



# Product catalog

# PROMFACTOR GROUP

**more than 25 years of high-quality and reliable equipment.**

**PROMFACTOR GROUP** is a group of companies that has been manufacturing and supplying low-voltage equipment under the PF brand for over 25 years. Nowadays the company has its own testing laboratory: production lines and stands, technological equipment which is tested and accredited both in Ukraine and abroad. The company is constantly improving the production technologies, as this is an important direction of technical progress and production efficiency.

**PROMFACTOR GROUP** is a group of companies that manufactures and supplies reliable low-voltage equipment to both within Ukraine and abroad to Belarus, Lithuania, Latvia, Estonia, Poland, Georgia, Romania and Moldova. It includes:

- **LLC «Promfactor»**, Ukraine
- **JSC «Promfactor Baltic»**, Lithuania
- **LLC «Promfactor Polska»**, Poland
- **LLC «Promfactor Georgia»**, Georgia

## Conventional designations



Application in everyday life



The value of the maximum rated current



The value of the maximum switching capacity



Application in public and administrative-commercial construction projects



Ability to connect additional devices



Sound signal notification function



Application at industrial facilities



Protecting people from electric shock



Voltage reduction function in alternating current circuits



Application at substations and switchgear and switchyards



Fire protection buildings and equipment due to damage to insulation



Light signal notification function



Application at oil and gas production facilities



Overcurrent protection



Possibility to turn on and off



Possibility of mounting on DIN rail 35x7.5 (1mm), DIN rail 35x7.5 (0.8mm)



Electric motor protection



Connecting to electricity



Can be connected with PIN or FORK buses, top or bottom



Switching and connection to the network of household appliances and production equipment



Connection of modular equipment



Possibility to connect with a crossover wire (single-core cable)



Degree of equipment protection



Possibility of connection by crossover wire (multicore cable)



Standard versions of push-button switches and push-button posts (plastic/metal)



Application in systems of automation and control systems equipment



They are used to maintain a given temperature regime



Voltage protection



Automatic switching on the lighting with the onset of dusk and turn it off at dawn



They are used in automation systems to control lighting or any device from different points

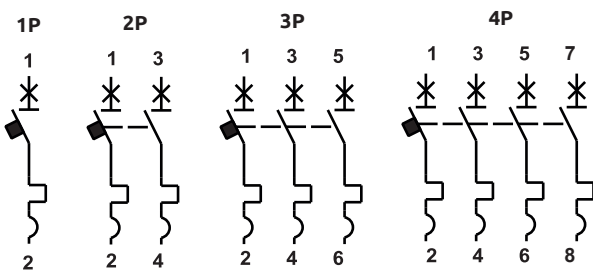
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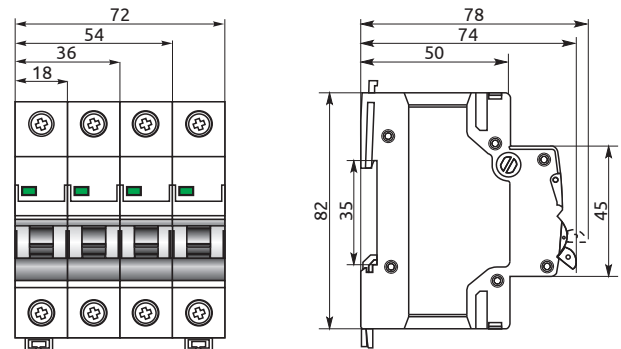
### Technical specifications


Series	FB1-63
Standards	IEC/EN 60898, IEC/EN 60947-2
Number of poles	1, 2, 3, 4
Tripping characteristics	B, C
Rated voltage $U_n$ , V	~230/400
Rated current $I_n$ , A	1, 2, 3, 4, 5, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63
Rated frequency $f$ , Hz	50/60
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	4000
Selectivity class	3
Rated breaking capacity $I_{cs}$ , A	6 000
Switching wear resistance (number of cycles on/off)	10 000/20 000 (electrical/mechanical)
Connecting of additional devices	no
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25
Degree of protection	IP20
DIN rail mounting	TN35
Connecting of busbar	PIN/FORK
Width, mm	18
Sealing option ON/OFF	yes
Trip unit technology	electromagnetic/thermal

### Schematic diagrams



### Overall dimensions



Characteristic B	Order code	Full name of	Rated current In, A	Packaging, pcs			Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box	
<b>1P</b> 	FB1B1001	Miniature circuit breaker FB1-63 1P B 1A 6kA ECO	1	12	240	0,103	1,236	24,720	
	FB1B1002	Miniature circuit breaker FB1-63 1P B 2A 6kA ECO	2	12	240	0,103	1,236	24,720	
	FB1B1003	Miniature circuit breaker FB1-63 1P B 3A 6kA ECO	3	12	240	0,103	1,236	24,720	
	FB1B1004	Miniature circuit breaker FB1-63 1P B 4A 6kA ECO	4	12	240	0,105	1,260	25,200	
	FB1B1005	Miniature circuit breaker FB1-63 1P B 5A 6kA ECO	5	12	240	0,107	1,284	25,680	
	FB1B1006	Miniature circuit breaker FB1-63 1P B 6A 6kA ECO	6	12	240	0,108	1,296	25,920	
	FB1B1008	Miniature circuit breaker FB1-63 1P B 8A 6kA ECO	8	12	240	0,110	1,320	26,400	
	FB1B1010	Miniature circuit breaker FB1-63 1P B 10A 6kA ECO	10	12	240	0,109	1,308	26,160	
	FB1B1013	Miniature circuit breaker FB1-63 1P B 13A 6kA ECO	13	12	240	0,109	1,308	26,160	
	FB1B1016	Miniature circuit breaker FB1-63 1P B 16A 6kA ECO	16	12	240	0,110	1,320	26,400	
	FB1B1020	Miniature circuit breaker FB1-63 1P B 20A 6kA ECO	20	12	240	0,110	1,320	26,400	
	FB1B1025	Miniature circuit breaker FB1-63 1P B 25A 6kA ECO	25	12	240	0,110	1,320	26,400	
	FB1B1032	Miniature circuit breaker FB1-63 1P B 32A 6kA ECO	32	12	240	0,111	1,332	26,640	
	FB1B1040	Miniature circuit breaker FB1-63 1P B 40A 6kA ECO	40	12	240	0,111	1,332	26,640	
	FB1B1050	Miniature circuit breaker FB1-63 1P B 50A 6kA ECO	50	12	240	0,111	1,332	26,640	
	FB1B1063	Miniature circuit breaker FB1-63 1P B 63A 6kA ECO	63	12	240	0,112	1,344	26,880	
<b>2P</b> 	FB1B2001	Miniature circuit breaker FB1-63 2P B 1A 6kA ECO	1	6	120	0,206	1,236	24,720	
	FB1B2002	Miniature circuit breaker FB1-63 2P B 2A 6kA ECO	2	6	120	0,206	1,236	24,720	
	FB1B2003	Miniature circuit breaker FB1-63 2P B 3A 6kA ECO	3	6	120	0,206	1,236	24,720	
	FB1B2004	Miniature circuit breaker FB1-63 2P B 4A 6kA ECO	4	6	120	0,210	1,260	25,200	
	FB1B2005	Miniature circuit breaker FB1-63 2P B 5A 6kA ECO	5	6	120	0,214	1,284	25,680	
	FB1B2006	Miniature circuit breaker FB1-63 2P B 6A 6kA ECO	6	6	120	0,216	1,296	25,920	
	FB1B2008	Miniature circuit breaker FB1-63 2P B 8A 6kA ECO	8	6	120	0,218	1,308	26,160	
	FB1B2010	Miniature circuit breaker FB1-63 2P B 10A 6kA ECO	10	6	120	0,218	1,308	26,160	
	FB1B2013	Miniature circuit breaker FB1-63 2P B 13A 6kA ECO	13	6	120	0,218	1,308	26,160	
	FB1B2016	Miniature circuit breaker FB1-63 2P B 16A 6kA ECO	16	6	120	0,220	1,320	26,400	
	FB1B2020	Miniature circuit breaker FB1-63 2P B 20A 6kA ECO	20	6	120	0,220	1,320	26,400	
	FB1B2025	Miniature circuit breaker FB1-63 2P B 25A 6kA ECO	25	6	120	0,220	1,320	26,400	
	FB1B2032	Miniature circuit breaker FB1-63 2P B 32A 6kA ECO	32	6	120	0,222	1,332	26,640	
	FB1B2040	Miniature circuit breaker FB1-63 2P B 40A 6kA ECO	40	6	120	0,222	1,332	26,640	
	FB1B2050	Miniature circuit breaker FB1-63 2P B 50A 6kA ECO	50	6	120	0,224	1,344	26,880	
	FB1B2063	Miniature circuit breaker FB1-63 2P B 63A 6kA ECO	63	6	120	0,224	1,344	26,880	
<b>3P</b> 	FB1B3001	Miniature circuit breaker FB1-63 3P B 1A 6kA ECO	1	4	80	0,309	1,236	24,720	
	FB1B3002	Miniature circuit breaker FB1-63 3P B 2A 6kA ECO	2	4	80	0,309	1,236	24,720	
	FB1B3003	Miniature circuit breaker FB1-63 3P B 3A 6kA ECO	3	4	80	0,309	1,236	24,720	
	FB1B3004	Miniature circuit breaker FB1-63 3P B 4A 6kA ECO	4	4	80	0,315	1,260	25,200	
	FB1B3005	Miniature circuit breaker FB1-63 3P B 5A 6kA ECO	5	4	80	0,321	1,284	25,680	
	FB1B3006	Miniature circuit breaker FB1-63 3P B 6A 6kA ECO	6	4	80	0,324	1,296	25,920	
	FB1B3008	Miniature circuit breaker FB1-63 3P B 8A 6kA ECO	8	4	80	0,327	1,308	26,160	
	FB1B3010	Miniature circuit breaker FB1-63 3P B 10A 6kA ECO	10	4	80	0,327	1,308	26,160	
	FB1B3013	Miniature circuit breaker FB1-63 3P B 13A 6kA ECO	13	4	80	0,327	1,308	26,160	
	FB1B3016	Miniature circuit breaker FB1-63 3P B 16A 6kA ECO	16	4	80	0,330	1,320	26,400	
	FB1B3020	Miniature circuit breaker FB1-63 3P B 20A 6kA ECO	20	4	80	0,330	1,320	26,400	
	FB1B3025	Miniature circuit breaker FB1-63 3P B 25A 6kA ECO	25	4	80	0,330	1,320	26,400	
	FB1B3032	Miniature circuit breaker FB1-63 3P B 32A 6kA ECO	32	4	80	0,333	1,332	26,640	
	FB1B3040	Miniature circuit breaker FB1-63 3P B 40A 6kA ECO	40	4	80	0,333	1,332	26,640	
	FB1B3050	Miniature circuit breaker FB1-63 3P B 50A 6kA ECO	50	4	80	0,336	1,344	26,880	
	FB1B3063	Miniature circuit breaker FB1-63 3P B 63A 6kA ECO	63	4	80	0,336	1,344	26,880	



**4P**



Characteristic B	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
	FB1B4001	Miniature circuit breaker FB1-63 4P B 1A 6kA ECO	1	3	60	0,412	1,236	24,720
	FB1B4002	Miniature circuit breaker FB1-63 4P B 2A 6kA ECO	2	3	60	0,412	1,236	24,720
	FB1B4003	Miniature circuit breaker FB1-63 4P B 3A 6kA ECO	3	3	60	0,412	1,236	24,720
	FB1B4004	Miniature circuit breaker FB1-63 4P B 4A 6kA ECO	4	3	60	0,420	1,260	25,200
	FB1B4005	Miniature circuit breaker FB1-63 4P B 5A 6kA ECO	5	3	60	0,428	1,284	25,680
	FB1B4006	Miniature circuit breaker FB1-63 4P B 6A 6kA ECO	6	3	60	0,432	1,296	25,920
	FB1B4008	Miniature circuit breaker FB1-63 4P B 8A 6kA ECO	8	3	60	0,436	1,308	26,160
	FB1B4010	Miniature circuit breaker FB1-63 4P B 10A 6kA ECO	10	3	60	0,436	1,308	26,160
	FB1B4013	Miniature circuit breaker FB1-63 4P B 13A 6kA ECO	13	3	60	0,436	1,308	26,160
	FB1B4016	Miniature circuit breaker FB1-63 4P B 16A 6kA ECO	16	3	60	0,440	1,320	26,400
	FB1B4020	Miniature circuit breaker FB1-63 4P B 20A 6kA ECO	20	3	60	0,440	1,320	26,400
	FB1B4025	Miniature circuit breaker FB1-63 4P B 25A 6kA ECO	25	3	60	0,440	1,320	26,400
	FB1B4032	Miniature circuit breaker FB1-63 4P B 32A 6kA ECO	32	3	60	0,444	1,332	26,640
	FB1B4040	Miniature circuit breaker FB1-63 4P B 40A 6kA ECO	40	3	60	0,444	1,332	26,640
	FB1B4050	Miniature circuit breaker FB1-63 4P B 50A 6kA ECO	50	3	60	0,448	1,344	26,880
	FB1B4063	Miniature circuit breaker FB1-63 4P B 63A 6kA ECO	63	3	60	0,448	1,344	26,880

**Characteristic C**

**1P**




	FB1C1001	Miniature circuit breaker FB1-63 1P C 1A 6kA ECO	1	12	240	0,103	1,236	24,720
	FB1C1002	Miniature circuit breaker FB1-63 1P C 2A 6kA ECO	2	12	240	0,103	1,236	24,720
	FB1C1003	Miniature circuit breaker FB1-63 1P C 3A 6kA ECO	3	12	240	0,103	1,236	24,720
	FB1C1004	Miniature circuit breaker FB1-63 1P C 4A 6kA ECO	4	12	240	0,105	1,260	25,200
	FB1C1005	Miniature circuit breaker FB1-63 1P C 5A 6kA ECO	5	12	240	0,107	1,284	25,680
	FB1C1006	Miniature circuit breaker FB1-63 1P C 6A 6kA ECO	6	12	240	0,108	1,296	25,920
	FB1C1008	Miniature circuit breaker FB1-63 1P C 8A 6kA ECO	8	12	240	0,109	1,308	26,160
	FB1C1010	Miniature circuit breaker FB1-63 1P C 10A 6kA ECO	10	12	240	0,109	1,308	26,160
	FB1C1013	Miniature circuit breaker FB1-63 1P C 13A 6kA ECO	13	12	240	0,109	1,308	26,160
	FB1C1016	Miniature circuit breaker FB1-63 1P C 16A 6kA ECO	16	12	240	0,110	1,320	26,400
	FB1C1020	Miniature circuit breaker FB1-63 1P C 20A 6kA ECO	20	12	240	0,110	1,320	26,400
	FB1C1025	Miniature circuit breaker FB1-63 1P C 25A 6kA ECO	25	12	240	0,110	1,320	26,400
	FB1C1032	Miniature circuit breaker FB1-63 1P C 32A 6kA ECO	32	12	240	0,111	1,332	26,640
	FB1C1040	Miniature circuit breaker FB1-63 1P C 40A 6kA ECO	40	12	240	0,111	1,332	26,640
	FB1C1050	Miniature circuit breaker FB1-63 1P C 50A 6kA ECO	50	12	240	0,112	1,344	26,880
	FB1C1063	Miniature circuit breaker FB1-63 1P C 63A 6kA ECO	63	12	240	0,112	1,344	26,880

**2P**




	FB1C2001	Miniature circuit breaker FB1-63 2P C 1A 6kA ECO	1	6	120	0,206	1,236	24,720
	FB1C2002	Miniature circuit breaker FB1-63 2P C 2A 6kA ECO	2	6	120	0,206	1,236	24,720
	FB1C2003	Miniature circuit breaker FB1-63 2P C 3A 6kA ECO	3	6	120	0,206	1,236	24,720
	FB1C2004	Miniature circuit breaker FB1-63 2P C 4A 6kA ECO	4	6	120	0,210	1,260	25,200
	FB1C2005	Miniature circuit breaker FB1-63 2P C 5A 6kA ECO	5	6	120	0,214	1,284	25,680
	FB1C2006	Miniature circuit breaker FB1-63 2P C 6A 6kA ECO	6	6	120	0,216	1,296	25,920
	FB1C2008	Miniature circuit breaker FB1-63 2P C 8A 6kA ECO	8	6	120	0,218	1,308	26,160
	FB1C2010	Miniature circuit breaker FB1-63 2P C 10A 6kA ECO	10	6	120	0,218	1,308	26,160
	FB1C2013	Miniature circuit breaker FB1-63 2P C 13A 6kA ECO	13	6	120	0,218	1,308	26,160
	FB1C2016	Miniature circuit breaker FB1-63 2P C 16A 6kA ECO	16	6	120	0,220	1,320	26,400
	FB1C2020	Miniature circuit breaker FB1-63 2P C 20A 6kA ECO	20	6	120	0,220	1,320	26,400
	FB1C2025	Miniature circuit breaker FB1-63 2P C 25A 6kA ECO	25	6	120	0,220	1,320	26,400
	FB1C2032	Miniature circuit breaker FB1-63 2P C 32A 6kA ECO	32	6	120	0,222	1,332	26,640
	FB1C2040	Miniature circuit breaker FB1-63 2P C 40A 6kA ECO	40	6	120	0,222	1,332	26,640
	FB1C2050	Miniature circuit breaker FB1-63 2P C 50A 6kA ECO	50	6	120	0,224	1,344	26,880
	FB1C2063	Miniature circuit breaker FB1-63 2P C 63A 6kA ECO	63	6	120	0,224	1,344	26,880

**3P**



Characteristic C	Order code	Full name of	Rated current I <sub>n</sub> , A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
	FB1C3001	Miniature circuit breaker FB1-63 3P C 1A 6kA ECO	1	4	80	0,309	1,236	24,720
	FB1C3002	Miniature circuit breaker FB1-63 3P C 2A 6kA ECO	2	4	80	0,309	1,236	24,720
	FB1C3003	Miniature circuit breaker FB1-63 3P C 3A 6kA ECO	3	4	80	0,309	1,236	24,720
	FB1C3004	Miniature circuit breaker FB1-63 3P C 4A 6kA ECO	4	4	80	0,315	1,260	25,200
	FB1C3005	Miniature circuit breaker FB1-63 3P C 5A 6kA ECO	5	4	80	0,321	1,284	25,680
	FB1C3006	Miniature circuit breaker FB1-63 3P C 6A 6kA ECO	6	4	80	0,324	1,296	25,920
	FB1C3008	Miniature circuit breaker FB1-63 3P C 8A 6kA ECO	8	4	80	0,327	1,308	26,160
	FB1C3010	Miniature circuit breaker FB1-63 3P C 10A 6kA ECO	10	4	80	0,327	1,308	26,160
	FB1C3013	Miniature circuit breaker FB1-63 3P C 13A 6kA ECO	13	4	80	0,327	1,308	26,160
	FB1C3016	Miniature circuit breaker FB1-63 3P C 16A 6kA ECO	16	4	80	0,330	1,320	26,400
	FB1C3020	Miniature circuit breaker FB1-63 3P C 20A 6kA ECO	20	4	80	0,330	1,320	26,400
	FB1C3025	Miniature circuit breaker FB1-63 3P C 25A 6kA ECO	25	4	80	0,330	1,320	26,400
	FB1C3032	Miniature circuit breaker FB1-63 3P C 32A 6kA ECO	32	4	80	0,333	1,332	26,640
	FB1C3040	Miniature circuit breaker FB1-63 3P C 40A 6kA ECO	40	4	80	0,333	1,332	26,640
	FB1C3050	Miniature circuit breaker FB1-63 3P C 50A 6kA ECO	50	4	80	0,336	1,344	26,880
	FB1C3063	Miniature circuit breaker FB1-63 3P C 63A 6kA ECO	63	4	80	0,336	1,344	26,880

**4P**



	FB1C4001	Miniature circuit breaker FB1-63 4P C 1A 6kA ECO	1	3	60	0,412	1,236	24,720
	FB1C4002	Miniature circuit breaker FB1-63 4P C 2A 6kA ECO	2	3	60	0,412	1,236	24,720
	FB1C4003	Miniature circuit breaker FB1-63 4P C 3A 6kA ECO	3	3	60	0,412	1,236	24,720
	FB1C4004	Miniature circuit breaker FB1-63 4P C 4A 6kA ECO	4	3	60	0,420	1,260	25,200
	FB1C4005	Miniature circuit breaker FB1-63 4P C 5A 6kA ECO	5	3	60	0,428	1,284	25,680
	FB1C4006	Miniature circuit breaker FB1-63 4P C 6A 6kA ECO	6	3	60	0,432	1,296	25,920
	FB1C4008	Miniature circuit breaker FB1-63 4P C 8A 6kA ECO	8	3	60	0,436	1,308	26,160
	FB1C4010	Miniature circuit breaker FB1-63 4P C 10A 6kA ECO	10	3	60	0,436	1,308	26,160
	FB1C4013	Miniature circuit breaker FB1-63 4P C 13A 6kA ECO	13	3	60	0,436	1,308	26,160
	FB1C4016	Miniature circuit breaker FB1-63 4P C 16A 6kA ECO	16	3	60	0,440	1,320	26,400
	FB1C4020	Miniature circuit breaker FB1-63 4P C 20A 6kA ECO	20	3	60	0,440	1,320	26,400
	FB1C4025	Miniature circuit breaker FB1-63 4P C 25A 6kA ECO	25	3	60	0,440	1,320	26,400
	FB1C4032	Miniature circuit breaker FB1-63 4P C 32A 6kA ECO	32	3	60	0,444	1,332	26,640
	FB1C4040	Miniature circuit breaker FB1-63 4P C 40A 6kA ECO	40	3	60	0,444	1,332	26,640
	FB1C4050	Miniature circuit breaker FB1-63 4P C 50A 6kA ECO	50	3	60	0,448	1,344	26,880
	FB1C4063	Miniature circuit breaker FB1-63 4P C 63A 6kA ECO	63	3	60	0,448	1,344	26,880



10kA

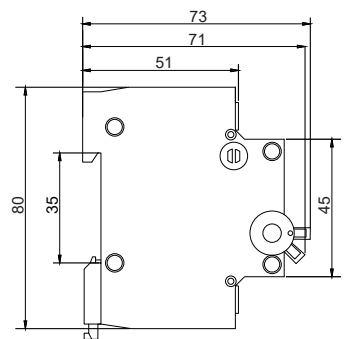
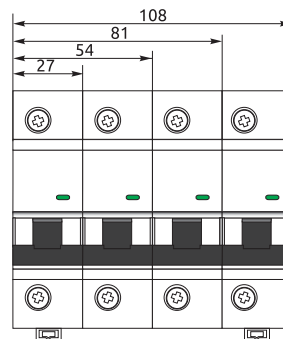
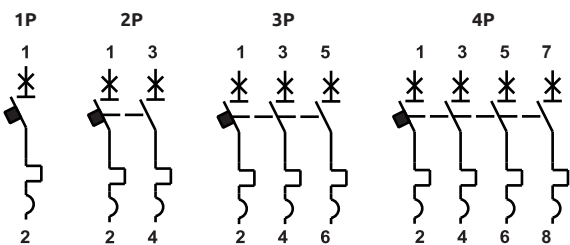


### Technical specifications


Series	FB1-125
Standards	IEC/EN 60898 IEC/EN 60947-2
Number of poles	1, 2, 3, 4
Tripping characteristics	C, D
Rated voltage $U_n$ , V	~230/400
Rated current $I_n$ , A	10, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125
Rated frequency $f$ , Hz	50/60
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	4000
Selectivity class	3
Rated breaking capacity $I_{cs}$ , A	10 000
Switching wear resistance (number of cycles on/off)	8 000/20 000 (electrical/mechanical)
Connecting of additional devices	no
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25
Degree of protection	IP20
Bolt tensioning torque, Nm	3.0
DIN rail mounting	TN35
Connecting of busbar	PIN
Operating position	any
Width, mm	27
Sealing option ON/OFF	yes
Trip unit technology	electromagnetic/thermal


### Schematic diagrams


### Overall dimensions




# Miniature circuit breakers FB1-125

Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b> 	FB1C10010	Miniature circuit breaker FB1-125 1P C 10A 10kA ECO	10	12	120	0,153	1,836	18,360
	FB1C10016	Miniature circuit breaker FB1-125 1P C 16A 10kA ECO	16	12	120	0,153	1,836	18,360
	FB1C10020	Miniature circuit breaker FB1-125 1P C 20A 10kA ECO	20	12	120	0,153	1,836	18,360
	FB1C10025	Miniature circuit breaker FB1-125 1P C 25A 10kA ECO	25	12	120	0,153	1,836	18,360
	FB1C10032	Miniature circuit breaker FB1-125 1P C 32A 10kA ECO	32	12	120	0,153	1,836	18,360
	FB1C10040	Miniature circuit breaker FB1-125 1P C 40A 10kA ECO	40	12	120	0,153	1,836	18,360
	FB1C10050	Miniature circuit breaker FB1-125 1P C 50A 10kA ECO	50	12	120	0,153	1,836	18,360
	FB1C10063	Miniature circuit breaker FB1-125 1P C 63A 10kA ECO	63	12	120	0,153	1,836	18,360
	FB1C1080	Miniature circuit breaker FB1-125 1P C 80A 10kA ECO	80	12	120	0,153	1,836	18,360
	FB1C1100	Miniature circuit breaker FB1-125 1P C 100A 10kA ECO	100	12	120	0,158	1,896	18,960
	FB1C1125	Miniature circuit breaker FB1-125 1P C 125A 10kA ECO	125	12	120	0,162	1,944	19,440

<b>2P</b> 	FB1C20010	Miniature circuit breaker FB1-125 2P C 10A 10kA ECO	10	6	60	0,316	1,896	18,960
	FB1C20016	Miniature circuit breaker FB1-125 2P C 16A 10kA ECO	16	6	60	0,316	1,896	18,960
	FB1C20020	Miniature circuit breaker FB1-125 2P C 20A 10kA ECO	20	6	60	0,316	1,896	18,960
	FB1C20025	Miniature circuit breaker FB1-125 2P C 25A 10kA ECO	25	6	60	0,316	1,896	18,960
	FB1C20032	Miniature circuit breaker FB1-125 2P C 32A 10kA ECO	32	6	60	0,316	1,896	18,960
	FB1C20040	Miniature circuit breaker FB1-125 2P C 40A 10kA ECO	40	6	60	0,316	1,896	18,960
	FB1C20050	Miniature circuit breaker FB1-125 2P C 50A 10kA ECO	50	6	60	0,316	1,896	18,960
	FB1C20063	Miniature circuit breaker FB1-125 2P C 63A 10kA ECO	63	6	60	0,316	1,896	18,960
	FB1C2080	Miniature circuit breaker FB1-125 2P C 80A 10kA ECO	80	6	60	0,316	1,896	18,960
	FB1C2100	Miniature circuit breaker FB1-125 2P C 100A 10kA ECO	100	6	60	0,320	1,920	19,200
	FB1C2125	Miniature circuit breaker FB1-125 2P C 125A 10kA ECO	125	6	60	0,324	1,944	19,440

<b>3P</b> 	FB1C30010	Miniature circuit breaker FB1-125 3P C 10A 10kA ECO	10	4	40	0,445	1,780	17,800
	FB1C30016	Miniature circuit breaker FB1-125 3P C 16A 10kA ECO	16	4	40	0,445	1,780	17,800
	FB1C30020	Miniature circuit breaker FB1-125 3P C 20A 10kA ECO	20	4	40	0,445	1,780	17,800
	FB1C30025	Miniature circuit breaker FB1-125 3P C 25A 10kA ECO	25	4	40	0,445	1,780	17,800
	FB1C30032	Miniature circuit breaker FB1-125 3P C 32A 10kA ECO	32	4	40	0,445	1,780	17,800
	FB1C30040	Miniature circuit breaker FB1-125 3P C 40A 10kA ECO	40	4	40	0,445	1,780	17,800
	FB1C30050	Miniature circuit breaker FB1-125 3P C 50A 10kA ECO	50	4	40	0,445	1,780	17,800
	FB1C30063	Miniature circuit breaker FB1-125 3P C 63A 10kA ECO	63	4	40	0,445	1,780	17,800
	FB1C3080	Miniature circuit breaker FB1-125 3P C 80A 10kA ECO	80	4	40	0,445	1,780	17,800
	FB1C3100	Miniature circuit breaker FB1-125 3P C 100A 10kA ECO	100	4	40	0,450	1,800	18,000
	FB1C3125	Miniature circuit breaker FB1-125 3P C 125A 10kA ECO	125	4	40	0,457	1,828	18,280

<b>4P</b> 	FB1C40010	Miniature circuit breaker FB1-125 4P C 10A 10kA ECO	10	3	30	0,612	1,836	18,360
	FB1C40016	Miniature circuit breaker FB1-125 4P C 16A 10kA ECO	16	3	30	0,612	1,836	18,360
	FB1C40020	Miniature circuit breaker FB1-125 4P C 20A 10kA ECO	20	3	30	0,612	1,836	18,360
	FB1C40025	Miniature circuit breaker FB1-125 4P C 25A 10kA ECO	25	3	30	0,612	1,836	18,360
	FB1C40032	Miniature circuit breaker FB1-125 4P C 32A 10kA ECO	32	3	30	0,612	1,836	18,360
	FB1C40040	Miniature circuit breaker FB1-125 4P C 40A 10kA ECO	40	3	30	0,612	1,836	18,360
	FB1C40050	Miniature circuit breaker FB1-125 4P C 50A 10kA ECO	50	3	30	0,612	1,836	18,360
	FB1C40063	Miniature circuit breaker FB1-125 4P C 63A 10kA ECO	63	3	30	0,612	1,836	18,360
	FB1C4080	Miniature circuit breaker FB1-125 4P C 80A 10kA ECO	80	3	30	0,612	1,836	18,360
	FB1C4100	Miniature circuit breaker FB1-125 4P C 100A 10kA ECO	100	3	30	0,615	1,845	18,450
	FB1C4125	Miniature circuit breaker FB1-125 4P C 125A 10kA ECO	125	3	30	0,700	2,100	21,000

# Miniature circuit breakers FB1-125



Characteristic D	Order code	Full name of	Rated current I <sub>n</sub> , A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB1D10010	Miniature circuit breaker FB1-125 1P D 10A 10kA ECO	10	12	120	0,153	1,836	18,360
	FB1D10016	Miniature circuit breaker FB1-125 1P D 16A 10kA ECO	16	12	120	0,153	1,836	18,360
	FB1D10020	Miniature circuit breaker FB1-125 1P D 20A 10kA ECO	20	12	120	0,153	1,836	18,360
	FB1D10025	Miniature circuit breaker FB1-125 1P D 25A 10kA ECO	25	12	120	0,153	1,836	18,360
	FB1D10032	Miniature circuit breaker FB1-125 1P D 32A 10kA ECO	32	12	120	0,153	1,836	18,360
	FB1D10040	Miniature circuit breaker FB1-125 1P D 40A 10kA ECO	40	12	120	0,153	1,836	18,360
	FB1D10050	Miniature circuit breaker FB1-125 1P D 50A 10kA ECO	50	12	120	0,153	1,836	18,360
	FB1D10063	Miniature circuit breaker FB1-125 1P D 63A 10kA ECO	63	12	120	0,153	1,836	18,360
	FB1D1080	Miniature circuit breaker FB1-125 1P D 80A 10kA ECO	80	12	120	0,153	1,836	18,360
	FB1D1100	Miniature circuit breaker FB1-125 1P D 100A 10kA ECO	100	12	120	0,158	1,896	18,960
	FB1D1125	Miniature circuit breaker FB1-125 1P D 125A 10kA ECO	125	12	120	0,162	1,944	19,440



## 2P

FB1D20010	Miniature circuit breaker FB1-125 2P D 10A 10kA ECO	10	6	60	0,316	1,896	18,960
FB1D20016	Miniature circuit breaker FB1-125 2P D 16A 10kA ECO	16	6	60	0,316	1,896	18,960
FB1D20020	Miniature circuit breaker FB1-125 2P D 20A 10kA ECO	20	6	60	0,316	1,896	18,960
FB1D20025	Miniature circuit breaker FB1-125 2P D 25A 10kA ECO	25	6	60	0,316	1,896	18,960
FB1D20032	Miniature circuit breaker FB1-125 2P D 32A 10kA ECO	32	6	60	0,316	1,896	18,960
FB1D20040	Miniature circuit breaker FB1-125 2P D 40A 10kA ECO	40	6	60	0,316	1,896	18,960
FB1D20050	Miniature circuit breaker FB1-125 2P D 50A 10kA ECO	50	6	60	0,316	1,896	18,960
FB1D20063	Miniature circuit breaker FB1-125 2P D 63A 10kA ECO	63	6	60	0,316	1,896	18,960
FB1D2080	Miniature circuit breaker FB1-125 2P D 80A 10kA ECO	80	6	60	0,316	1,896	18,960
FB1D2100	Miniature circuit breaker FB1-125 2P D 100A 10kA ECO	100	6	60	0,320	1,920	19,200
FB1D2125	Miniature circuit breaker FB1-125 2P D 125A 10kA ECO	125	6	60	0,324	1,944	19,440



## 3P

FB1D30010	Miniature circuit breaker FB1-125 3P D 10A 10kA ECO	10	4	40	0,445	1,780	17,800
FB1D30016	Miniature circuit breaker FB1-125 3P D 16A 10kA ECO	16	4	40	0,445	1,780	17,800
FB1D30020	Miniature circuit breaker FB1-125 3P D 20A 10kA ECO	20	4	40	0,445	1,780	17,800
FB1D30025	Miniature circuit breaker FB1-125 3P D 25A 10kA ECO	25	4	40	0,445	1,780	17,800
FB1D30032	Miniature circuit breaker FB1-125 3P D 32A 10kA ECO	32	4	40	0,445	1,780	17,800
FB1D30040	Miniature circuit breaker FB1-125 3P D 40A 10kA ECO	40	4	40	0,445	1,780	17,800
FB1D30050	Miniature circuit breaker FB1-125 3P D 50A 10kA ECO	50	4	40	0,445	1,780	17,800
FB1D30063	Miniature circuit breaker FB1-125 3P D 63A 10kA ECO	63	4	40	0,445	1,780	17,800
FB1D3080	Miniature circuit breaker FB1-125 3P D 80A 10kA ECO	80	4	40	0,445	1,780	17,800
FB1D3100	Miniature circuit breaker FB1-125 3P D 100A 10kA ECO	100	4	40	0,450	1,800	18,000
FB1D3125	Miniature circuit breaker FB1-125 3P D 125A 10kA ECO	125	4	40	0,457	1,828	18,280



## 4P

FB1D40010	Miniature circuit breaker FB1-125 4P D 10A 10kA ECO	10	3	30	0,612	1,836	18,360
FB1D40016	Miniature circuit breaker FB1-125 4P D 16A 10kA ECO	16	3	30	0,612	1,836	18,360
FB1D40020	Miniature circuit breaker FB1-125 4P D 20A 10kA ECO	20	3	30	0,612	1,836	18,360
FB1D40025	Miniature circuit breaker FB1-125 4P D 25A 10kA ECO	25	3	30	0,612	1,836	18,360
FB1D40032	Miniature circuit breaker FB1-125 4P D 32A 10kA ECO	32	3	30	0,612	1,836	18,360
FB1D40040	Miniature circuit breaker FB1-125 4P D 40A 10kA ECO	40	3	30	0,612	1,836	18,360
FB1D40050	Miniature circuit breaker FB1-125 4P D 50A 10kA ECO	50	3	30	0,612	1,836	18,360
FB1D40063	Miniature circuit breaker FB1-125 4P D 63A 10kA ECO	63	3	30	0,612	1,836	18,360
FB1D4080	Miniature circuit breaker FB1-125 4P D 80A 10kA ECO	80	3	30	0,612	1,836	18,360
FB1D4100	Miniature circuit breaker FB1-125 4P D 100A 10kA ECO	100	3	30	0,615	1,845	18,450
FB1D4125	Miniature circuit breaker FB1-125 4P D 125A 10kA ECO	125	3	30	0,700	2,100	21,000



**MAX  
63A**

**6kA**

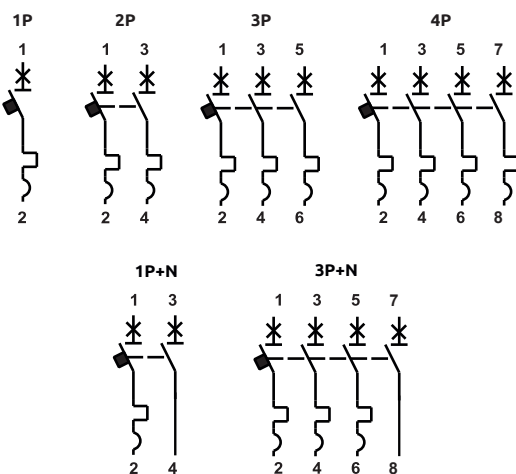


**Standart**

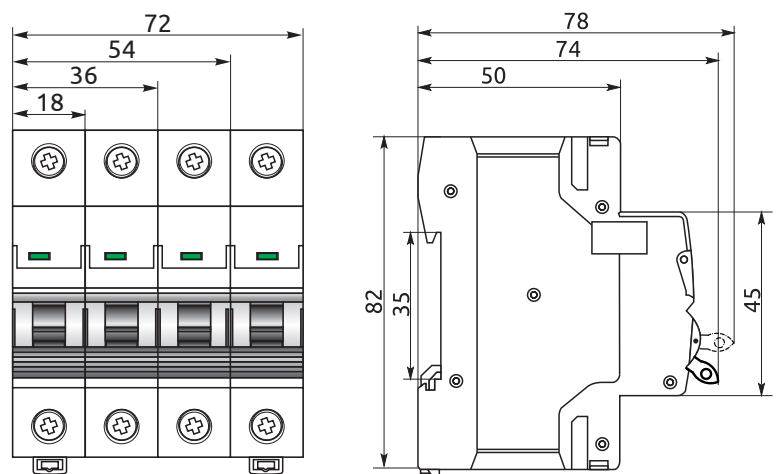
## Technical specifications

Series	FB2-63
Standards	IEC/EN 60898 IEC/EN 60947-2
Number of poles	1P, 1P+N, 2P, 3P, 3P+N, 4P
Tripping characteristics	B, C, D
Rated voltage Un, V	~230/400
Rated current In, A	1, 2, 3, 4, 5, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63
Rated frequency f, Hz	50/60
Rated voltage of the insulation Ui, V	500
Rated impulse withstand voltage Uimp, V	4000
Selectivity class	3
Rated breaking capacity Ics, A	6 000
Switching wear resistance (number of cycles on/off)	10 000/20 000 (electrical/mechanical)
Connecting of additional devices	yes
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25
Degree of protection	IP20
DIN rail mounting	TN35
Connecting of busbar	PIN/FORK
Operating position	any
Width, mm	18
Sealing option ON/OFF	yes
Trip unit technology	electromagnetic/thermal

## Schematic diagrams



## Overall dimensions



# Miniature circuit breakers FB2-63 Standart

Standart

Characteristic B	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB2B1001	Miniature circuit breaker FB2-63 1P B 1A 6kA STANDART	1	12	240	0,109	1,308	26,160
	FB2B1002	Miniature circuit breaker FB2-63 1P B 2A 6kA STANDART	2	12	240	0,109	1,308	26,160
	FB2B1003	Miniature circuit breaker FB2-63 1P B 3A 6kA STANDART	3	12	240	0,109	1,308	26,160
	FB2B1004	Miniature circuit breaker FB2-63 1P B 4A 6kA STANDART	4	12	240	0,110	1,320	26,400
	FB2B1005	Miniature circuit breaker FB2-63 1P B 5A 6kA STANDART	5	12	240	0,110	1,320	26,400
	FB2B1006	Miniature circuit breaker FB2-63 1P B 6A 6kA STANDART	6	12	240	0,110	1,320	26,400
	FB2B1008	Miniature circuit breaker FB2-63 1P B 8A 6kA STANDART	8	12	240	0,110	1,320	26,400
	FB2B1010	Miniature circuit breaker FB2-63 1P B 10A 6kA STANDART	10	12	240	0,109	1,308	26,160
	FB2B1013	Miniature circuit breaker FB2-63 1P B 13A 6kA STANDART	13	12	240	0,113	1,356	27,120
	FB2B1016	Miniature circuit breaker FB2-63 1P B 16A 6kA STANDART	16	12	240	0,114	1,368	27,360
	FB2B1020	Miniature circuit breaker FB2-63 1P B 20A 6kA STANDART	20	12	240	0,114	1,368	27,360
	FB2B1025	Miniature circuit breaker FB2-63 1P B 25A 6kA STANDART	25	12	240	0,114	1,368	27,360
	FB2B1032	Miniature circuit breaker FB2-63 1P B 32A 6kA STANDART	32	12	240	0,115	1,380	27,600
	FB2B1040	Miniature circuit breaker FB2-63 1P B 40A 6kA STANDART	40	12	240	0,115	1,380	27,600
	FB2B1050	Miniature circuit breaker FB2-63 1P B 50A 6kA STANDART	50	12	240	0,116	1,392	27,840
	FB2B1063	Miniature circuit breaker FB2-63 1P B 63A 6kA STANDART	63	12	240	0,116	1,392	27,840

<b>1P+N</b>	FB2BN2001	Miniature circuit breaker FB2-63 1P+N B 1A 6kA STANDART	1	6	120	0,218	1,308	26,160
	FB2BN2002	Miniature circuit breaker FB2-63 1P+N B 2A 6kA STANDART	2	6	120	0,218	1,308	26,160
	FB2BN2003	Miniature circuit breaker FB2-63 1P+N B 3A 6kA STANDART	3	6	120	0,218	1,308	26,160
	FB2BN2004	Miniature circuit breaker FB2-63 1P+N B 4A 6kA STANDART	4	6	120	0,220	1,320	26,400
	FB2BN2005	Miniature circuit breaker FB2-63 1P+N B 5A 6kA STANDART	5	6	120	0,220	1,320	26,400
	FB2BN2006	Miniature circuit breaker FB2-63 1P+N B 6A 6kA STANDART	6	6	120	0,220	1,320	26,400
	FB2BN2008	Miniature circuit breaker FB2-63 1P+N B 8A 6kA STANDART	8	6	120	0,220	1,320	26,400
	FB2BN2010	Miniature circuit breaker FB2-63 1P+N B 10A 6kA STANDART	10	6	120	0,224	1,344	26,880
	FB2BN2013	Miniature circuit breaker FB2-63 1P+N B 13A 6kA STANDART	13	6	120	0,226	1,356	27,120
	FB2BN2016	Miniature circuit breaker FB2-63 1P+N B 16A 6kA STANDART	16	6	120	0,228	1,368	27,360
	FB2BN2020	Miniature circuit breaker FB2-63 1P+N B 20A 6kA STANDART	20	6	120	0,228	1,368	27,360
	FB2BN2025	Miniature circuit breaker FB2-63 1P+N B 25A 6kA STANDART	25	6	120	0,228	1,368	27,360
	FB2BN2032	Miniature circuit breaker FB2-63 1P+N B 32A 6kA STANDART	32	6	120	0,230	1,380	27,600
	FB2BN2040	Miniature circuit breaker FB2-63 1P+N B 40A 6kA STANDART	40	6	120	0,230	1,380	27,600
FB2BN2050	Miniature circuit breaker FB2-63 1P+N B 50A 6kA STANDART	50	6	120	0,232	1,392	27,840	
FB2BN2063	Miniature circuit breaker FB2-63 1P+N B 63A 6kA STANDART	63	6	120	0,232	1,392	27,840	

<b>2P</b>	FB2B2001	Miniature circuit breaker FB2-63 2P B 1A 6kA STANDART	1	6	120	0,218	1,308	26,160
	FB2B2002	Miniature circuit breaker FB2-63 2P B 2A 6kA STANDART	2	6	120	0,218	1,308	26,160
	FB2B2003	Miniature circuit breaker FB2-63 2P B 3A 6kA STANDART	3	6	120	0,218	1,308	26,160
	FB2B2004	Miniature circuit breaker FB2-63 2P B 4A 6kA STANDART	4	6	120	0,220	1,320	26,400
	FB2B2005	Miniature circuit breaker FB2-63 2P B 5A 6kA STANDART	5	6	120	0,220	1,320	26,400
	FB2B2006	Miniature circuit breaker FB2-63 2P B 6A 6kA STANDART	6	6	120	0,220	1,320	26,400
	FB2B2008	Miniature circuit breaker FB2-63 2P B 8A 6kA STANDART	8	6	120	0,220	1,320	26,400
	FB2B2010	Miniature circuit breaker FB2-63 2P B 10A 6kA STANDART	10	6	120	0,224	1,344	26,880
	FB2B2013	Miniature circuit breaker FB2-63 2P B 13A 6kA STANDART	13	6	120	0,226	1,356	27,120
	FB2B2016	Miniature circuit breaker FB2-63 2P B 16A 6kA STANDART	16	6	120	0,228	1,368	27,360
	FB2B2020	Miniature circuit breaker FB2-63 2P B 20A 6kA STANDART	20	6	120	0,228	1,368	27,360
	FB2B2025	Miniature circuit breaker FB2-63 2P B 25A 6kA STANDART	25	6	120	0,228	1,368	27,360
	FB2B2032	Miniature circuit breaker FB2-63 2P B 32A 6kA STANDART	32	6	120	0,230	1,380	27,600
	FB2B2040	Miniature circuit breaker FB2-63 2P B 40A 6kA STANDART	40	6	120	0,230	1,380	27,600
FB2B2050	Miniature circuit breaker FB2-63 2P B 50A 6kA STANDART	50	6	120	0,232	1,392	27,840	
FB2B2063	Miniature circuit breaker FB2-63 2P B 63A 6kA STANDART	63	6	120	0,232	1,392	27,840	

## Miniature circuit breakers FB2-63 Standart

Characteristic B	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>3P</b>	FB2B3001	Miniature circuit breaker FB2-63 3P B 1A 6kA STANDART	1	4	80	0,327	1,308	26,160
	FB2B3002	Miniature circuit breaker FB2-63 3P B 2A 6kA STANDART	2	4	80	0,327	1,308	26,160
	FB2B3003	Miniature circuit breaker FB2-63 3P B 3A 6kA STANDART	3	4	80	0,327	1,308	26,160
	FB2B3004	Miniature circuit breaker FB2-63 3P B 4A 6kA STANDART	4	4	80	0,330	1,320	26,400
	FB2B3005	Miniature circuit breaker FB2-63 3P B 5A 6kA STANDART	5	4	80	0,330	1,320	26,400
	FB2B3006	Miniature circuit breaker FB2-63 3P B 6A 6kA STANDART	6	4	80	0,330	1,320	26,400
	FB2B3008	Miniature circuit breaker FB2-63 3P B 8A 6kA STANDART	8	4	80	0,330	1,320	26,400
	FB2B3010	Miniature circuit breaker FB2-63 3P B 10A 6kA STANDART	10	4	80	0,336	1,344	26,880
	FB2B3013	Miniature circuit breaker FB2-63 3P B 13A 6kA STANDART	13	4	80	0,339	1,356	27,120
	FB2B3016	Miniature circuit breaker FB2-63 3P B 16A 6kA STANDART	16	4	80	0,342	1,368	27,360
	FB2B3020	Miniature circuit breaker FB2-63 3P B 20A 6kA STANDART	20	4	80	0,342	1,368	27,360
	FB2B3025	Miniature circuit breaker FB2-63 3P B 25A 6kA STANDART	25	4	80	0,342	1,368	27,360
	FB2B3032	Miniature circuit breaker FB2-63 3P B 32A 6kA STANDART	32	4	80	0,345	1,380	27,600
	FB2B3040	Miniature circuit breaker FB2-63 3P B 40A 6kA STANDART	40	4	80	0,345	1,380	27,600
	FB2B3050	Miniature circuit breaker FB2-63 3P B 50A 6kA STANDART	50	4	80	0,348	1,392	27,840
	FB2B3063	Miniature circuit breaker FB2-63 3P B 63A 6kA STANDART	63	4	80	0,348	1,392	27,840
	<b>3P+N</b>	FB2BN4001	Miniature circuit breaker FB2-63 3P+N B 1A 6kA STANDART	1	3	60	0,436	1,308
FB2BN4002		Miniature circuit breaker FB2-63 3P+N B 2A 6kA STANDART	2	3	60	0,436	1,308	26,160
FB2BN4003		Miniature circuit breaker FB2-63 3P+N B 3A 6kA STANDART	3	3	60	0,436	1,308	26,160
FB2BN4004		Miniature circuit breaker FB2-63 3P+N B 4A 6kA STANDART	4	3	60	0,440	1,320	26,400
FB2BN4005		Miniature circuit breaker FB2-63 3P+N B 5A 6kA STANDART	5	3	60	0,440	1,320	26,400
FB2BN4006		Miniature circuit breaker FB2-63 3P+N B 6A 6kA STANDART	6	3	60	0,440	1,320	26,400
FB2BN4008		Miniature circuit breaker FB2-63 3P+N B 8A 6kA STANDART	8	3	60	0,440	1,320	26,400
FB2BN4010		Miniature circuit breaker FB2-63 3P+N B 10A 6kA STANDART	10	3	60	0,448	1,344	26,880
FB2BN4013		Miniature circuit breaker FB2-63 3P+N B 13A 6kA STANDART	13	3	60	0,452	1,356	27,120
FB2BN4016		Miniature circuit breaker FB2-63 3P+N B 16A 6kA STANDART	16	3	60	0,456	1,368	27,360
FB2BN4020		Miniature circuit breaker FB2-63 3P+N B 20A 6kA STANDART	20	3	60	0,456	1,368	27,360
FB2BN4025		Miniature circuit breaker FB2-63 3P+N B 25A 6kA STANDART	25	3	60	0,456	1,368	27,360
FB2BN4032		Miniature circuit breaker FB2-63 3P+N B 32A 6kA STANDART	32	3	60	0,460	1,380	27,600
FB2BN4040		Miniature circuit breaker FB2-63 3P+N B 40A 6kA STANDART	40	3	60	0,460	1,380	27,600
FB2BN4050		Miniature circuit breaker FB2-63 3P+N B 50A 6kA STANDART	50	3	60	0,464	1,392	27,840
FB2BN4063		Miniature circuit breaker FB2-63 3P+N B 63A 6kA STANDART	63	3	60	0,464	1,392	27,840
<b>4P</b>		FB2B4001	Miniature circuit breaker FB2-63 4P B 1A 6kA STANDART	1	3	60	0,436	1,308
	FB2B4002	Miniature circuit breaker FB2-63 4P B 2A 6kA STANDART	2	3	60	0,436	1,308	26,160
	FB2B4003	Miniature circuit breaker FB2-63 4P B 3A 6kA STANDART	3	3	60	0,436	1,308	26,160
	FB2B4004	Miniature circuit breaker FB2-63 4P B 4A 6kA STANDART	4	3	60	0,440	1,320	26,400
	FB2B4005	Miniature circuit breaker FB2-63 4P B 5A 6kA STANDART	5	3	60	0,440	1,320	26,400
	FB2B4006	Miniature circuit breaker FB2-63 4P B 6A 6kA STANDART	6	3	60	0,440	1,320	26,400
	FB2B4008	Miniature circuit breaker FB2-63 4P B 8A 6kA STANDART	8	3	60	0,440	1,320	26,400
	FB2B4010	Miniature circuit breaker FB2-63 4P B 10A 6kA STANDART	10	3	60	0,448	1,344	26,880
	FB2B4013	Miniature circuit breaker FB2-63 4P B 13A 6kA STANDART	13	3	60	0,452	1,356	27,120
	FB2B4016	Miniature circuit breaker FB2-63 4P B 16A 6kA STANDART	16	3	60	0,456	1,368	27,360
	FB2B4020	Miniature circuit breaker FB2-63 4P B 20A 6kA STANDART	20	3	60	0,456	1,368	27,360
	FB2B4025	Miniature circuit breaker FB2-63 4P B 25A 6kA STANDART	25	3	60	0,456	1,368	27,360
	FB2B4032	Miniature circuit breaker FB2-63 4P B 32A 6kA STANDART	32	3	60	0,460	1,380	27,600
	FB2B4040	Miniature circuit breaker FB2-63 4P B 40A 6kA STANDART	40	3	60	0,460	1,380	27,600
	FB2B4050	Miniature circuit breaker FB2-63 4P B 50A 6kA STANDART	50	3	60	0,464	1,392	27,840
	FB2B4063	Miniature circuit breaker FB2-63 4P B 63A 6kA STANDART	63	3	60	0,464	1,392	27,840

# Miniature circuit breakers FB2-63 Standart

Standart

Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB2C1001	Miniature circuit breaker FB2-63 1P C 1A 6kA STANDART	1	12	240	0,109	1,308	26,160
	FB2C1002	Miniature circuit breaker FB2-63 1P C 2A 6kA STANDART	2	12	240	0,109	1,308	26,160
	FB2C1003	Miniature circuit breaker FB2-63 1P C 3A 6kA STANDART	3	12	240	0,109	1,308	26,160
	FB2C1004	Miniature circuit breaker FB2-63 1P C 4A 6kA STANDART	4	12	240	0,110	1,320	26,400
	FB2C1005	Miniature circuit breaker FB2-63 1P C 5A 6kA STANDART	5	12	240	0,110	1,320	26,400
	FB2C1006	Miniature circuit breaker FB2-63 1P C 6A 6kA STANDART	6	12	240	0,110	1,320	26,400
	FB2C1008	Miniature circuit breaker FB2-63 1P C 8A 6kA STANDART	8	12	240	0,110	1,320	26,400
	FB2C1010	Miniature circuit breaker FB2-63 1P C 10A 6kA STANDART	10	12	240	0,112	1,344	26,880
	FB2C1013	Miniature circuit breaker FB2-63 1P C 13A 6kA STANDART	13	12	240	0,113	1,356	27,120
	FB2C1016	Miniature circuit breaker FB2-63 1P C 16A 6kA STANDART	16	12	240	0,114	1,368	27,360
	FB2C1020	Miniature circuit breaker FB2-63 1P C 20A 6kA STANDART	20	12	240	0,114	1,368	27,360
	FB2C1025	Miniature circuit breaker FB2-63 1P C 25A 6kA STANDART	25	12	240	0,114	1,368	27,360
	FB2C1032	Miniature circuit breaker FB2-63 1P C 32A 6kA STANDART	32	12	240	0,115	1,380	27,600
	FB2C1040	Miniature circuit breaker FB2-63 1P C 40A 6kA STANDART	40	12	240	0,115	1,380	27,600
	FB2C1050	Miniature circuit breaker FB2-63 1P C 50A 6kA STANDART	50	12	240	0,116	1,392	27,840
	FB2C1063	Miniature circuit breaker FB2-63 1P C 63A 6kA STANDART	63	12	240	0,116	1,392	27,840

<b>1P+N</b>	FB2CN2001	Miniature circuit breaker FB2-63 1P+N C 1A 6kA STANDART	1	6	120	0,218	1,308	26,160
	FB2CN2002	Miniature circuit breaker FB2-63 1P+N C 2A 6kA STANDART	2	6	120	0,218	1,308	26,160
	FB2CN2003	Miniature circuit breaker FB2-63 1P+N C 3A 6kA STANDART	3	6	120	0,218	1,308	26,160
	FB2CN2004	Miniature circuit breaker FB2-63 1P+N C 4A 6kA STANDART	4	6	120	0,220	1,320	26,400
	FB2CN2005	Miniature circuit breaker FB2-63 1P+N C 5A 6kA STANDART	5	6	120	0,220	1,320	26,400
	FB2CN2006	Miniature circuit breaker FB2-63 1P+N C 6A 6kA STANDART	6	6	120	0,220	1,320	26,400
	FB2CN2008	Miniature circuit breaker FB2-63 1P+N C 8A 6kA STANDART	8	6	120	0,220	1,320	26,400
	FB2CN2010	Miniature circuit breaker FB2-63 1P+N C 10A 6kA STANDART	10	6	120	0,224	1,344	26,880
	FB2CN2013	Miniature circuit breaker FB2-63 1P+N C 13A 6kA STANDART	13	6	120	0,226	1,356	27,120
	FB2CN2016	Miniature circuit breaker FB2-63 1P+N C 16A 6kA STANDART	16	6	120	0,228	1,368	27,360
	FB2CN2020	Miniature circuit breaker FB2-63 1P+N C 20A 6kA STANDART	20	6	120	0,228	1,368	27,360
	FB2CN2025	Miniature circuit breaker FB2-63 1P+N C 25A 6kA STANDART	25	6	120	0,228	1,368	27,360
	FB2CN2032	Miniature circuit breaker FB2-63 1P+N C 32A 6kA STANDART	32	6	120	0,230	1,380	27,600
	FB2CN2040	Miniature circuit breaker FB2-63 1P+N C 40A 6kA STANDART	40	6	120	0,230	1,380	27,600
	FB2CN2050	Miniature circuit breaker FB2-63 1P+N C 50A 6kA STANDART	50	6	120	0,232	1,392	27,840
	FB2CN2063	Miniature circuit breaker FB2-63 1P+N C 63A 6kA STANDART	63	6	120	0,232	1,392	27,840

<b>2P</b>	FB2C2001	Miniature circuit breaker FB2-63 2P C 1A 6kA STANDART	1	6	120	0,218	1,308	26,160
	FB2C2002	Miniature circuit breaker FB2-63 2P C 2A 6kA STANDART	2	6	120	0,218	1,308	26,160
	FB2C2003	Miniature circuit breaker FB2-63 2P C 3A 6kA STANDART	3	6	120	0,218	1,308	26,160
	FB2C2004	Miniature circuit breaker FB2-63 2P C 4A 6kA STANDART	4	6	120	0,220	1,320	26,400
	FB2C2005	Miniature circuit breaker FB2-63 2P C 5A 6kA STANDART	5	6	120	0,220	1,320	26,400
	FB2C2006	Miniature circuit breaker FB2-63 2P C 6A 6kA STANDART	6	6	120	0,220	1,320	26,400
	FB2C2008	Miniature circuit breaker FB2-63 2P C 8A 6kA STANDART	8	6	120	0,220	1,320	26,400
	FB2C2010	Miniature circuit breaker FB2-63 2P C 10A 6kA STANDART	10	6	120	0,224	1,344	26,880
	FB2C2013	Miniature circuit breaker FB2-63 2P C 13A 6kA STANDART	13	6	120	0,226	1,356	27,120
	FB2C2016	Miniature circuit breaker FB2-63 2P C 16A 6kA STANDART	16	6	120	0,228	1,368	27,360
	FB2C2020	Miniature circuit breaker FB2-63 2P C 20A 6kA STANDART	20	6	120	0,228	1,368	27,360
	FB2C2025	Miniature circuit breaker FB2-63 2P C 25A 6kA STANDART	25	6	120	0,228	1,368	27,360
	FB2C2032	Miniature circuit breaker FB2-63 2P C 32A 6kA STANDART	32	6	120	0,230	1,380	27,600
	FB2C2040	Miniature circuit breaker FB2-63 2P C 40A 6kA STANDART	40	6	120	0,230	1,380	27,600
	FB2C2050	Miniature circuit breaker FB2-63 2P C 50A 6kA STANDART	50	6	120	0,232	1,392	27,840
	FB2C2063	Miniature circuit breaker FB2-63 2P C 63A 6kA STANDART	63	6	120	0,232	1,392	27,840

## Miniature circuit breakers FB2-63 Standart

Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>3P</b>	FB2C3001	Miniature circuit breaker FB2-63 3P C 1A 6kA STANDART	1	4	80	0,327	1,308	26,160
	FB2C3002	Miniature circuit breaker FB2-63 3P C 2A 6kA STANDART	2	4	80	0,327	1,308	26,160
	FB2C3003	Miniature circuit breaker FB2-63 3P C 3A 6kA STANDART	3	4	80	0,327	1,308	26,160
	FB2C3004	Miniature circuit breaker FB2-63 3P C 4A 6kA STANDART	4	4	80	0,330	1,320	26,400
	FB2C3005	Miniature circuit breaker FB2-63 3P C 5A 6kA STANDART	5	4	80	0,330	1,320	26,400
	FB2C3006	Miniature circuit breaker FB2-63 3P C 6A 6kA STANDART	6	4	80	0,330	1,320	26,400
	FB2C3008	Miniature circuit breaker FB2-63 3P C 8A 6kA STANDART	8	4	80	0,330	1,320	26,400
	FB2C3010	Miniature circuit breaker FB2-63 3P C 10A 6kA STANDART	10	4	80	0,336	1,344	26,880
	FB2C3013	Miniature circuit breaker FB2-63 3P C 13A 6kA STANDART	13	4	80	0,339	1,356	27,120
	FB2C3016	Miniature circuit breaker FB2-63 3P C 16A 6kA STANDART	16	4	80	0,342	1,368	27,360
	FB2C3020	Miniature circuit breaker FB2-63 3P C 20A 6kA STANDART	20	4	80	0,342	1,368	27,360
	FB2C3025	Miniature circuit breaker FB2-63 3P C 25A 6kA STANDART	25	4	80	0,342	1,368	27,360
	FB2C3032	Miniature circuit breaker FB2-63 3P C 32A 6kA STANDART	32	4	80	0,345	1,380	27,600
	FB2C3040	Miniature circuit breaker FB2-63 3P C 40A 6kA STANDART	40	4	80	0,345	1,380	27,600
	FB2C3050	Miniature circuit breaker FB2-63 3P C 50A 6kA STANDART	50	4	80	0,348	1,392	27,840
	FB2C3063	Miniature circuit breaker FB2-63 3P C 63A 6kA STANDART	63	4	80	0,348	1,392	27,840
	<b>3P+N</b>	FB2CN4001	Miniature circuit breaker FB2-63 3P+N C 1A 6kA STANDART	1	3	60	0,436	1,308
FB2CN4002		Miniature circuit breaker FB2-63 3P+N C 2A 6kA STANDART	2	3	60	0,436	1,308	26,160
FB2CN4003		Miniature circuit breaker FB2-63 3P+N C 3A 6kA STANDART	3	3	60	0,436	1,308	26,160
FB2CN4004		Miniature circuit breaker FB2-63 3P+N C 4A 6kA STANDART	4	3	60	0,440	1,320	26,400
FB2CN4005		Miniature circuit breaker FB2-63 3P+N C 5A 6kA STANDART	5	3	60	0,440	1,320	26,400
FB2CN4006		Miniature circuit breaker FB2-63 3P+N C 6A 6kA STANDART	6	3	60	0,440	1,320	26,400
FB2CN4008		Miniature circuit breaker FB2-63 3P+N C 8A 6kA STANDART	8	3	60	0,440	1,320	26,400
FB2CN4010		Miniature circuit breaker FB2-63 3P+N C 10A 6kA STANDART	10	3	60	0,448	1,344	26,880
FB2CN4013		Miniature circuit breaker FB2-63 3P+N C 13A 6kA STANDART	13	3	60	0,452	1,356	27,120
FB2CN4016		Miniature circuit breaker FB2-63 3P+N C 16A 6kA STANDART	16	3	60	0,456	1,368	27,360
FB2CN4020		Miniature circuit breaker FB2-63 3P+N C 20A 6kA STANDART	20	3	60	0,456	1,368	27,360
FB2CN4025		Miniature circuit breaker FB2-63 3P+N C 25A 6kA STANDART	25	3	60	0,456	1,368	27,360
FB2CN4032		Miniature circuit breaker FB2-63 3P+N C 32A 6kA STANDART	32	3	60	0,460	1,380	27,600
FB2CN4040		Miniature circuit breaker FB2-63 3P+N C 40A 6kA STANDART	40	3	60	0,460	1,380	27,600
FB2CN4050		Miniature circuit breaker FB2-63 3P+N C 50A 6kA STANDART	50	3	60	0,464	1,392	27,840
FB2CN4063		Miniature circuit breaker FB2-63 3P+N C 63A 6kA STANDART	63	3	60	0,464	1,392	27,840
<b>4P</b>		FB2C4001	Miniature circuit breaker FB2-63 4P C 1A 6kA STANDART	1	3	60	0,436	1,308
	FB2C4002	Miniature circuit breaker FB2-63 4P C 2A 6kA STANDART	2	3	60	0,436	1,308	26,160
	FB2C4003	Miniature circuit breaker FB2-63 4P C 3A 6kA STANDART	3	3	60	0,436	1,308	26,160
	FB2C4004	Miniature circuit breaker FB2-63 4P C 4A 6kA STANDART	4	3	60	0,440	1,320	26,400
	FB2C4005	Miniature circuit breaker FB2-63 4P C 5A 6kA STANDART	5	3	60	0,440	1,320	26,400
	FB2C4006	Miniature circuit breaker FB2-63 4P C 6A 6kA STANDART	6	3	60	0,440	1,320	26,400
	FB2C4008	Miniature circuit breaker FB2-63 4P C 8A 6kA STANDART	8	3	60	0,440	1,320	26,400
	FB2C4010	Miniature circuit breaker FB2-63 4P C 10A 6kA STANDART	10	3	60	0,448	1,344	26,880
	FB2C4013	Miniature circuit breaker FB2-63 4P C 13A 6kA STANDART	13	3	60	0,452	1,356	27,120
	FB2C4016	Miniature circuit breaker FB2-63 4P C 16A 6kA STANDART	16	3	60	0,456	1,368	27,360
	FB2C4020	Miniature circuit breaker FB2-63 4P C 20A 6kA STANDART	20	3	60	0,456	1,368	27,360
	FB2C4025	Miniature circuit breaker FB2-63 4P C 25A 6kA STANDART	25	3	60	0,456	1,368	27,360
	FB2C4032	Miniature circuit breaker FB2-63 4P C 32A 6kA STANDART	32	3	60	0,460	1,380	27,600
	FB2C4040	Miniature circuit breaker FB2-63 4P C 40A 6kA STANDART	40	3	60	0,460	1,380	27,600
	FB2C4050	Miniature circuit breaker FB2-63 4P C 50A 6kA STANDART	50	3	60	0,464	1,392	27,840
	FB2C4063	Miniature circuit breaker FB2-63 4P C 63A 6kA STANDART	63	3	60	0,464	1,392	27,840

Standart

# Miniature circuit breakers FB2-63 Standart

Standart

Characteristic D	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB2D1001	Miniature circuit breaker FB2-63 1P D 1A 6kA STANDART	1	12	240	0,110	1,320	26,400
	FB2D1002	Miniature circuit breaker FB2-63 1P D 2A 6kA STANDART	2	12	240	0,110	1,320	26,400
	FB2D1003	Miniature circuit breaker FB2-63 1P D 3A 6kA STANDART	3	12	240	0,110	1,320	26,400
	FB2D1004	Miniature circuit breaker FB2-63 1P D 4A 6kA STANDART	4	12	240	0,110	1,320	26,400
	FB2D1005	Miniature circuit breaker FB2-63 1P D 5A 6kA STANDART	5	12	240	0,110	1,320	26,400
	FB2D1006	Miniature circuit breaker FB2-63 1P D 6A 6kA STANDART	6	12	240	0,110	1,320	26,400
	FB2D1008	Miniature circuit breaker FB2-63 1P D 8A 6kA STANDART	8	12	240	0,110	1,320	26,400
	FB2D1010	Miniature circuit breaker FB2-63 1P D 10A 6kA STANDART	10	12	240	0,112	1,344	26,880
	FB2D1013	Miniature circuit breaker FB2-63 1P D 13A 6kA STANDART	13	12	240	0,112	1,344	26,880
	FB2D1016	Miniature circuit breaker FB2-63 1P D 16A 6kA STANDART	16	12	240	0,114	1,368	27,360
	FB2D1020	Miniature circuit breaker FB2-63 1P D 20A 6kA STANDART	20	12	240	0,114	1,368	27,360
	FB2D1025	Miniature circuit breaker FB2-63 1P D 25A 6kA STANDART	25	12	240	0,114	1,368	27,360
	FB2D1032	Miniature circuit breaker FB2-63 1P D 32A 6kA STANDART	32	12	240	0,115	1,380	27,600
	FB2D1040	Miniature circuit breaker FB2-63 1P D 40A 6kA STANDART	40	12	240	0,115	1,380	27,600
	FB2D1050	Miniature circuit breaker FB2-63 1P D 50A 6kA STANDART	50	12	240	0,116	1,392	27,840
	FB2D1063	Miniature circuit breaker FB2-63 1P D 63A 6kA STANDART	63	12	240	0,116	1,392	27,840

<b>1P+N</b>	FB2DN2001	Miniature circuit breaker FB2-63 1P+N D 1A 6kA STANDART	1	6	120	0,220	1,320	26,400
	FB2DN2002	Miniature circuit breaker FB2-63 1P+N D 2A 6kA STANDART	2	6	120	0,220	1,320	26,400
	FB2DN2003	Miniature circuit breaker FB2-63 1P+N D 3A 6kA STANDART	3	6	120	0,220	1,320	26,400
	FB2DN2004	Miniature circuit breaker FB2-63 1P+N D 4A 6kA STANDART	4	6	120	0,220	1,320	26,400
	FB2DN2005	Miniature circuit breaker FB2-63 1P+N D 5A 6kA STANDART	5	6	120	0,220	1,320	26,400
	FB2DN2006	Miniature circuit breaker FB2-63 1P+N D 6A 6kA STANDART	6	6	120	0,220	1,320	26,400
	FB2DN2008	Miniature circuit breaker FB2-63 1P+N D 8A 6kA STANDART	8	6	120	0,220	1,320	26,400
	FB2DN2010	Miniature circuit breaker FB2-63 1P+N D 10A 6kA STANDART	10	6	120	0,224	1,344	26,880
	FB2DN2013	Miniature circuit breaker FB2-63 1P+N D 13A 6kA STANDART	13	6	120	0,22	1,344	26,880
	FB2DN2016	Miniature circuit breaker FB2-63 1P+N D 16A 6kA STANDART	16	6	120	0,228	1,368	27,360
	FB2DN2020	Miniature circuit breaker FB2-63 1P+N D 20A 6kA STANDART	20	6	120	0,228	1,368	27,360
	FB2DN2025	Miniature circuit breaker FB2-63 1P+N D 25A 6kA STANDART	25	6	120	0,228	1,368	27,360
	FB2DN2032	Miniature circuit breaker FB2-63 1P+N D 32A 6kA STANDART	32	6	120	0,230	1,380	27,600
	FB2DN2040	Miniature circuit breaker FB2-63 1P+N D 40A 6kA STANDART	40	6	120	0,230	1,380	27,600
FB2DN2050	Miniature circuit breaker FB2-63 1P+N D 50A 6kA STANDART	50	6	120	0,232	1,392	27,840	
FB2DN2063	Miniature circuit breaker FB2-63 1P+N D 63A 6kA STANDART	63	6	120	0,232	1,392	27,840	

<b>2P</b>	FB2D2001	Miniature circuit breaker FB2-63 2P D 1A 6kA STANDART	1	6	120	0,220	1,320	26,400
	FB2D2002	Miniature circuit breaker FB2-63 2P D 2A 6kA STANDART	2	6	120	0,220	1,320	26,400
	FB2D2003	Miniature circuit breaker FB2-63 2P D 3A 6kA STANDART	3	6	120	0,220	1,320	26,400
	FB2D2004	Miniature circuit breaker FB2-63 2P D 4A 6kA STANDART	4	6	120	0,220	1,320	26,400
	FB2D2005	Miniature circuit breaker FB2-63 2P D 5A 6kA STANDART	5	6	120	0,220	1,320	26,400
	FB2D2006	Miniature circuit breaker FB2-63 2P D 6A 6kA STANDART	6	6	120	0,220	1,320	26,400
	FB2D2008	Miniature circuit breaker FB2-63 2P D 8A 6kA STANDART	8	6	120	0,220	1,320	26,400
	FB2D2010	Miniature circuit breaker FB2-63 2P D 10A 6kA STANDART	10	6	120	0,224	1,344	26,880
	FB2D2013	Miniature circuit breaker FB2-63 2P D 13A 6kA STANDART	13	6	120	0,224	1,344	26,880
	FB2D2016	Miniature circuit breaker FB2-63 2P D 16A 6kA STANDART	16	6	120	0,228	1,368	27,360
	FB2D2020	Miniature circuit breaker FB2-63 2P D 20A 6kA STANDART	20	6	120	0,228	1,368	27,360
	FB2D2025	Miniature circuit breaker FB2-63 2P D 25A 6kA STANDART	25	6	120	0,228	1,368	27,360
	FB2D2032	Miniature circuit breaker FB2-63 2P D 32A 6kA STANDART	32	6	120	0,230	1,380	27,600
	FB2D2040	Miniature circuit breaker FB2-63 2P D 40A 6kA STANDART	40	6	120	0,230	1,380	27,600
FB2D2050	Miniature circuit breaker FB2-63 2P D 50A 6kA STANDART	50	6	120	0,232	1,392	27,840	
FB2D2063	Miniature circuit breaker FB2-63 2P D 63A 6kA STANDART	63	6	120	0,232	1,392	27,840	

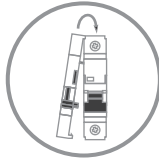
## Miniature circuit breakers FB2-63 Standart

Characteristic D	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg			
				Packaging	Box	Unit	Packaging	Box	
<b>3P</b>	FB2D3001	Miniature circuit breaker FB2-63 3P D 1A 6kA STANDART	1	4	80	0,330	1,320	26,400	
	FB2D3002	Miniature circuit breaker FB2-63 3P D 2A 6kA STANDART	2	4	80	0,330	1,320	26,400	
	FB2D3003	Miniature circuit breaker FB2-63 3P D 3A 6kA STANDART	3	4	80	0,330	1,320	26,400	
	FB2D3004	Miniature circuit breaker FB2-63 3P D 4A 6kA STANDART	4	4	80	0,330	1,320	26,400	
	FB2D3005	Miniature circuit breaker FB2-63 3P D 5A 6kA STANDART	5	4	80	0,330	1,320	26,400	
	FB2D3006	Miniature circuit breaker FB2-63 3P D 6A 6kA STANDART	6	4	80	0,330	1,320	26,400	
	FB2D3008	Miniature circuit breaker FB2-63 3P D 8A 6kA STANDART	8	4	80	0,330	1,320	26,400	
	FB2D3010	Miniature circuit breaker FB2-63 3P D 10A 6kA STANDART	10	4	80	0,336	1,344	26,880	
	FB2D3013	Miniature circuit breaker FB2-63 3P D 13A 6kA STANDART	13	4	80	0,339	1,356	27,120	
	FB2D3016	Miniature circuit breaker FB2-63 3P D 16A 6kA STANDART	16	4	80	0,342	1,368	27,360	
	FB2D3020	Miniature circuit breaker FB2-63 3P D 20A 6kA STANDART	20	4	80	0,342	1,368	27,360	
	FB2D3025	Miniature circuit breaker FB2-63 3P D 25A 6kA STANDART	25	4	80	0,342	1,368	27,360	
	FB2D3032	Miniature circuit breaker FB2-63 3P D 32A 6kA STANDART	32	4	80	0,345	1,380	27,600	
	FB2D3040	Miniature circuit breaker FB2-63 3P D 40A 6kA STANDART	40	4	80	0,345	1,380	27,600	
	FB2D3050	Miniature circuit breaker FB2-63 3P D 50A 6kA STANDART	50	4	80	0,348	1,392	27,840	
	FB2D3063	Miniature circuit breaker FB2-63 3P D 63A 6kA STANDART	63	4	80	0,348	1,392	27,840	
	<b>3P+N</b>	FB2DN4001	Miniature circuit breaker FB2-63 3P+N D 1A 6kA STANDART	1	3	60	0,448	1,344	26,880
		FB2DN4002	Miniature circuit breaker FB2-63 3P+N D 2A 6kA STANDART	2	3	60	0,448	1,344	26,880
FB2DN4003		Miniature circuit breaker FB2-63 3P+N D 3A 6kA STANDART	3	3	60	0,448	1,344	26,880	
FB2DN4004		Miniature circuit breaker FB2-63 3P+N D 4A 6kA STANDART	4	3	60	0,448	1,344	26,880	
FB2DN4005		Miniature circuit breaker FB2-63 3P+N D 5A 6kA STANDART	5	3	60	0,448	1,344	26,880	
FB2DN4006		Miniature circuit breaker FB2-63 3P+N D 6A 6kA STANDART	6	3	60	0,448	1,344	26,880	
FB2DN4008		Miniature circuit breaker FB2-63 3P+N D 8A 6kA STANDART	8	3	60	0,448	1,344	26,880	
FB2DN4010		Miniature circuit breaker FB2-63 3P+N D 10A 6kA STANDART	10	3	60	0,448	1,344	26,880	
FB2DN4013		Miniature circuit breaker FB2-63 3P+N D 13A 6kA STANDART	13	3	60	0,448	1,344	26,880	
FB2DN4016		Miniature circuit breaker FB2-63 3P+N D 16A 6kA STANDART	16	3	60	0,448	1,344	26,880	
FB2DN4020		Miniature circuit breaker FB2-63 3P+N D 20A 6kA STANDART	20	3	60	0,448	1,344	26,880	
FB2DN4025		Miniature circuit breaker FB2-63 3P+N D 25A 6kA STANDART	25	3	60	0,448	1,344	26,880	
FB2DN4032		Miniature circuit breaker FB2-63 3P+N D 32A 6kA STANDART	32	3	60	0,448	1,344	26,880	
FB2DN4040		Miniature circuit breaker FB2-63 3P+N D 40A 6kA STANDART	40	3	60	0,448	1,344	26,880	
FB2DN4050	Miniature circuit breaker FB2-63 3P+N D 50A 6kA STANDART	50	3	60	0,448	1,344	26,880		
FB2DN4063	Miniature circuit breaker FB2-63 3P+N D 63A 6kA STANDART	63	3	60	0,448	1,344	26,880		
<b>4P</b>	FB2D4001	Miniature circuit breaker FB2-63 4P D 1A 6kA STANDART	1	3	60	0,448	1,344	26,880	
	FB2D4002	Miniature circuit breaker FB2-63 4P D 2A 6kA STANDART	2	3	60	0,448	1,344	26,880	
	FB2D4003	Miniature circuit breaker FB2-63 4P D 3A 6kA STANDART	3	3	60	0,448	1,344	26,880	
	FB2D4004	Miniature circuit breaker FB2-63 4P D 4A 6kA STANDART	4	3	60	0,448	1,344	26,880	
	FB2D4005	Miniature circuit breaker FB2-63 4P D 5A 6kA STANDART	5	3	60	0,448	1,344	26,880	
	FB2D4006	Miniature circuit breaker FB2-63 4P D 6A 6kA STANDART	6	3	60	0,448	1,344	26,880	
	FB2D4008	Miniature circuit breaker FB2-63 4P D 8A 6kA STANDART	8	3	60	0,448	1,344	26,880	
	FB2D4010	Miniature circuit breaker FB2-63 4P D 10A 6kA STANDART	10	3	60	0,448	1,344	26,880	
	FB2D4013	Miniature circuit breaker FB2-63 4P D 13A 6kA STANDART	13	3	60	0,448	1,344	26,880	
	FB2D4016	Miniature circuit breaker FB2-63 4P D 16A 6kA STANDART	16	3	60	0,448	1,344	26,880	
	FB2D4020	Miniature circuit breaker FB2-63 4P D 20A 6kA STANDART	20	3	60	0,448	1,344	26,880	
	FB2D4025	Miniature circuit breaker FB2-63 4P D 25A 6kA STANDART	25	3	60	0,448	1,344	26,880	
	FB2D4032	Miniature circuit breaker FB2-63 4P D 32A 6kA STANDART	32	3	60	0,448	1,344	26,880	
	FB2D4040	Miniature circuit breaker FB2-63 4P D 40A 6kA STANDART	40	3	60	0,448	1,344	26,880	
FB2D4050	Miniature circuit breaker FB2-63 4P D 50A 6kA STANDART	50	3	60	0,448	1,344	26,880		
FB2D4063	Miniature circuit breaker FB2-63 4P D 63A 6kA STANDART	63	3	60	0,448	1,344	26,880		

Standart

**MAX  
63A**

**10kA**

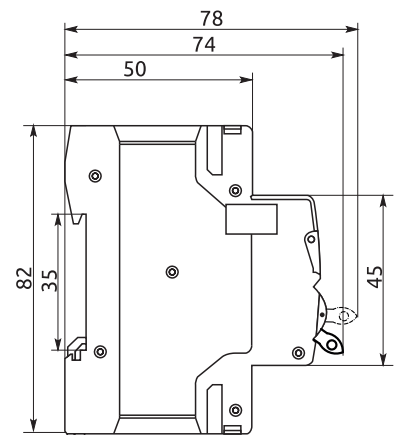
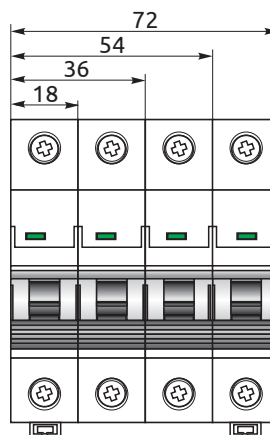
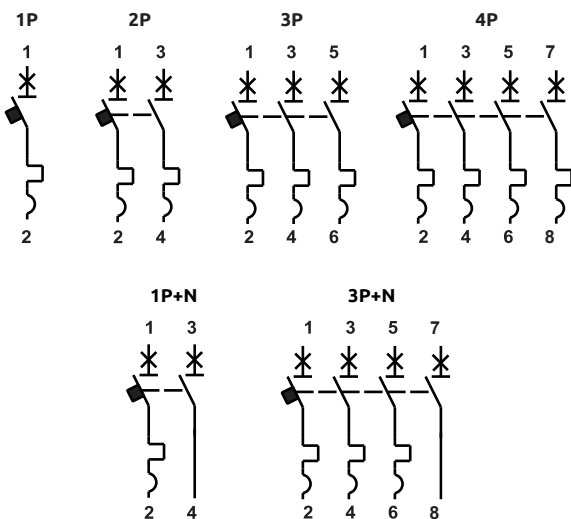


## Technical specifications

Series	FB2-63
Standards	IEC/EN 60898 IEC/EN 60947-2
Number of poles	1P, 1P+N, 2P, 3P, 3P+N, 4P
Tripping characteristics	B, C, D
Rated voltage $U_n$ , V	~230/400
Rated current $I_n$ , A	1, 2, 3, 4, 5, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63
Rated frequency $f$ , Hz	50/60
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	4000
Selectivity class	3
Rated breaking capacity $I_{cs}$ , A	10 000
Switching wear resistance (number of cycles on/off)	10 000/20 000 (electrical/mechanical)
Connecting of additional devices	yes
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25
Degree of protection	IP20
DIN rail mounting	TN35
Connecting of busbar	PIN/FORK
Connecting of busbar	any
Width, mm	18
Sealing option ON/OFF	yes
Trip unit technology	electromagnetic/thermal

## Schematic diagrams

## Overall dimensions



# Miniature circuit breakers FB2-63 Standart

Characteristic B	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB2B1101	Miniature circuit breaker FB2-63 1P B 1A 10kA STANDART	1	12	240	0,109	1,308	26,160
	FB2B1102	Miniature circuit breaker FB2-63 1P B 2A 10kA STANDART	2	12	240	0,109	1,308	26,160
	FB2B1103	Miniature circuit breaker FB2-63 1P B 3A 10kA STANDART	3	12	240	0,109	1,308	26,160
	FB2B1104	Miniature circuit breaker FB2-63 1P B 4A 10kA STANDART	4	12	240	0,110	1,320	26,400
	FB2B1105	Miniature circuit breaker FB2-63 1P B 5A 10kA STANDART	5	12	240	0,110	1,320	26,400
	FB2B1106	Miniature circuit breaker FB2-63 1P B 6A 10kA STANDART	6	12	240	0,110	1,320	26,400
	FB2B1108	Miniature circuit breaker FB2-63 1P B 8A 10kA STANDART	8	12	240	0,110	1,320	26,400
	FB2B1110	Miniature circuit breaker FB2-63 1P B 10A 10kA STANDART	10	12	240	0,109	1,308	26,160
	FB2B1113	Miniature circuit breaker FB2-63 1P B 13A 10kA STANDART	13	12	240	0,113	1,356	27,120
	FB2B1116	Miniature circuit breaker FB2-63 1P B 16A 10kA STANDART	16	12	240	0,114	1,368	27,360
	FB2B1120	Miniature circuit breaker FB2-63 1P B 20A 10kA STANDART	20	12	240	0,114	1,368	27,360
	FB2B1125	Miniature circuit breaker FB2-63 1P B 25A 10kA STANDART	25	12	240	0,114	1,368	27,360
	FB2B1132	Miniature circuit breaker FB2-63 1P B 32A 10kA STANDART	32	12	240	0,115	1,380	27,600
	FB2B1140	Miniature circuit breaker FB2-63 1P B 40A 10kA STANDART	40	12	240	0,115	1,380	27,600
	FB2B1150	Miniature circuit breaker FB2-63 1P B 50A 10kA STANDART	50	12	240	0,116	1,392	27,840
	FB2B1163	Miniature circuit breaker FB2-63 1P B 63A 10kA STANDART	63	12	240	0,116	1,392	27,840



Standart

<b>1P+N</b>	FB2BN2101	Miniature circuit breaker FB2-63 1P+N B 1A 10kA STANDART	1	6	120	0,218	1,308	26,160
	FB2BN2102	Miniature circuit breaker FB2-63 1P+N B 2A 10kA STANDART	2	6	120	0,218	1,308	26,160
	FB2BN2103	Miniature circuit breaker FB2-63 1P+N B 3A 10kA STANDART	3	6	120	0,218	1,308	26,160
	FB2BN2104	Miniature circuit breaker FB2-63 1P+N B 4A 10kA STANDART	4	6	120	0,220	1,320	26,400
	FB2BN2105	Miniature circuit breaker FB2-63 1P+N B 5A 10kA STANDART	5	6	120	0,220	1,320	26,400
	FB2BN2106	Miniature circuit breaker FB2-63 1P+N B 6A 10kA STANDART	6	6	120	0,220	1,320	26,400
	FB2BN2108	Miniature circuit breaker FB2-63 1P+N B 8A 10kA STANDART	8	6	120	0,220	1,320	26,400
	FB2BN2110	Miniature circuit breaker FB2-63 1P+N B 10A 10kA STANDART	10	6	120	0,224	1,344	26,880
	FB2BN2113	Miniature circuit breaker FB2-63 1P+N B 13A 10kA STANDART	13	6	120	0,226	1,356	27,120
	FB2BN2116	Miniature circuit breaker FB2-63 1P+N B 16A 10kA STANDART	16	6	120	0,228	1,368	27,360
	FB2BN2120	Miniature circuit breaker FB2-63 1P+N B 20A 10kA STANDART	20	6	120	0,228	1,368	27,360
	FB2BN2125	Miniature circuit breaker FB2-63 1P+N B 25A 10kA STANDART	25	6	120	0,228	1,368	27,360
	FB2BN2132	Miniature circuit breaker FB2-63 1P+N B 32A 10kA STANDART	32	6	120	0,230	1,380	27,600
	FB2BN2140	Miniature circuit breaker FB2-63 1P+N B 40A 10kA STANDART	40	6	120	0,230	1,380	27,600
	FB2BN2150	Miniature circuit breaker FB2-63 1P+N B 50A 10kA STANDART	50	6	120	0,232	1,392	27,840
	FB2BN2163	Miniature circuit breaker FB2-63 1P+N B 63A 10kA STANDART	63	6	120	0,232	1,392	27,840



<b>2P</b>	FB2B2101	Miniature circuit breaker FB2-63 2P B 1A 10kA STANDART	1	6	120	0,218	1,308	26,160
	FB2B2102	Miniature circuit breaker FB2-63 2P B 2A 10kA STANDART	2	6	120	0,218	1,308	26,160
	FB2B2103	Miniature circuit breaker FB2-63 2P B 3A 10kA STANDART	3	6	120	0,218	1,308	26,160
	FB2B2104	Miniature circuit breaker FB2-63 2P B 4A 10kA STANDART	4	6	120	0,220	1,320	26,400
	FB2B2105	Miniature circuit breaker FB2-63 2P B 5A 10kA STANDART	5	6	120	0,220	1,320	26,400
	FB2B2106	Miniature circuit breaker FB2-63 2P B 6A 10kA STANDART	6	6	120	0,220	1,320	26,400
	FB2B2108	Miniature circuit breaker FB2-63 2P B 8A 10kA STANDART	8	6	120	0,220	1,320	26,400
	FB2B2110	Miniature circuit breaker FB2-63 2P B 10A 10kA STANDART	10	6	120	0,224	1,344	26,880
	FB2B2113	Miniature circuit breaker FB2-63 2P B 13A 10kA STANDART	13	6	120	0,226	1,356	27,120
	FB2B2116	Miniature circuit breaker FB2-63 2P B 16A 10kA STANDART	16	6	120	0,228	1,368	27,360
	FB2B2120	Miniature circuit breaker FB2-63 2P B 20A 10kA STANDART	20	6	120	0,228	1,368	27,360
	FB2B2125	Miniature circuit breaker FB2-63 2P B 25A 10kA STANDART	25	6	120	0,228	1,368	27,360
	FB2B2132	Miniature circuit breaker FB2-63 2P B 32A 10kA STANDART	32	6	120	0,230	1,380	27,600
	FB2B2140	Miniature circuit breaker FB2-63 2P B 40A 10kA STANDART	40	6	120	0,230	1,380	27,600
	FB2B2150	Miniature circuit breaker FB2-63 2P B 50A 10kA STANDART	50	6	120	0,232	1,392	27,840
	FB2B2163	Miniature circuit breaker FB2-63 2P B 63A 10kA STANDART	63	6	120	0,232	1,392	27,840



# Miniature circuit breakers FB2-63 Standart

Standart



## 3P

Characteristic B	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
	FB2B3101	Miniature circuit breaker FB2-63 3P B 1A 10kA STANDART	1	4	80	0,327	1,308	26,160
	FB2B3102	Miniature circuit breaker FB2-63 3P B 2A 10kA STANDART	2	4	80	0,327	1,308	26,160
	FB2B3103	Miniature circuit breaker FB2-63 3P B 3A 10kA STANDART	3	4	80	0,327	1,308	26,160
	FB2B3104	Miniature circuit breaker FB2-63 3P B 4A 10kA STANDART	4	4	80	0,330	1,320	26,400
	FB2B3105	Miniature circuit breaker FB2-63 3P B 5A 10kA STANDART	5	4	80	0,330	1,320	26,400
	FB2B3106	Miniature circuit breaker FB2-63 3P B 6A 10kA STANDART	6	4	80	0,330	1,320	26,400
	FB2B3108	Miniature circuit breaker FB2-63 3P B 8A 10kA STANDART	8	4	80	0,330	1,320	26,400
	FB2B3110	Miniature circuit breaker FB2-63 3P B 10A 10kA STANDART	10	4	80	0,336	1,344	26,880
	FB2B3113	Miniature circuit breaker FB2-63 3P B 13A 10kA STANDART	13	4	80	0,339	1,356	27,120
	FB2B3116	Miniature circuit breaker FB2-63 3P B 16A 10kA STANDART	16	4	80	0,342	1,368	27,360
	FB2B3120	Miniature circuit breaker FB2-63 3P B 20A 10kA STANDART	20	4	80	0,342	1,368	27,360
	FB2B3125	Miniature circuit breaker FB2-63 3P B 25A 10kA STANDART	25	4	80	0,342	1,368	27,360
	FB2B3132	Miniature circuit breaker FB2-63 3P B 32A 10kA STANDART	32	4	80	0,345	1,380	27,600
	FB2B3140	Miniature circuit breaker FB2-63 3P B 40A 10kA STANDART	40	4	80	0,345	1,380	27,600
	FB2B3150	Miniature circuit breaker FB2-63 3P B 50A 10kA STANDART	50	4	80	0,348	1,392	27,840
	FB2B3163	Miniature circuit breaker FB2-63 3P B 63A 10kA STANDART	63	4	80	0,348	1,392	27,840

## 3P+N



	FB2BN4101	Miniature circuit breaker FB2-63 3P+N B 1A 10kA STANDART	1	3	60	0,436	1,308	26,160
	FB2BN4102	Miniature circuit breaker FB2-63 3P+N B 2A 10kA STANDART	2	3	60	0,436	1,308	26,160
	FB2BN4103	Miniature circuit breaker FB2-63 3P+N B 3A 10kA STANDART	3	3	60	0,436	1,308	26,160
	FB2BN4104	Miniature circuit breaker FB2-63 3P+N B 4A 10kA STANDART	4	3	60	0,440	1,320	26,400
	FB2BN4105	Miniature circuit breaker FB2-63 3P+N B 5A 10kA STANDART	5	3	60	0,440	1,320	26,400
	FB2BN4106	Miniature circuit breaker FB2-63 3P+N B 6A 10kA STANDART	6	3	60	0,440	1,320	26,400
	FB2BN4108	Miniature circuit breaker FB2-63 3P+N B 8A 10kA STANDART	8	3	60	0,440	1,320	26,400
	FB2BN4110	Miniature circuit breaker FB2-63 3P+N B 10A 10kA STANDART	10	3	60	0,448	1,344	26,880
	FB2BN4113	Miniature circuit breaker FB2-63 3P+N B 13A 10kA STANDART	13	3	60	0,452	1,356	27,120
	FB2BN4116	Miniature circuit breaker FB2-63 3P+N B 16A 10kA STANDART	16	3	60	0,456	1,368	27,360
	FB2BN4120	Miniature circuit breaker FB2-63 3P+N B 20A 10kA STANDART	20	3	60	0,456	1,368	27,360
	FB2BN4125	Miniature circuit breaker FB2-63 3P+N B 25A 10kA STANDART	25	3	60	0,456	1,368	27,360
	FB2BN4132	Miniature circuit breaker FB2-63 3P+N B 32A 10kA STANDART	32	3	60	0,460	1,380	27,600
	FB2BN4140	Miniature circuit breaker FB2-63 3P+N B 40A 10kA STANDART	40	3	60	0,460	1,380	27,600
	FB2BN4150	Miniature circuit breaker FB2-63 3P+N B 50A 10kA STANDART	50	3	60	0,464	1,392	27,840
	FB2BN4163	Miniature circuit breaker FB2-63 3P+N B 63A 10kA STANDART	63	3	60	0,464	1,392	27,840

## 4P



	FB2B4101	Miniature circuit breaker FB2-63 4P B 1A 10kA STANDART	1	3	60	0,436	1,308	26,160
	FB2B4102	Miniature circuit breaker FB2-63 4P B 2A 10kA STANDART	2	3	60	0,436	1,308	26,160
	FB2B4103	Miniature circuit breaker FB2-63 4P B 3A 10kA STANDART	3	3	60	0,436	1,308	26,160
	FB2B4104	Miniature circuit breaker FB2-63 4P B 4A 10kA STANDART	4	3	60	0,440	1,320	26,400
	FB2B4105	Miniature circuit breaker FB2-63 4P B 5A 10kA STANDART	5	3	60	0,440	1,320	26,400
	FB2B4106	Miniature circuit breaker FB2-63 4P B 6A 10kA STANDART	6	3	60	0,440	1,320	26,400
	FB2B4108	Miniature circuit breaker FB2-63 4P B 8A 10kA STANDART	8	3	60	0,440	1,320	26,400
	FB2B4110	Miniature circuit breaker FB2-63 4P B 10A 10kA STANDART	10	3	60	0,448	1,344	26,880
	FB2B4113	Miniature circuit breaker FB2-63 4P B 13A 10kA STANDART	13	3	60	0,452	1,356	27,120
	FB2B4116	Miniature circuit breaker FB2-63 4P B 16A 10kA STANDART	16	3	60	0,456	1,368	27,360
	FB2B4120	Miniature circuit breaker FB2-63 4P B 20A 10kA STANDART	20	3	60	0,456	1,368	27,360
	FB2B4125	Miniature circuit breaker FB2-63 4P B 25A 10kA STANDART	25	3	60	0,456	1,368	27,360
	FB2B4132	Miniature circuit breaker FB2-63 4P B 32A 10kA STANDART	32	3	60	0,460	1,380	27,600
	FB2B4140	Miniature circuit breaker FB2-63 4P B 40A 10kA STANDART	40	3	60	0,460	1,380	27,600
	FB2B4150	Miniature circuit breaker FB2-63 4P B 50A 10kA STANDART	50	3	60	0,464	1,392	27,840
	FB2B4163	Miniature circuit breaker FB2-63 4P B 63A 10kA STANDART	63	3	60	0,464	1,392	27,840

# Miniature circuit breakers FB2-63 Standart

Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB2C1101	Miniature circuit breaker FB2-63 1P C 1A 10kA STANDART	1	12	240	0,109	1,308	26,160
	FB2C1102	Miniature circuit breaker FB2-63 1P C 2A 10kA STANDART	2	12	240	0,109	1,308	26,160
	FB2C1103	Miniature circuit breaker FB2-63 1P C 3A 10kA STANDART	3	12	240	0,109	1,308	26,160
	FB2C1104	Miniature circuit breaker FB2-63 1P C 4A 10kA STANDART	4	12	240	0,110	1,320	26,400
	FB2C1105	Miniature circuit breaker FB2-63 1P C 5A 10kA STANDART	5	12	240	0,110	1,320	26,400
	FB2C1106	Miniature circuit breaker FB2-63 1P C 6A 10kA STANDART	6	12	240	0,110	1,320	26,400
	FB2C1108	Miniature circuit breaker FB2-63 1P C 8A 10kA STANDART	8	12	240	0,110	1,320	26,400
	FB2C1110	Miniature circuit breaker FB2-63 1P C 10A 10kA STANDART	10	12	240	0,112	1,344	26,880
	FB2C1113	Miniature circuit breaker FB2-63 1P C 13A 10kA STANDART	13	12	240	0,113	1,356	27,120
	FB2C1116	Miniature circuit breaker FB2-63 1P C 16A 10kA STANDART	16	12	240	0,114	1,368	27,360
	FB2C1120	Miniature circuit breaker FB2-63 1P C 20A 10kA STANDART	20	12	240	0,114	1,368	27,360
	FB2C1125	Miniature circuit breaker FB2-63 1P C 25A 10kA STANDART	25	12	240	0,114	1,368	27,360
	FB2C1132	Miniature circuit breaker FB2-63 1P C 32A 10kA STANDART	32	12	240	0,115	1,380	27,600
	FB2C1140	Miniature circuit breaker FB2-63 1P C 40A 10kA STANDART	40	12	240	0,115	1,380	27,600
	FB2C1150	Miniature circuit breaker FB2-63 1P C 50A 10kA STANDART	50	12	240	0,116	1,392	27,840
	FB2C1163	Miniature circuit breaker FB2-63 1P C 63A 10kA STANDART	63	12	240	0,116	1,392	27,840
<b>1P+N</b>	FB2CN2101	Miniature circuit breaker FB2-63 1P+N C 1A 10kA STANDART	1	6	120	0,218	1,308	26,160
	FB2CN2102	Miniature circuit breaker FB2-63 1P+N C 2A 10kA STANDART	2	6	120	0,218	1,308	26,160
	FB2CN2103	Miniature circuit breaker FB2-63 1P+N C 3A 10kA STANDART	3	6	120	0,218	1,308	26,160
	FB2CN2104	Miniature circuit breaker FB2-63 1P+N C 4A 10kA STANDART	4	6	120	0,220	1,320	26,400
	FB2CN2105	Miniature circuit breaker FB2-63 1P+N C 5A 10kA STANDART	5	6	120	0,220	1,320	26,400
	FB2CN2106	Miniature circuit breaker FB2-63 1P+N C 6A 10kA STANDART	6	6	120	0,220	1,320	26,400
	FB2CN2108	Miniature circuit breaker FB2-63 1P+N C 8A 10kA STANDART	8	6	120	0,220	1,320	26,400
	FB2CN2110	Miniature circuit breaker FB2-63 1P+N C 10A 10kA STANDART	10	6	120	0,224	1,344	26,880
	FB2CN2113	Miniature circuit breaker FB2-63 1P+N C 13A 10kA STANDART	13	6	120	0,226	1,356	27,120
	FB2CN2116	Miniature circuit breaker FB2-63 1P+N C 16A 10kA STANDART	16	6	120	0,228	1,368	27,360
	FB2CN2120	Miniature circuit breaker FB2-63 1P+N C 20A 10kA STANDART	20	6	120	0,228	1,368	27,360
	FB2CN2125	Miniature circuit breaker FB2-63 1P+N C 25A 10kA STANDART	25	6	120	0,228	1,368	27,360
	FB2CN2132	Miniature circuit breaker FB2-63 1P+N C 32A 10kA STANDART	32	6	120	0,230	1,380	27,600
	FB2CN2140	Miniature circuit breaker FB2-63 1P+N C 40A 10kA STANDART	40	6	120	0,230	1,380	27,600
	FB2CN2150	Miniature circuit breaker FB2-63 1P+N C 50A 10kA STANDART	50	6	120	0,232	1,392	27,840
	FB2CN2163	Miniature circuit breaker FB2-63 1P+N C 63A 10kA STANDART	63	6	120	0,232	1,392	27,840
<b>2P</b>	FB2C2101	Miniature circuit breaker FB2-63 2P C 1A 10kA STANDART	1	6	120	0,218	1,308	26,160
	FB2C2102	Miniature circuit breaker FB2-63 2P C 2A 10kA STANDART	2	6	120	0,218	1,308	26,160
	FB2C2103	Miniature circuit breaker FB2-63 2P C 3A 10kA STANDART	3	6	120	0,218	1,308	26,160
	FB2C2104	Miniature circuit breaker FB2-63 2P C 4A 10kA STANDART	4	6	120	0,220	1,320	26,400
	FB2C2105	Miniature circuit breaker FB2-63 2P C 5A 10kA STANDART	5	6	120	0,220	1,320	26,400
	FB2C2106	Miniature circuit breaker FB2-63 2P C 6A 10kA STANDART	6	6	120	0,220	1,320	26,400
	FB2C2108	Miniature circuit breaker FB2-63 2P C 8A 10kA STANDART	8	6	120	0,220	1,320	26,400
	FB2C2110	Miniature circuit breaker FB2-63 2P C 10A 10kA STANDART	10	6	120	0,224	1,344	26,880
	FB2C2113	Miniature circuit breaker FB2-63 2P C 13A 10kA STANDART	13	6	120	0,226	1,356	27,120
	FB2C2116	Miniature circuit breaker FB2-63 2P C 16A 10kA STANDART	16	6	120	0,228	1,368	27,360
	FB2C2120	Miniature circuit breaker FB2-63 2P C 20A 10kA STANDART	20	6	120	0,228	1,368	27,360
	FB2C2125	Miniature circuit breaker FB2-63 2P C 25A 10kA STANDART	25	6	120	0,228	1,368	27,360
	FB2C2132	Miniature circuit breaker FB2-63 2P C 32A 10kA STANDART	32	6	120	0,230	1,380	27,600
	FB2C2140	Miniature circuit breaker FB2-63 2P C 40A 10kA STANDART	40	6	120	0,230	1,380	27,600
	FB2C2150	Miniature circuit breaker FB2-63 2P C 50A 10kA STANDART	50	6	120	0,232	1,392	27,840
	FB2C2163	Miniature circuit breaker FB2-63 2P C 63A 10kA STANDART	63	6	120	0,232	1,392	27,840

Standart

# Miniature circuit breakers FB2-63 Standart

Standart

## 3P



Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
	FB2C3101	Miniature circuit breaker FB2-63 3P C 1A 10kA STANDART	1	4	80	0,327	1,308	26,160
	FB2C3102	Miniature circuit breaker FB2-63 3P C 2A 10kA STANDART	2	4	80	0,327	1,308	26,160
	FB2C3103	Miniature circuit breaker FB2-63 3P C 3A 10kA STANDART	3	4	80	0,327	1,308	26,160
	FB2C3104	Miniature circuit breaker FB2-63 3P C 4A 10kA STANDART	4	4	80	0,330	1,320	26,400
	FB2C3105	Miniature circuit breaker FB2-63 3P C 5A 10kA STANDART	5	4	80	0,330	1,320	26,400
	FB2C3106	Miniature circuit breaker FB2-63 3P C 6A 10kA STANDART	6	4	80	0,330	1,320	26,400
	FB2C3108	Miniature circuit breaker FB2-63 3P C 8A 10kA STANDART	8	4	80	0,330	1,320	26,400
	FB2C3110	Miniature circuit breaker FB2-63 3P C 10A 10kA STANDART	10	4	80	0,336	1,344	26,880
	FB2C3113	Miniature circuit breaker FB2-63 3P C 13A 10kA STANDART	13	4	80	0,339	1,356	27,120
	FB2C3116	Miniature circuit breaker FB2-63 3P C 16A 10kA STANDART	16	4	80	0,342	1,368	27,360
	FB2C3120	Miniature circuit breaker FB2-63 3P C 20A 10kA STANDART	20	4	80	0,342	1,368	27,360
	FB2C3125	Miniature circuit breaker FB2-63 3P C 25A 10kA STANDART	25	4	80	0,342	1,368	27,360
	FB2C3132	Miniature circuit breaker FB2-63 3P C 32A 10kA STANDART	32	4	80	0,345	1,380	27,600
	FB2C3140	Miniature circuit breaker FB2-63 3P C 40A 10kA STANDART	40	4	80	0,345	1,380	27,600
	FB2C3150	Miniature circuit breaker FB2-63 3P C 50A 10kA STANDART	50	4	80	0,348	1,392	27,840
	FB2C3163	Miniature circuit breaker FB2-63 3P C 63A 10kA STANDART	63	4	80	0,348	1,392	27,840

## 3P+N



	FB2CN4101	Miniature circuit breaker FB2-63 3P+N C 1A 10kA STANDART	1	3	60	0,436	1,308	26,160
	FB2CN4102	Miniature circuit breaker FB2-63 3P+N C 2A 10kA STANDART	2	3	60	0,436	1,308	26,160
	FB2CN4103	Miniature circuit breaker FB2-63 3P+N C 3A 10kA STANDART	3	3	60	0,436	1,308	26,160
	FB2CN4104	Miniature circuit breaker FB2-63 3P+N C 4A 10kA STANDART	4	3	60	0,440	1,320	26,400
	FB2CN4105	Miniature circuit breaker FB2-63 3P+N C 5A 10kA STANDART	5	3	60	0,440	1,320	26,400
	FB2CN4106	Miniature circuit breaker FB2-63 3P+N C 6A 10kA STANDART	6	3	60	0,440	1,320	26,400
	FB2CN4108	Miniature circuit breaker FB2-63 3P+N C 8A 10kA STANDART	8	3	60	0,440	1,320	26,400
	FB2CN4110	Miniature circuit breaker FB2-63 3P+N C 10A 10kA STANDART	10	3	60	0,448	1,344	26,880
	FB2CN4113	Miniature circuit breaker FB2-63 3P+N C 13A 10kA STANDART	13	3	60	0,452	1,356	27,120
	FB2CN4116	Miniature circuit breaker FB2-63 3P+N C 16A 10kA STANDART	16	3	60	0,456	1,368	27,360
	FB2CN4120	Miniature circuit breaker FB2-63 3P+N C 20A 10kA STANDART	20	3	60	0,456	1,368	27,360
	FB2CN4125	Miniature circuit breaker FB2-63 3P+N C 25A 10kA STANDART	25	3	60	0,456	1,368	27,360
	FB2CN4132	Miniature circuit breaker FB2-63 3P+N C 32A 10kA STANDART	32	3	60	0,460	1,380	27,600
	FB2CN4140	Miniature circuit breaker FB2-63 3P+N C 40A 10kA STANDART	40	3	60	0,460	1,380	27,600
	FB2CN4150	Miniature circuit breaker FB2-63 3P+N C 50A 10kA STANDART	50	3	60	0,464	1,392	27,840
	FB2CN4163	Miniature circuit breaker FB2-63 3P+N C 63A 10kA STANDART	63	3	60	0,464	1,392	27,840

## 4P



	FB2C4101	Miniature circuit breaker FB2-63 4P C 1A 10kA STANDART	1	3	60	0,436	1,308	26,160
	FB2C4102	Miniature circuit breaker FB2-63 4P C 2A 10kA STANDART	2	3	60	0,436	1,308	26,160
	FB2C4103	Miniature circuit breaker FB2-63 4P C 3A 10kA STANDART	3	3	60	0,436	1,308	26,160
	FB2C4104	Miniature circuit breaker FB2-63 4P C 4A 10kA STANDART	4	3	60	0,440	1,320	26,400
	FB2C4105	Miniature circuit breaker FB2-63 4P C 5A 10kA STANDART	5	3	60	0,440	1,320	26,400
	FB2C4106	Miniature circuit breaker FB2-63 4P C 6A 10kA STANDART	6	3	60	0,440	1,320	26,400
	FB2C4108	Miniature circuit breaker FB2-63 4P C 8A 10kA STANDART	8	3	60	0,440	1,320	26,400
	FB2C4110	Miniature circuit breaker FB2-63 4P C 10A 10kA STANDART	10	3	60	0,448	1,344	26,880
	FB2C4113	Miniature circuit breaker FB2-63 4P C 13A 10kA STANDART	13	3	60	0,452	1,356	27,120
	FB2C4116	Miniature circuit breaker FB2-63 4P C 16A 10kA STANDART	16	3	60	0,456	1,368	27,360
	FB2C4120	Miniature circuit breaker FB2-63 4P C 20A 10kA STANDART	20	3	60	0,456	1,368	27,360
	FB2C4125	Miniature circuit breaker FB2-63 4P C 25A 10kA STANDART	25	3	60	0,456	1,368	27,360
	FB2C4132	Miniature circuit breaker FB2-63 4P C 32A 10kA STANDART	32	3	60	0,460	1,380	27,600
	FB2C4140	Miniature circuit breaker FB2-63 4P C 40A 10kA STANDART	40	3	60	0,460	1,380	27,600
	FB2C4150	Miniature circuit breaker FB2-63 4P C 50A 10kA STANDART	50	3	60	0,464	1,392	27,840
	FB2C4163	Miniature circuit breaker FB2-63 4P C 63A 10kA STANDART	63	3	60	0,464	1,392	27,840

# Miniature circuit breakers FB2-63 Standart

Characteristic D	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b>	FB2D1101	Miniature circuit breaker FB2-63 1P D 1A 10kA STANDART	1	12	240	0,110	1,320	26,40
	FB2D1102	Miniature circuit breaker FB2-63 1P D 2A 10kA STANDART	2	12	240	0,110	1,320	26,40
	FB2D1103	Miniature circuit breaker FB2-63 1P D 3A 10kA STANDART	3	12	240	0,110	1,320	26,40
	FB2D1104	Miniature circuit breaker FB2-63 1P D 4A 10kA STANDART	4	12	240	0,110	1,320	26,40
	FB2D1105	Miniature circuit breaker FB2-63 1P D 5A 10kA STANDART	5	12	240	0,110	1,320	26,40
	FB2D1106	Miniature circuit breaker FB2-63 1P D 6A 10kA STANDART	6	12	240	0,110	1,320	26,40
	FB2D1108	Miniature circuit breaker FB2-63 1P D 8A 10kA STANDART	8	12	240	0,110	1,320	26,40
	FB2D1110	Miniature circuit breaker FB2-63 1P D 10A 10kA STANDART	10	12	240	0,112	1,344	26,88
	FB2D1113	Miniature circuit breaker FB2-63 1P D 13A 10kA STANDART	13	12	240	0,113	1,356	27,12
	FB2D1116	Miniature circuit breaker FB2-63 1P D 16A 10kA STANDART	16	12	240	0,114	1,368	27,36
	FB2D1120	Miniature circuit breaker FB2-63 1P D 20A 10kA STANDART	20	12	240	0,114	1,368	27,36
	FB2D1125	Miniature circuit breaker FB2-63 1P D 25A 10kA STANDART	25	12	240	0,114	1,368	27,36
	FB2D1132	Miniature circuit breaker FB2-63 1P D 32A 10kA STANDART	32	12	240	0,115	1,380	27,60
	FB2D1140	Miniature circuit breaker FB2-63 1P D 40A 10kA STANDART	40	12	240	0,115	1,380	27,60
	FB2D1150	Miniature circuit breaker FB2-63 1P D 50A 10kA STANDART	50	12	240	0,116	1,392	27,84
	FB2D1163	Miniature circuit breaker FB2-63 1P D 63A 10kA STANDART	63	12	240	0,116	1,392	27,84



Standart

<b>1P+N</b>	FB2DN2101	Miniature circuit breaker FB2-63 1P+N D 1A 10kA STANDART	1	6	120	0,220	1,320	26,40
	FB2DN2102	Miniature circuit breaker FB2-63 1P+N D 2A 10kA STANDART	2	6	120	0,220	1,320	26,40
	FB2DN2103	Miniature circuit breaker FB2-63 1P+N D 3A 10kA STANDART	3	6	120	0,220	1,320	26,40
	FB2DN2104	Miniature circuit breaker FB2-63 1P+N D 4A 10kA STANDART	4	6	120	0,220	1,320	26,40
	FB2DN2105	Miniature circuit breaker FB2-63 1P+N D 5A 10kA STANDART	5	6	120	0,220	1,320	26,40
	FB2DN2106	Miniature circuit breaker FB2-63 1P+N D 6A 10kA STANDART	6	6	120	0,220	1,320	26,40
	FB2DN2108	Miniature circuit breaker FB2-63 1P+N D 8A 10kA STANDART	8	6	120	0,220	1,320	26,40
	FB2DN2110	Miniature circuit breaker FB2-63 1P+N D 10A 10kA STANDART	10	6	120	0,112	0,672	13,44
	FB2DN2113	Miniature circuit breaker FB2-63 1P+N D 13A 10kA STANDART	13	6	120	0,113	0,678	13,56
	FB2DN2116	Miniature circuit breaker FB2-63 1P+N D 16A 10kA STANDART	16	6	120	0,114	0,684	13,68
	FB2DN2120	Miniature circuit breaker FB2-63 1P+N D 20A 10kA STANDART	20	6	120	0,228	1,368	27,36
	FB2DN2125	Miniature circuit breaker FB2-63 1P+N D 25A 10kA STANDART	25	6	120	0,228	1,368	27,36
	FB2DN2132	Miniature circuit breaker FB2-63 1P+N D 32A 10kA STANDART	32	6	120	0,230	1,380	27,60
	FB2DN2140	Miniature circuit breaker FB2-63 1P+N D 40A 10kA STANDART	40	6	120	0,230	1,380	27,60
	FB2DN2150	Miniature circuit breaker FB2-63 1P+N D 50A 10kA STANDART	50	6	120	0,232	1,392	27,84
	FB2DN2163	Miniature circuit breaker FB2-63 1P+N D 63A 10kA STANDART	63	6	120	0,232	1,392	27,84



<b>2P</b>	FB2D2101	Miniature circuit breaker FB2-63 2P D 1A 10kA STANDART	1	6	120	0,220	1,320	26,40
	FB2D2102	Miniature circuit breaker FB2-63 2P D 2A 10kA STANDART	2	6	120	0,220	1,320	26,40
	FB2D2103	Miniature circuit breaker FB2-63 2P D 3A 10kA STANDART	3	6	120	0,220	1,320	26,40
	FB2D2104	Miniature circuit breaker FB2-63 2P D 4A 10kA STANDART	4	6	120	0,220	1,320	26,40
	FB2D2105	Miniature circuit breaker FB2-63 2P D 5A 10kA STANDART	5	6	120	0,220	1,320	26,40
	FB2D2106	Miniature circuit breaker FB2-63 2P D 6A 10kA STANDART	6	6	120	0,220	1,320	26,40
	FB2D2108	Miniature circuit breaker FB2-63 2P D 8A 10kA STANDART	8	6	120	0,220	1,320	26,40
	FB2D2110	Miniature circuit breaker FB2-63 2P D 10A 10kA STANDART	10	6	120	0,112	0,672	13,44
	FB2D2113	Miniature circuit breaker FB2-63 2P D 13A 10kA STANDART	13	6	120	0,113	0,678	13,56
	FB2D2116	Miniature circuit breaker FB2-63 2P D 16A 10kA STANDART	16	6	120	0,114	0,684	13,68
	FB2D2120	Miniature circuit breaker FB2-63 2P D 20A 10kA STANDART	20	6	120	0,228	1,368	27,36
	FB2D2125	Miniature circuit breaker FB2-63 2P D 25A 10kA STANDART	25	6	120	0,228	1,368	27,36
	FB2D2132	Miniature circuit breaker FB2-63 2P D 32A 10kA STANDART	32	6	120	0,230	1,380	27,60
	FB2D2140	Miniature circuit breaker FB2-63 2P D 40A 10kA STANDART	40	6	120	0,230	1,380	27,60
	FB2D2150	Miniature circuit breaker FB2-63 2P D 50A 10kA STANDART	50	6	120	0,232	1,392	27,84
	FB2D2163	Miniature circuit breaker FB2-63 2P D 63A 10kA STANDART	63	6	120	0,232	1,392	27,84



# Miniature circuit breakers FB2-63 Standart

Standart



## 3P

Characteristic D	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
	FB2D3101	Miniature circuit breaker FB2-63 3P D 1A 10kA STANDART	1	4	80	0,330	1,320	26,40
	FB2D3102	Miniature circuit breaker FB2-63 3P D 2A 10kA STANDART	2	4	80	0,330	1,320	26,40
	FB2D3103	Miniature circuit breaker FB2-63 3P D 3A 10kA STANDART	3	4	80	0,330	1,320	26,40
	FB2D3104	Miniature circuit breaker FB2-63 3P D 4A 10kA STANDART	4	4	80	0,330	1,320	26,40
	FB2D3105	Miniature circuit breaker FB2-63 3P D 5A 10kA STANDART	5	4	80	0,330	1,320	26,40
	FB2D3106	Miniature circuit breaker FB2-63 3P D 6A 10kA STANDART	6	4	80	0,330	1,320	26,40
	FB2D3108	Miniature circuit breaker FB2-63 3P D 8A 10kA STANDART	8	4	80	0,330	1,320	26,40
	FB2D3110	Miniature circuit breaker FB2-63 3P D 10A 10kA STANDART	10	4	80	0,336	1,344	26,88
	FB2D3113	Miniature circuit breaker FB2-63 3P D 13A 10kA STANDART	13	4	80	0,339	1,356	27,12
	FB2D3116	Miniature circuit breaker FB2-63 3P D 16A 10kA STANDART	16	4	80	0,342	1,368	27,36
	FB2D3120	Miniature circuit breaker FB2-63 3P D 20A 10kA STANDART	20	4	80	0,342	1,368	27,36
	FB2D3125	Miniature circuit breaker FB2-63 3P D 25A 10kA STANDART	25	4	80	0,342	1,368	27,36
	FB2D3132	Miniature circuit breaker FB2-63 3P D 32A 10kA STANDART	32	4	80	0,345	1,380	27,60
	FB2D3140	Miniature circuit breaker FB2-63 3P D 40A 10kA STANDART	40	4	80	0,345	1,380	27,60
	FB2D3150	Miniature circuit breaker FB2-63 3P D 50A 10kA STANDART	50	4	80	0,348	1,392	27,84
	FB2D3163	Miniature circuit breaker FB2-63 3P D 63A 10kA STANDART	63	4	80	0,348	1,392	27,84



## 3P+N

	FB2DN4101	Miniature circuit breaker FB2-63 3P+N D 1A 10kA STANDART	1	3	60	0,440	1,320	26,40
	FB2DN4102	Miniature circuit breaker FB2-63 3P+N D 2A 10kA STANDART	2	3	60	0,440	1,320	26,40
	FB2DN4103	Miniature circuit breaker FB2-63 3P+N D 3A 10kA STANDART	3	3	60	0,440	1,320	26,40
	FB2DN4104	Miniature circuit breaker FB2-63 3P+N D 4A 10kA STANDART	4	3	60	0,440	1,320	26,40
	FB2DN4105	Miniature circuit breaker FB2-63 3P+N D 5A 10kA STANDART	5	3	60	0,440	1,320	26,40
	FB2DN4106	Miniature circuit breaker FB2-63 3P+N D 6A 10kA STANDART	6	3	60	0,440	1,320	26,40
	FB2DN4108	Miniature circuit breaker FB2-63 3P+N D 8A 10kA STANDART	8	3	60	0,440	1,320	26,40
	FB2DN4110	Miniature circuit breaker FB2-63 3P+N D 10A 10kA STANDART	10	3	60	0,448	1,344	26,88
	FB2DN4113	Miniature circuit breaker FB2-63 3P+N D 13A 10kA STANDART	13	3	60	0,452	1,356	27,12
	FB2DN4116	Miniature circuit breaker FB2-63 3P+N D 16A 10kA STANDART	16	3	60	0,456	1,368	27,36
	FB2DN4120	Miniature circuit breaker FB2-63 3P+N D 20A 10kA STANDART	20	3	60	0,456	1,368	27,36
	FB2DN4125	Miniature circuit breaker FB2-63 3P+N D 25A 10kA STANDART	25	3	60	0,456	1,368	27,36
	FB2DN4132	Miniature circuit breaker FB2-63 3P+N D 32A 10kA STANDART	32	3	60	0,460	1,380	27,60
	FB2DN4140	Miniature circuit breaker FB2-63 3P+N D 40A 10kA STANDART	40	3	60	0,460	1,380	27,60
	FB2DN4150	Miniature circuit breaker FB2-63 3P+N D 50A 10kA STANDART	50	3	60	0,464	1,392	27,84
	FB2DN4163	Miniature circuit breaker FB2-63 3P+N D 63A 10kA STANDART	63	3	60	0,464	1,392	27,84

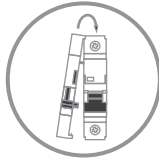


## 4P

	FB2D4101	Miniature circuit breaker FB2-63 4P D 1A 10kA STANDART	1	3	60	0,440	1,320	26,40
	FB2D4102	Miniature circuit breaker FB2-63 4P D 2A 10kA STANDART	2	3	60	0,440	1,320	26,40
	FB2D4103	Miniature circuit breaker FB2-63 4P D 3A 10kA STANDART	3	3	60	0,440	1,320	26,40
	FB2D4104	Miniature circuit breaker FB2-63 4P D 4A 10kA STANDART	4	3	60	0,440	1,320	26,40
	FB2D4105	Miniature circuit breaker FB2-63 4P D 5A 10kA STANDART	5	3	60	0,440	1,320	26,40
	FB2D4106	Miniature circuit breaker FB2-63 4P D 6A 10kA STANDART	6	3	60	0,440	1,320	26,40
	FB2D4108	Miniature circuit breaker FB2-63 4P D 8A 10kA STANDART	8	3	60	0,440	1,320	26,40
	FB2D4110	Miniature circuit breaker FB2-63 4P D 10A 10kA STANDART	10	3	60	0,448	1,344	26,88
	FB2D4113	Miniature circuit breaker FB2-63 4P D 13A 10kA STANDART	13	3	60	0,452	1,356	27,12
	FB2D4116	Miniature circuit breaker FB2-63 4P D 16A 10kA STANDART	16	3	60	0,456	1,368	27,36
	FB2D4120	Miniature circuit breaker FB2-63 4P D 20A 10kA STANDART	20	3	60	0,456	1,368	27,36
	FB2D4125	Miniature circuit breaker FB2-63 4P D 25A 10kA STANDART	25	3	60	0,456	1,368	27,36
	FB2D4132	Miniature circuit breaker FB2-63 4P D 32A 10kA STANDART	32	3	60	0,460	1,380	27,60
	FB2D4140	Miniature circuit breaker FB2-63 4P D 40A 10kA STANDART	40	3	60	0,460	1,380	27,60
	FB2D4150	Miniature circuit breaker FB2-63 4P D 50A 10kA STANDART	50	3	60	0,464	1,392	27,84
	FB2D4163	Miniature circuit breaker FB2-63 4P D 63A 10kA STANDART	63	3	60	0,464	1,392	27,84

MAX  
125A

15kA

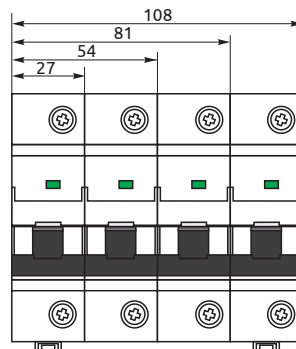
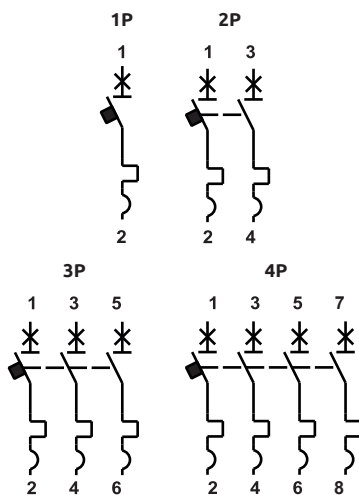


**EVO**

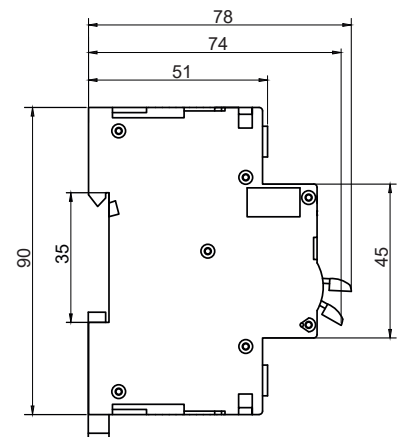
### Technical specifications

Series	FB3-125
Standards	IEC/EN 60898 IEC/EN 60947-2
Number of poles	1, 2, 3, 4
Tripping characteristics	C, D
Rated voltage $U_n$ , V	~230/400
Rated current $I_n$ , A	63, 80, 100, 125
Rated frequency $f$ , Hz	50/60
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	4000
Selectivity class	3
Rated breaking capacity $I_{cs}$ , A	15 000
Switching wear resistance (number of cycles on/off)	10 000/20 000 (electrical/mechanical)
Connecting of additional devices	yes
Cross-section of connecting conductors, mm <sup>2</sup>	up to 50
Degree of protection	IP20
DIN rail mounting	TN35
Connecting of busbar	PIN/FORK
Operating position	any
Width, mm	27
Sealing option ON/OFF	yes
Trip unit technology	electromagnetic/thermal

### Schematic diagrams










### Overall dimensions



# Miniature circuit breakers FB3-125 **EVO**



Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P</b> 	FB3C1063	Miniature circuit breaker FB3-125 1P C 63A 15kA EVO	63	12	48	0,220	2,640	10,560
	FB3C1080	Miniature circuit breaker FB3-125 1P C 80A 15kA EVO	80	12	48	0,220	2,640	10,560
	FB3C1100	Miniature circuit breaker FB3-125 1P C 100A 15kA EVO	100	12	48	0,225	2,700	10,800
	FB3C1125	Miniature circuit breaker FB3-125 1P C 125A 15kA EVO	125	12	48	0,228	2,736	10,944
<b>2P</b> 	FB3C2063	Miniature circuit breaker FB3-125 2P C 63A 15kA EVO	63	6	24	0,440	2,640	10,560
	FB3C2080	Miniature circuit breaker FB3-125 2P C 80A 15kA EVO	80	6	24	0,440	2,640	10,560
	FB3C2100	Miniature circuit breaker FB3-125 2P C 100A 15kA EVO	100	6	24	0,450	2,700	10,800
	FB3C2125	Miniature circuit breaker FB3-125 2P C 125A 15kA EVO	125	6	24	0,456	2,736	10,944
<b>3P</b> 	FB3C3063	Miniature circuit breaker FB3-125 3P C 63A 15kA EVO	63	4	16	0,660	2,640	10,560
	FB3C3080	Miniature circuit breaker FB3-125 3P C 80A 15kA EVO	80	4	16	0,660	2,640	10,560
	FB3C3100	Miniature circuit breaker FB3-125 3P C 100A 15kA EVO	100	4	16	0,675	2,700	10,800
	FB3C3125	Miniature circuit breaker FB3-125 3P C 125A 15kA EVO	125	4	16	0,684	2,736	10,944
<b>4P</b> 	FB3C4063	Miniature circuit breaker FB3-125 4P C 63A 15kA EVO	63	3	12	0,886	2,658	10,632
	FB3C4080	Miniature circuit breaker FB3-125 4P C 80A 15kA EVO	80	3	12	0,886	2,658	10,632
	FB3C4100	Miniature circuit breaker FB3-125 4P C 100A 15kA EVO	100	3	12	0,900	2,700	10,800
	FB3C4125	Miniature circuit breaker FB3-125 4P C 125A 15kA EVO	125	3	12	0,912	2,736	10,944
<b>Characteristic D</b>								
<b>1P</b> 	FB3D1063	Miniature circuit breaker FB3-125 1P D 63A 15kA EVO	63	12	48	0,220	2,640	10,560
	FB3D1080	Miniature circuit breaker FB3-125 1P D 80A 15kA EVO	80	12	48	0,220	2,640	10,560
	FB3D1100	Miniature circuit breaker FB3-125 1P D 100A 15kA EVO	100	12	48	0,225	2,700	10,800
	FB3D1125	Miniature circuit breaker FB3-125 1P D 125A 15kA EVO	125	12	48	0,228	2,736	10,944
<b>2P</b> 	FB3D2063	Miniature circuit breaker FB3-125 2P D 63A 15kA EVO	63	6	24	0,440	2,640	10,560
	FB3D2080	Miniature circuit breaker FB3-125 2P D 80A 15kA EVO	80	6	24	0,440	2,640	10,560
	FB3D2100	Miniature circuit breaker FB3-125 2P D 100A 15kA EVO	100	6	24	0,450	2,700	10,800
	FB3D2125	Miniature circuit breaker FB3-125 2P D 125A 15kA EVO	125	6	24	0,456	2,736	10,944
<b>3P</b> 	FB3D3063	Miniature circuit breaker FB3-125 3P D 63A 15kA EVO	63	4	16	0,660	2,640	10,560
	FB3D3080	Miniature circuit breaker FB3-125 3P D 80A 15kA EVO	80	4	16	0,660	2,640	10,560
	FB3D3100	Miniature circuit breaker FB3-125 3P D 100A 15kA EVO	100	4	16	0,675	2,700	10,800
	FB3D3125	Miniature circuit breaker FB3-125 3P D 125A 15kA EVO	125	4	16	0,684	2,736	10,944
<b>4P</b> 	FB3D4063	Miniature circuit breaker FB3-125 4P D 63A 15kA EVO	63	3	12	0,886	2,658	10,632
	FB3D4080	Miniature circuit breaker FB3-125 4P D 80A 15kA EVO	80	3	12	0,886	2,658	10,632
	FB3D4100	Miniature circuit breaker FB3-125 4P D 100A 15kA EVO	100	3	12	0,900	2,700	10,800
	FB3D4125	Miniature circuit breaker FB3-125 4P D 125A 15kA EVO	125	3	12	0,912	2,736	10,944

## Accessories for circuit breakers

### Auxiliary contact F/A

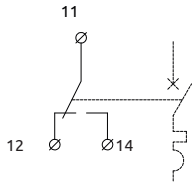


#### Technical specifications

Series	F/A
Standards	IEC/EN 60947-5-1
Use with a switch	FB2-63 (Standart) FB3-125 (EVO), FSD3
Nominal current (at a voltage of ~400V) In, A	3
Nominal current (at a voltage of ~230V) In, A	6
Rated frequency f, Hz	50/60
Rated voltage Un, V	~230/400
Number of contacts	1 C/O
Switching wear resistance (number of cycles on/off)	10 000/15 000 (electrical/mechanical)

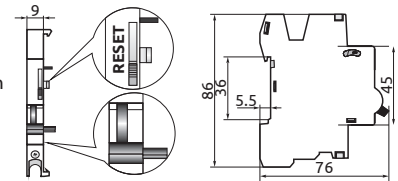
Additional devices

#### Schematic diagrams



#### Overall dimensions

RESET - testing the operation of the synchronizer



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/A	Auxiliary contact F/A	1	240	0,030	0,030	7,200

## Accessories for circuit breakers

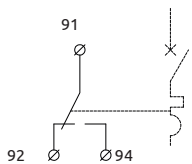
### Signal contact F/AL



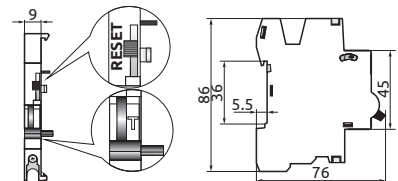
#### Technical specifications

Series	F/AL
Standards	IEC/EN 60947-5-1, IEC/EN 60947-1
Use with a switch	FB2-63 (Standart), FB3-125 (EVO), FSD3
Nominal current (at a voltage of ~400V) In, A	3
Nominal current (at a voltage of ~230V) In, A	6
Rated voltage Un, V	~230/400
Rated frequency f, Hz	50/60
Number of contacts	1 C/O
Switching wear resistance (number of cycles on/off)	10 000/15 000 (electrical/mechanical)

#### Schematic diagrams



RESET - testing the operation of the synchronizer  
T - testing the operation of contacts



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/AL	Signal contact F/AL	1	240	0,030	0,030	7,200

## Accessories for circuit breakers Voltage control disengager F/CV

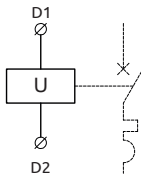
Additional devices



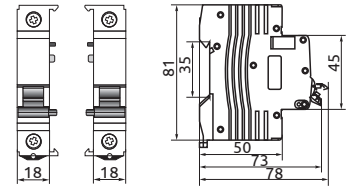
### Technical specifications

Series	F/CV
Standards	IEC/EN 60947-1
Use with a switch	FB2-63 (Standart) FB3-125 (EVO), FSD3
Rated voltage $U_n$ , V	~230
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	8 000/8 000 (electrical/mechanical)
Rated insulation voltage $U_i$ , V	500
Rated pulse voltage $U_{imp}$ , V	4000
Minimum operating voltage $U_{min}$ , V	~170 ± 5%
Maximum operating voltage $U_{max}$ , V	~280 ± 5%

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/CV230R	Voltage control disengager F/CV right, 230V	1	240	0,125	0,125	30,000
F/CV230L	Voltage control disengager F/CV left, 230V	1	240	0,125	0,125	30,000

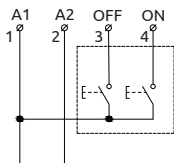
## Accessories for circuit breakers Remote control unit F/MD2



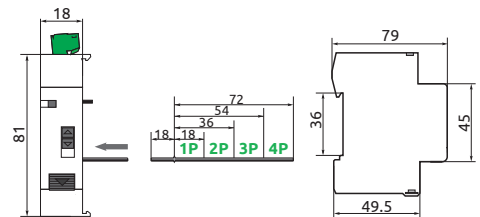
### Technical specifications

Series	F/MD2
Standards	IEC/EN 60947-1
Use with a switch	FB2-63 Standart, FSD3
Rated voltage $U_n$ , V	~230
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	8 000 / 10 000 (electrical/mechanical)
Input power $P$ , W	1 (standby mode), 20 (active mode)

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/MD2	Remote control unit F/MD2	1	50	0,096	0,096	4,800

## Accessories for circuit breakers

### Shunt release F/SR

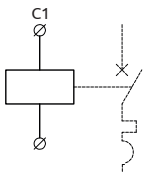


#### Technical specifications

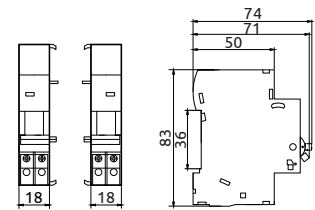
Series	F/SR
Standard	IEC/EN 60947-1
Use with a switch	FB2-63 (Standard) FB3-125 (EVO), FSD3
Rated current $I_n$ , A	6
Rated voltage $U_n$ , V	~24, ~230
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	8 000/8 000 (electrical/mechanical)

Additional devices

#### Schematic diagrams



#### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/SR230L	Shunt release F/SR230L left, 230V	1	240	0,081	0,081	19,440
F/SR230R	Shunt release F/SR230R right, 230V	1	240	0,081	0,081	19,440
F/SR024L	Shunt release F/SR24L left, 24V	1	240	0,081	0,081	19,440
F/SR024R	Shunt release F/SR24R right, 24V	1	240	0,081	0,081	19,440

## Accessories for circuit breakers

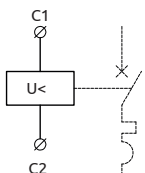
### Undervoltage release F/UV



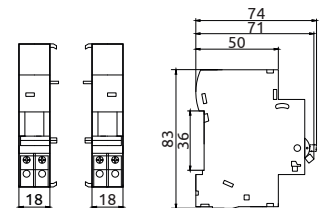
#### Technical specifications

Series	F/UV
Standard	IEC/EN 60947-1
Use with a switch	FB2-63 (Standard) FB3-125 (EVO), FSD3
Rated voltage $U_n$ , V	~230
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	8 000/8 000 (electrical/mechanical)

#### Schematic diagrams



#### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/UV230L	Undervoltage release F/UV left, 230V	1	240	0,125	0,125	30,000
F/UV230R	Undervoltage release F/UV right, 230V	1	240	0,125	0,125	30,000

# Residual current circuit breakers FPR, FPR-1

FPR

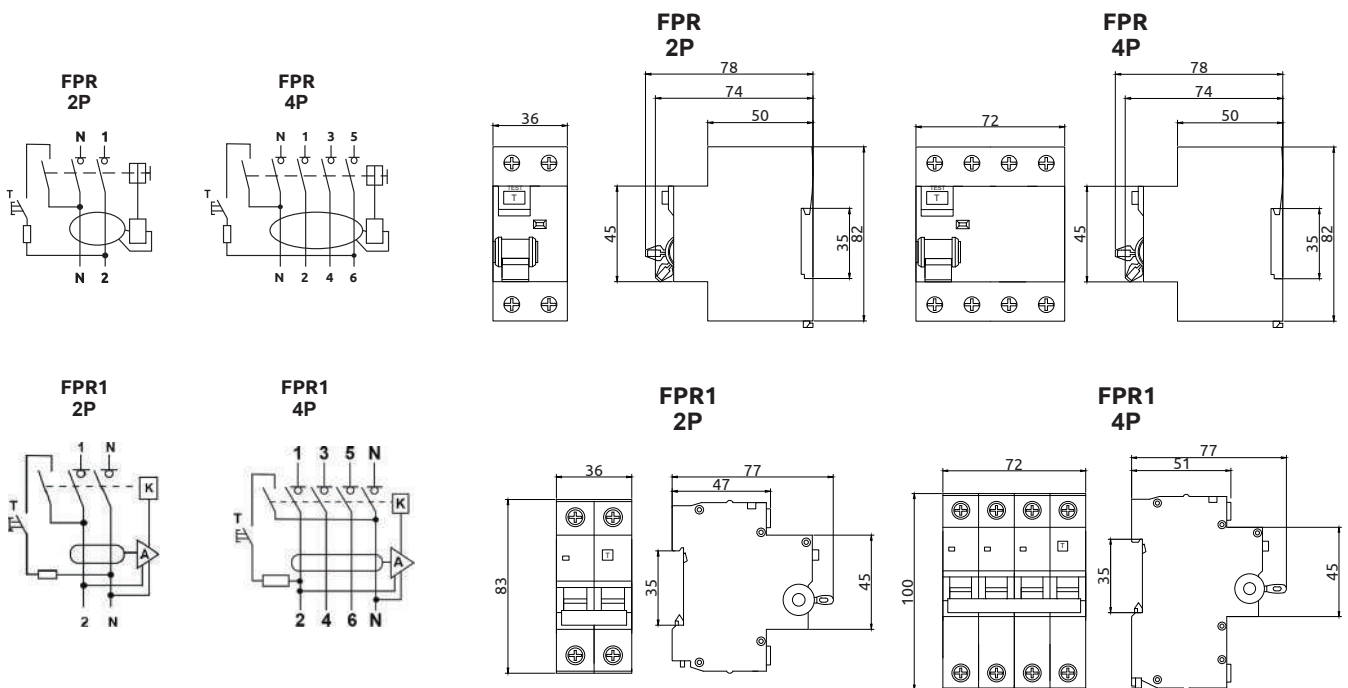


## Technical specifications

Series	FPR-A	FPR-AC	FPR1
Standards	IEC 61008-1, EN 61008-1		
Number of poles	2P, 4P		
Rated current $I_n$ , A	10, 16, 20, 25, 32, 40, 50, 63, 80, 100		10, 16, 20, 25, 32, 40, 50, 63
Rated voltage of the insulation $U_i$ , V	500		
Rated impulse withstand voltage $U_{imp}$ , V	4000		
Leakage current $I_{\Delta n}$ , mA	30, 100, 300		30
Rated voltage $U_n$ , V	~230/400		~230
Application category	A	AC	
Limit switching capacity $I_{cn}$ , A	10 000		6 000
Rated frequency $f$ , Hz	50/60		
Selectivity class	3		
Instantaneous shutdown duration, s	≤ 0.1		
Switching wear resistance (number of cycles on/off)	4 000/20 000 (electrical/mechanical)		4 000/10 000 (electrical/mechanical)
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25		
Type of differential protection	electromechanical		electronic
Degree of protection	IP20		
DIN rail mounting	TN35		
Connecting of busbar	PIN/FORK		PIN
Connecting of additional devices	no		
Operating position	any		
Sealing option ON/OFF	yes		

## Schematic diagrams

## Overall dimensions





## Residual current circuit breakers FPR, FPR-1


Type A	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>2P</b>	FPR2010030A	Residual current circuit breaker FPR-A 10A/0,03A 2P A 10kA	10	1	100	0,215	0,215	21,500
	FPR2010100A	Residual current circuit breaker FPR-A 10A/0,1A 2P A 10kA	10	1	100	0,215	0,215	21,500
	FPR2010300A	Residual current circuit breaker FPR-A 10A/0,3A 2P A 10kA	10	1	100	0,215	0,215	21,500
	FPR2016030A	Residual current circuit breaker FPR-A 16A/0,03A 2P A 10kA	16	1	100	0,215	0,215	21,500
	FPR2016100A	Residual current circuit breaker FPR-A 16A/0,1A 2P A 10kA	16	1	100	0,215	0,215	21,500
	FPR2016300A	Residual current circuit breaker FPR-A 16A/0,3A 2P A 10kA	16	1	100	0,215	0,215	21,500
	FPR2020030A	Residual current circuit breaker FPR-A 20A/0,03A 2P A 10kA	20	1	100	0,216	0,216	21,600
	FPR2020100A	Residual current circuit breaker FPR-A 20A/0,1A 2P A 10kA	20	1	100	0,216	0,216	21,600
	FPR2020300A	Residual current circuit breaker FPR-A 20A/0,3A 2P A 10kA	20	1	100	0,216	0,216	21,600
	FPR2025030A	Residual current circuit breaker FPR-A 25A/0,03A 2P A 10kA	25	1	100	0,216	0,216	21,600
	FPR2025100A	Residual current circuit breaker FPR-A 25A/0,1A 2P A 10kA	25	1	100	0,216	0,216	21,600
	FPR2025300A	Residual current circuit breaker FPR-A 25A/0,3A 2P A 10kA	25	1	100	0,216	0,216	21,600
	FPR2032030A	Residual current circuit breaker FPR-A 32A/0,03A 2P A 10kA	32	1	100	0,218	0,218	21,800
	FPR2032100A	Residual current circuit breaker FPR-A 32A/0,1A 2P A 10kA	32	1	100	0,218	0,218	21,800
	FPR2032300A	Residual current circuit breaker FPR-A 32A/0,3A 2P A 10kA	32	1	100	0,218	0,218	21,800
	FPR2040030A	Residual current circuit breaker FPR-A 40A/0,03A 2P A 10kA	40	1	100	0,220	0,220	22,000
	FPR2040100A	Residual current circuit breaker FPR-A 40A/0,1A 2P A 10kA	40	1	100	0,220	0,220	22,000
	FPR2040300A	Residual current circuit breaker FPR-A 40A/0,3A 2P A 10kA	50	1	100	0,220	0,220	22,000
	FPR2050030A	Residual current circuit breaker FPR-A 50A/0,03A 2P A 10kA	50	1	100	0,220	0,220	22,000
	FPR2050100A	Residual current circuit breaker FPR-A 50A/0,1A 2P A 10kA	50	1	100	0,220	0,220	22,000
	FPR2050300A	Residual current circuit breaker FPR-A 50A/0,3A 2P A 10kA	50	1	100	0,220	0,220	22,000
	FPR2063030A	Residual current circuit breaker FPR-A 63A/0,03A 2P A 10kA	63	1	100	0,220	0,220	22,000
	FPR2063100A	Residual current circuit breaker FPR-A 63A/0,1A 2P A 10kA	63	1	100	0,220	0,220	22,000
	FPR2063300A	Residual current circuit breaker FPR-A 63A/0,3A 2P A 10kA	63	1	100	0,220	0,220	22,000
	FPR2080030A	Residual current circuit breaker FPR-A 80A/0,03A 2P A 10kA	80	1	100	0,222	0,222	22,200
	FPR2080100A	Residual current circuit breaker FPR-A 80A/0,1A 2P A 10kA	80	1	100	0,222	0,222	22,200
	FPR2080300A	Residual current circuit breaker FPR-A 80A/0,3A 2P A 10kA	80	1	100	0,222	0,222	22,200
	FPR2100030A	Residual current circuit breaker FPR-A 100A/0,03A 2P A 10kA	100	1	100	0,222	0,222	22,200
	FPR2100100A	Residual current circuit breaker FPR-A 100A/0,1A 2P A 10kA	100	1	100	0,222	0,222	22,200
	FPR2100300A	Residual current circuit breaker FPR-A 100A/0,3A 2P A 10kA	100	1	100	0,222	0,222	22,200




<b>4P</b>	FPR4010030A	Residual current circuit breaker FPR-A 10A/0,03A 4P A 10kA	10	1	50	0,342	0,342	17,100
	FPR4010030A	Residual current circuit breaker FPR-A 10A/0,03A 4P A 10kA	10	1	50	0,342	0,342	17,100
	FPR4010300A	Residual current circuit breaker FPR-A 10A/0,3A 4P A 10kA	10	1	50	0,342	0,342	17,100
	FPR4016030A	Residual current circuit breaker FPR-A 16A/0,03A 4P A 10kA	16	1	50	0,342	0,342	17,100
	FPR4016100A	Residual current circuit breaker FPR-A 16A/0,1A 4P A 10kA	16	1	50	0,342	0,342	17,100
	FPR4016300A	Residual current circuit breaker FPR-A 16A/0,3A 4P A 10kA	16	1	50	0,342	0,342	17,100
	FPR4020030A	Residual current circuit breaker FPR-A 20A/0,03A 4P A 10kA	20	1	50	0,350	0,350	17,500
	FPR4020100A	Residual current circuit breaker FPR-A 20A/0,1A 4P A 10kA	20	1	50	0,350	0,350	17,500
	FPR4020300A	Residual current circuit breaker FPR-A 20A/0,3A 4P A 10kA	20	1	50	0,350	0,350	17,500
	FPR4025030A	Residual current circuit breaker FPR-A 25A/0,03A 4P A 10kA	25	1	50	0,357	0,357	17,850
	FPR4025100A	Residual current circuit breaker FPR-A 25A/0,1A 4P A 10kA	25	1	50	0,357	0,357	17,850
	FPR4025300A	Residual current circuit breaker FPR-A 25A/0,3A 4P A 10kA	25	1	50	0,357	0,357	17,850
	FPR4032030	Residual current circuit breaker FPR-A 32A/0,03A 4P A 10kA	32	1	50	0,362	0,362	18,100
	FPR4032100A	Residual current circuit breaker FPR-A 32A/0,1A 4P A 10kA	32	1	50	0,362	0,362	18,100
	FPR4032300A	Residual current circuit breaker FPR-A 32A/0,3A 4P A 10kA	32	1	50	0,362	0,362	18,100
	FPR4040030A	Residual current circuit breaker FPR-A 40A/0,03A 4P A 10kA	40	1	50	0,368	0,368	18,400
	FPR4040100A	Residual current circuit breaker FPR-A 40A/0,1A 4P A 10kA	40	1	50	0,368	0,368	18,400
	FPR4040300A	Residual current circuit breaker FPR-A 40A/0,3A 4P A 10kA	50	1	50	0,368	0,368	18,400
	FPR4050030A	Residual current circuit breaker FPR-A 50A/0,03A 4P A 10kA	50	1	50	0,372	0,372	18,600
	FPR4050100A	Residual current circuit breaker FPR-A 50A/0,1A 4P A 10kA	50	1	50	0,372	0,372	18,600
	FPR4050300A	Residual current circuit breaker FPR-A 50A/0,3A 4P A 10kA	50	1	50	0,372	0,372	18,600
	FPR4063030A	Residual current circuit breaker FPR-A 63A/0,03A 4P A 10kA	63	1	50	0,372	0,372	18,600
	FPR4063100A	Residual current circuit breaker FPR-A 63A/0,1A 4P A 10kA	63	1	50	0,372	0,372	18,600
	FPR4063300A	Residual current circuit breaker FPR-A 63A/0,3A 4P A 10kA	63	1	50	0,372	0,372	18,600
	FPR4080030A	Residual current circuit breaker FPR-A 80A/0,03A 4P A 10kA	80	1	50	0,390	0,390	19,500
	FPR4080100A	Residual current circuit breaker FPR-A 80A/0,1A 4P A 10kA	80	1	50	0,390	0,390	19,500
	FPR4080300A	Residual current circuit breaker FPR-A 80A/0,3A 4P A 10kA	80	1	50	0,390	0,390	19,500
	FPR4100030A	Residual current circuit breaker FPR-A 100A/0,03A 4P A 10kA	100	1	50	0,395	0,395	19,750
	FPR4100100A	Residual current circuit breaker FPR-A 100A/0,1A 4P A 10kA	100	1	50	0,395	0,395	19,750
	FPR4100300A	Residual current circuit breaker FPR-A 100A/0,3A 4P A 10kA	100	1	50	0,395	0,395	19,750



## Residual current circuit breakers FPR, FPR-1

Type AC	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
 <p><b>2P</b></p>	FPR12016030AC	Residual current circuit breaker FPR1-AC 16A/0,03A 2P AC 6kA	1	3	60	0,440	1,320	26,40
	FPR12020030AC	Residual current circuit breaker FPR1-AC 20A/0,03A 2P AC 6kA	2	3	60	0,440	1,320	26,40
	FPR12025030AC	Residual current circuit breaker FPR1-AC 25A/0,03A 2P AC 6kA	3	3	60	0,440	1,320	26,40
	FPR12032030AC	Residual current circuit breaker FPR1-AC 32A/0,03A 2P AC 6kA	4	3	60	0,440	1,320	26,40
	FPR12040030AC	Residual current circuit breaker FPR1-AC 40A/0,03A 2P AC 6kA	5	3	60	0,440	1,320	26,40
	FPR12050030AC	Residual current circuit breaker FPR1-AC 50A/0,03A 2P AC 6kA	6	3	60	0,440	1,320	26,40
	FPR12063030AC	Residual current circuit breaker FPR1-AC 63A/0,03A 2P AC 6kA	8	3	60	0,440	1,320	26,40

 <p><b>4P</b></p>	FPR14016030AC	Residual current circuit breaker FPR1-AC 16A/0,03A 4P AC 6kA	1	3	60	0,440	1,320	26,40
	FPR14020030AC	Residual current circuit breaker FPR1-AC 20A/0,03A 4P AC 6kA	2	3	60	0,440	1,320	26,40
	FPR14025030AC	Residual current circuit breaker FPR1-AC 25A/0,03A 4P AC 6kA	3	3	60	0,440	1,320	26,40
	FPR14032030AC	Residual current circuit breaker FPR1-AC 32A/0,03A 4P AC 6kA	4	3	60	0,440	1,320	26,40
	FPR14040030AC	Residual current circuit breaker FPR1-AC 40A/0,03A 4P AC 6kA	5	3	60	0,440	1,320	26,40
	FPR14050030AC	Residual current circuit breaker FPR1-AC 50A/0,03A 4P AC 6kA	6	3	60	0,440	1,320	26,40
	FPR14063030AC	Residual current circuit breaker FPR1-AC 63A/0,03A 4P AC 6kA	8	3	60	0,440	1,320	26,40

FPR

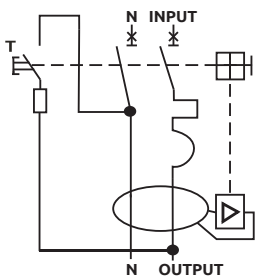


**Technical specifications**

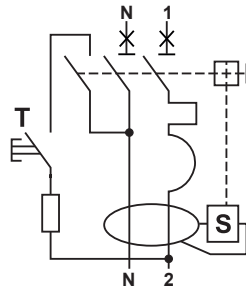
Series	FAP1	FAP6	FAP10
Standards	IEC 61009	IEC 61009	IEC 61009
Number of poles	1P+N, 3P+N	1P+N	1P+N
Rated current $I_n$ , A	6, 10, 16, 20, 25, 32, 40, 50, 63	6, 10, 16, 20, 25, 32, 40	6, 10, 16, 20, 25, 32, 40
Leakage current $I_{\Delta n}$ , mA	30	30, 100, 300	30, 100, 300
Rated voltage $U_n$ , V	~230, 400	~230	~230
Disconnection characteristic	C	B, C	B, C
Limit switching capacity $I_{cn}$ , A	6 000	6 000	10 000
Application category	AC	AC	A, AC
Switching wear resistance (number of cycles on/off)	4 000/10 000 (electrical/mechanical)	4 000/10 000 (electrical/mechanical)	6 000/20 000 (electrical/mechanical)
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25	up to 16	up to 25
Type of differential protection	electronic	electronic	electromechanical
Rated voltage of the insulation $U_i$ , V		500	
Rated impulse withstand voltage $U_{imp}$ , V		4000	
Rated frequency $f$ , Hz		50/60	
Selectivity class		3	
Instantaneous shutdown duration, s		≤ 0.1	
Degree of protection		IP20	
DIN rail mounting	TN35	TN35	TN35
Connecting of busbar	PIN	no	PIN/FORK
Connecting of additional devices		no	
Operating position		any	
Sealing option ON/OFF		yes	
Release type		electromagnetic/thermal	

**Schematic diagrams**

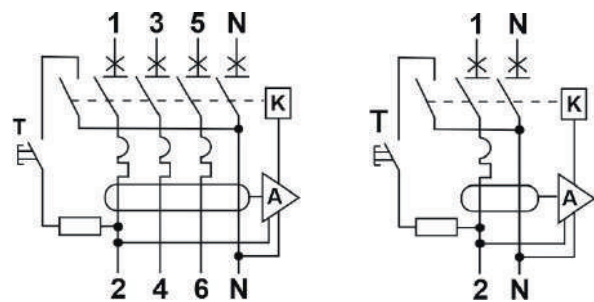
**FAP6**  
electronic



**FAP10**  
electromechanical



**FAP1**



## Residual current circuit breakers with over-current protection FAP1, FAP6, FAP10

Characteristic C	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>2P</b>	FAP01C06030AC	Residual current circuit breaker with over-current protection FAP1-AC 6A/0,03A 2P 6kA	6	1	120	0,175	0,175	21,000
	FAP01C10030AC	Residual current circuit breaker with over-current protection FAP1-AC 10A/0,03A 2P 6kA	10	1	120	0,175	0,175	21,000
	FAP01C16030AC	Residual current circuit breaker with over-current protection FAP1-AC 16A/0,03A 2P 6kA	16	1	120	0,175	0,175	21,000
	FAP01C20030AC	Residual current circuit breaker with over-current protection FAP1-AC 20A/0,03A 2P 6kA	20	1	120	0,175	0,175	21,000
	FAP01C25030AC	Residual current circuit breaker with over-current protection FAP1-AC 25A/0,03A 2P 6kA	25	1	120	0,175	0,175	21,000
	FAP01C32030AC	Residual current circuit breaker with over-current protection FAP1-AC 32A/0,03A 2P 6kA	32	1	120	0,175	0,175	21,000
	FAP01C40030AC	Residual current circuit breaker with over-current protection FAP1-AC 40A/0,03A 2P 6kA	40	1	120	0,175	0,175	21,000
	FAP01C50030AC	Residual current circuit breaker with over-current protection FAP1-AC 50A/0,03A 2P 6kA	50	1	120	0,175	0,175	21,000
	FAP01C63030AC	Residual current circuit breaker with over-current protection FAP1-AC 63A/0,03A 2P 6kA	63	1	120	0,175	0,175	21,000

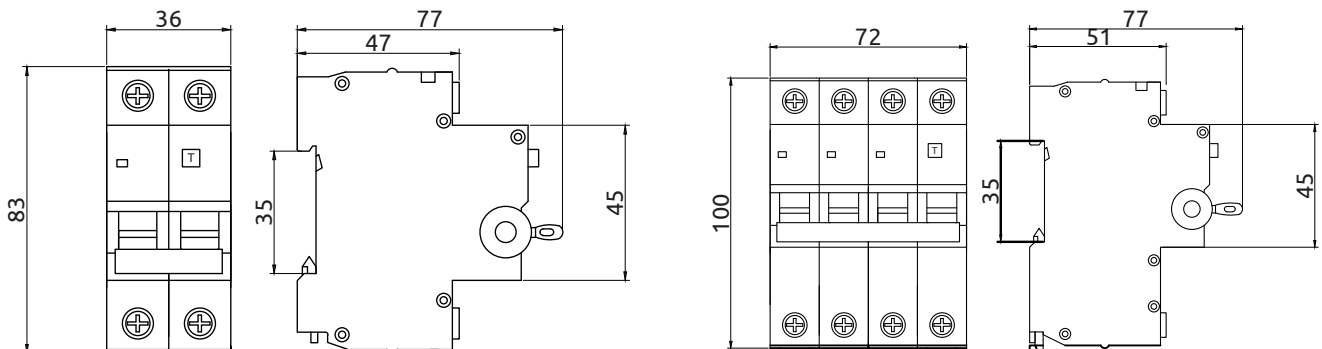


FAP

<b>4P</b>	FAP01C060304AC	Residual current circuit breaker with over-current protection FAP1-AC 6A/0,03A 4P 6kA	6	1	120	0,441	0,441	52,92
	FAP01C100304AC	Residual current circuit breaker with over-current protection FAP1-AC 10A/0,03A 4P 6kA	10	1	120	0,441	0,441	52,92
	FAP01C160304AC	Residual current circuit breaker with over-current protection FAP1-AC 16A/0,03A 4P 6kA	16	1	120	0,441	0,441	52,92
	FAP01C200304AC	Residual current circuit breaker with over-current protection FAP1-AC 20A/0,03A 4P 6kA	20	1	120	0,441	0,441	52,92
	FAP01C250304AC	Residual current circuit breaker with over-current protection FAP1-AC 25A/0,03A 4P 6kA	25	1	120	0,441	0,441	52,92
	FAP01C320304AC	Residual current circuit breaker with over-current protection FAP1-AC 32A/0,03A 4P 6kA	32	1	120	0,441	0,441	52,92
	FAP01C400304AC	Residual current circuit breaker with over-current protection FAP1-AC 40A/0,03A 4P 6kA	40	1	120	0,441	0,441	52,92
	FAP01C500304AC	Residual current circuit breaker with over-current protection FAP1-AC 50A/0,03A 4P 6kA	50	1	120	0,441	0,441	52,92
	FAP01C630304AC	Residual current circuit breaker with over-current protection FAP1-AC 63A/0,03A 4P 6kA	63	1	120	0,441	0,441	52,92



## Overall dimensions




## Residual current circuit breakers with over-current protection FAP1, FAP6, FAP10

FAP

Characteristic B	Order code	Full name of	Rated current $I_n$ , A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P+N</b>	FAP06B06030AC	Residual current circuit breaker with over-current protection FAP6-AC 6A/0,03A 2P 6kA	6	1	100	0,154	0,154	15,800
	FAP06B10030AC	Residual current circuit breaker with over-current protection FAP6-AC 10A/0,03A 2P 6kA	10	1	100	0,154	0,154	15,800
	FAP06B16030AC	Residual current circuit breaker with over-current protection FAP6-AC 16A/0,03A 2P 6kA	16	1	100	0,154	0,154	15,800
	FAP06B20030AC	Residual current circuit breaker with over-current protection FAP6-AC 20A/0,03A 2P 6kA	20	1	100	0,154	0,154	15,800
	FAP06B25030AC	Residual current circuit breaker with over-current protection FAP6-AC 25A/0,03A 2P 6kA	25	1	100	0,160	0,160	16,400
	FAP06B32030AC	Residual current circuit breaker with over-current protection FAP6-AC 32A/0,03A 2P 6kA	32	1	100	0,160	0,160	16,400
	FAP06B40030AC	Residual current circuit breaker with over-current protection FAP6-AC 40A/0,03A 2P 6kA	40	1	100	0,160	0,160	16,400

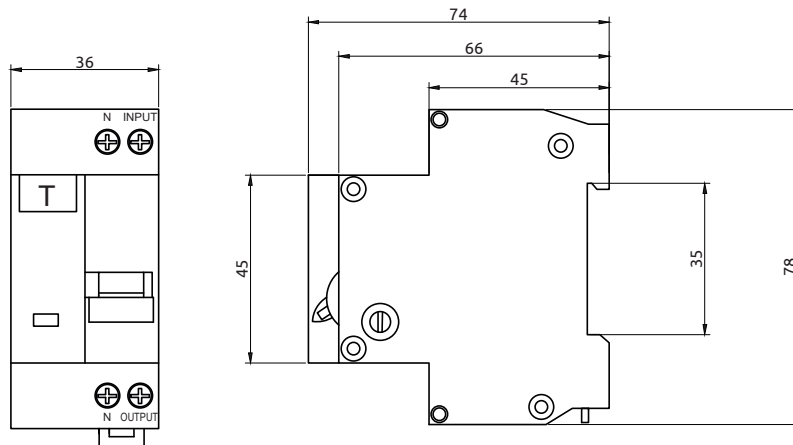
### Characteristic C

**1P+N**

	FAP06C06030AC	Residual current circuit breaker with over-current protection FAP6-AC 6A/0,03A 2P 6kA	6	1	100	0,154	0,154	15,800
	FAP06C10030AC	Residual current circuit breaker with over-current protection FAP6-AC 10A/0,03A 2P 6kA	10	1	100	0,154	0,154	15,800
	FAP06C16030AC	Residual current circuit breaker with over-current protection FAP6-AC 16A/0,03A 2P 6kA	16	1	100	0,154	0,154	15,800
	FAP06C20030AC	Residual current circuit breaker with over-current protection FAP6-AC 20A/0,03A 2P 6kA	20	1	100	0,154	0,154	15,800
	FAP06C25030AC	Residual current circuit breaker with over-current protection FAP6-AC 25A/0,03A 2P 6kA	25	1	100	0,160	0,160	16,400
	FAP06C32030AC	Residual current circuit breaker with over-current protection FAP6-AC 32A/0,03A 2P 6kA	32	1	100	0,160	0,160	16,400
	FAP06C40030AC	Residual current circuit breaker with over-current protection FAP6-AC 40A/0,03A 2P 6kA	40	1	100	0,160	0,160	16,400



## Overall dimensions



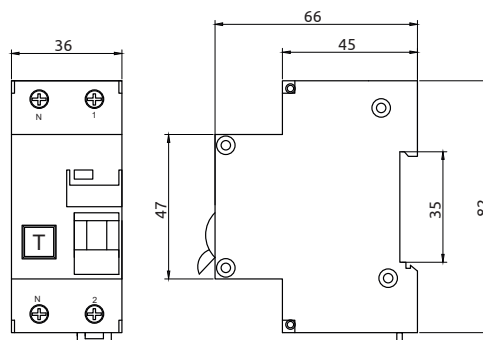
## Residual current circuit breakers with over-current protection FAP1, FAP6, FAP10

Characteristic B Type AC	Order code	Full name of	Rated current I <sub>n</sub> , A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P+N</b>	FAP10B06030AC	Residual current circuit breaker with over-current protection FAP10-AC 6A/0,03A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10B06100AC	Residual current circuit breaker with over-current protection FAP10-AC 6A/0,1A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10B06300AC	Residual current circuit breaker with over-current protection FAP10-AC 6A/0,3A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10B10030AC	Residual current circuit breaker with over-current protection FAP10-AC 10A/0,03A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10B10100AC	Residual current circuit breaker with over-current protection FAP10-AC 10A/0,1A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10B10300AC	Residual current circuit breaker with over-current protection FAP10-AC 10A/0,3A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10B16030AC	Residual current circuit breaker with over-current protection FAP10-AC 16A/0,03A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10B16100AC	Residual current circuit breaker with over-current protection FAP10-AC 16A/0,1A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10B16300AC	Residual current circuit breaker with over-current protection FAP10-AC 16A/0,3A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10B20030AC	Residual current circuit breaker with over-current protection FAP10-AC 20A/0,03A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10B20100A	Residual current circuit breaker with over-current protection FAP10-AC 20A/0,1A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10B20300AC	Residual current circuit breaker with over-current protection FAP10-AC 20A/0,3A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10B25030AC	Residual current circuit breaker with over-current protection FAP10-AC 25A/0,03A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10B25100AC	Residual current circuit breaker with over-current protection FAP10-AC 25A/0,1A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10B25300AC	Residual current circuit breaker with over-current protection FAP10-AC 25A/0,3A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10B32030AC	Residual current circuit breaker with over-current protection FAP10-AC 32A/0,03A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10B32100AC	Residual current circuit breaker with over-current protection FAP10-AC 32A/0,1A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10B32300AC	Residual current circuit breaker with over-current protection FAP10-AC 32A/0,3A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10B40030AC	Residual current circuit breaker with over-current protection FAP10-AC 40A/0,03A 2P 10kA	40	1	100	0,227	0,227	23,100
	FAP10B40100AC	Residual current circuit breaker with over-current protection FAP10-AC 40A/0,1A 2P 10kA	40	1	100	0,227	0,227	23,100
FAP10B40300AC	Residual current circuit breaker with over-current protection FAP10-AC 40A/0,3A 2P 10kA	40	1	100	0,227	0,227	23,100	



FAP

### Overall dimensions



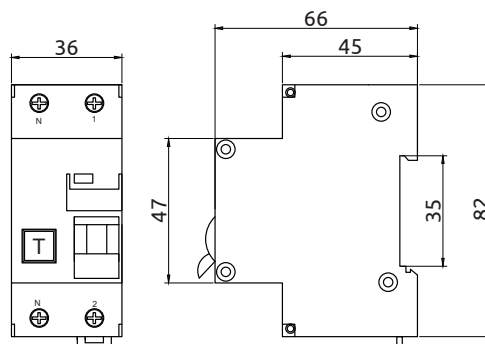
## Residual current circuit breakers with over-current protection FAP1, FAP6, FAP10

FAP

Characteristic C Type AC	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P+N</b>	FAP10C06030AC	Residual current circuit breaker with over-current protection FAP10-AC 6A/0,03A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10C06100AC	Residual current circuit breaker with over-current protection FAP10-AC 6A/0,1A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10C06300AC	Residual current circuit breaker with over-current protection FAP10-AC 6A/0,3A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10C10030AC	Residual current circuit breaker with over-current protection FAP10-AC 10A/0,03A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10C10100AC	Residual current circuit breaker with over-current protection FAP10-AC 10A/0,1A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10C10300AC	Residual current circuit breaker with over-current protection FAP10-AC 10A/0,3A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10C16030AC	Residual current circuit breaker with over-current protection FAP10-AC 16A/0,03A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10C16100AC	Residual current circuit breaker with over-current protection FAP10-AC 16A/0,1A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10C16300AC	Residual current circuit breaker with over-current protection FAP10-AC 16A/0,3A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10C20030AC	Residual current circuit breaker with over-current protection FAP10-AC 20A/0,03A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10C20100AC	Residual current circuit breaker with over-current protection FAP10-AC 20A/0,1A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10C20300AC	Residual current circuit breaker with over-current protection FAP10-AC 20A/0,3A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10C25030AC	Residual current circuit breaker with over-current protection FAP10-AC 25A/0,03A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10C25100AC	Residual current circuit breaker with over-current protection FAP10-AC 25A/0,1A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10C25300AC	Residual current circuit breaker with over-current protection FAP10-AC 25A/0,3A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10C32030AC	Residual current circuit breaker with over-current protection FAP10-AC 32A/0,03A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10C32100AC	Residual current circuit breaker with over-current protection FAP10-AC 32A/0,1A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10C32300AC	Residual current circuit breaker with over-current protection FAP10-AC 32A/0,3A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10C40030AC	Residual current circuit breaker with over-current protection FAP10-AC 40A/0,03A 2P 10kA	40	1	100	0,227	0,227	23,100
	FAP10C40100AC	Residual current circuit breaker with over-current protection FAP10-AC 40A/0,1A 2P 10kA	40	1	100	0,227	0,227	23,100
FAP10C40300AC	Residual current circuit breaker with over-current protection FAP10-AC 40A/0,3A 2P 10kA	40	1	100	0,227	0,227	23,100	



### Overall dimensions



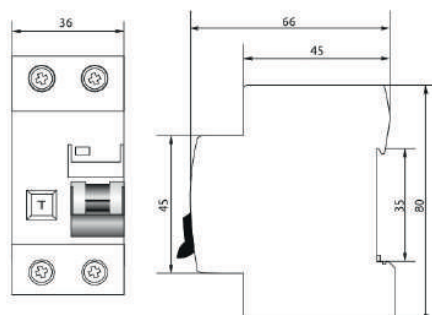
## Residual current circuit breakers with over-current protection FAP1, FAP6, FAP10

Characteristic B Type A	Order code	Full name of	Rated current I <sub>n</sub> , A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P+N</b>	FAP10B06030A	Residual current circuit breaker with over-current protection FAP10-A "B" 6A/0,03A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10B06100A	Residual current circuit breaker with over-current protection FAP10-A "B" 6A/0,1A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10B06300A	Residual current circuit breaker with over-current protection FAP10-A "B" 6A/0,3A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10B10030A	Residual current circuit breaker with over-current protection FAP10-A "B" 10A/0,03A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10B10100A	Residual current circuit breaker with over-current protection FAP10-A "B" 10A/0,1A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10B10300A	Residual current circuit breaker with over-current protection FAP10-A "B" 10A/0,3A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10B16030A	Residual current circuit breaker with over-current protection FAP10-A «B" 16A/0,03A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10B16100A	Residual current circuit breaker with over-current protection FAP10-A "B" 16A/0,1A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10B16300A	Residual current circuit breaker with over-current protection FAP10-A "B" 16A/0,3A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10B20030A	Residual current circuit breaker with over-current protection FAP10-A "B" 20A/0,03A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10B20100A	Residual current circuit breaker with over-current protection FAP10-A "B" 20A/0,1A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10B20300A	Residual current circuit breaker with over-current protection FAP10-A "B" 20A/0,3A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10B25030A	Residual current circuit breaker with over-current protection FAP10-A "B" 25A/0,03A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10B25100A	Residual current circuit breaker with over-current protection FAP10-A "B" 25A/0,1A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10B25300A	Residual current circuit breaker with over-current protection FAP10-A "B" 25A/0,3A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10B32030A	Residual current circuit breaker with over-current protection FAP10-A «B" 32A/0,03A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10B32100A	Residual current circuit breaker with over-current protection FAP10-A "B" 32A/0,1A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10B32300A	Residual current circuit breaker with over-current protection FAP10-A "B" 32A/0,3A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10B40030A	Residual current circuit breaker with over-current protection FAP10-A "B" 40A/0,03A 2P 10kA	40	1	100	0,227	0,227	23,100
	FAP10B40100A	Residual current circuit breaker with over-current protection FAP10-A "B" 40A/0,1A 2P 10kA	40	1	100	0,227	0,227	23,100
FAP10B40300A	Residual current circuit breaker with over-current protection FAP10-A "B" 40A/0,3A 2P 10kA	40	1	100	0,227	0,227	23,100	



FAP

## Overall dimensions



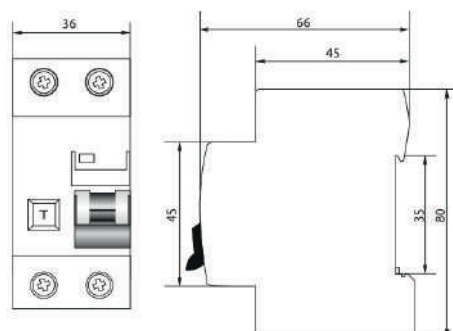
## Residual current circuit breakers with over-current protection FAP1, FAP6, FAP10

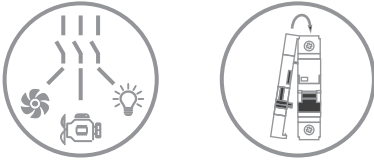
FAP

Characteristic C Type A	Order code	Full name of	Rated current I <sub>n</sub> , A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>1P+N</b>	FAP10C06030A	Residual current circuit breaker with over-current protection FAP10-A "C" 6A/0,03A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10C06100A	Residual current circuit breaker with over-current protection FAP10-A "C" 6A/0,1A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10C06300A	Residual current circuit breaker with over-current protection FAP10-A "C" 6A/0,3A 2P 10kA	6	1	100	0,218	0,218	22,200
	FAP10C10030A	Residual current circuit breaker with over-current protection FAP10-A "C" 10A/0,03A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10C10100A	Residual current circuit breaker with over-current protection FAP10-A "C" 10A/0,1A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10C10300A	Residual current circuit breaker with over-current protection FAP10-A "C" 10A/0,3A 2P 10kA	10	1	100	0,218	0,218	22,200
	FAP10C16030A	Residual current circuit breaker with over-current protection FAP10-A "C" 16A/0,03A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10C16100A	Residual current circuit breaker with over-current protection FAP10-A "C" 16A/0,1A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10C16300A	Residual current circuit breaker with over-current protection FAP10-A "C" 16A/0,3A 2P 10kA	16	1	100	0,221	0,221	22,500
	FAP10C20030A	Residual current circuit breaker with over-current protection FAP10-A "C" 20A/0,03A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10C20100A	Residual current circuit breaker with over-current protection FAP10-A "C" 20A/0,1A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10C20300A	Residual current circuit breaker with over-current protection FAP10-A "C" 20A/0,3A 2P 10kA	20	1	100	0,225	0,225	22,900
	FAP10C25030A	Residual current circuit breaker with over-current protection FAP10-A "C" 25A/0,03A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10C25100A	Residual current circuit breaker with over-current protection FAP10-A "C" 25A/0,1A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10C25300A	Residual current circuit breaker with over-current protection FAP10-A "C" 25A/0,3A 2P 10kA	25	1	100	0,225	0,225	22,900
	FAP10C32030A	Residual current circuit breaker with over-current protection FAP10-A "C" 32A/0,03A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10C32100A	Residual current circuit breaker with over-current protection FAP10-A "C" 32A/0,1A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10C32300A	Residual current circuit breaker with over-current protection FAP10-A "C" 32A/0,3A 2P 10kA	32	1	100	0,227	0,227	23,100
	FAP10C40030A	Residual current circuit breaker with over-current protection FAP10-A "C" 40A/0,03A 2P 10kA	40	1	100	0,227	0,227	23,100
	FAP10C40100A	Residual current circuit breaker with over-current protection FAP10-A "C" 40A/0,1A 2P 10kA	40	1	100	0,227	0,227	23,100
FAP10C40300A	Residual current circuit breaker with over-current protection FAP10-A "C" 40A/0,3A 2P 10kA	40	1	100	0,227	0,227	23,100	



### Overall dimensions

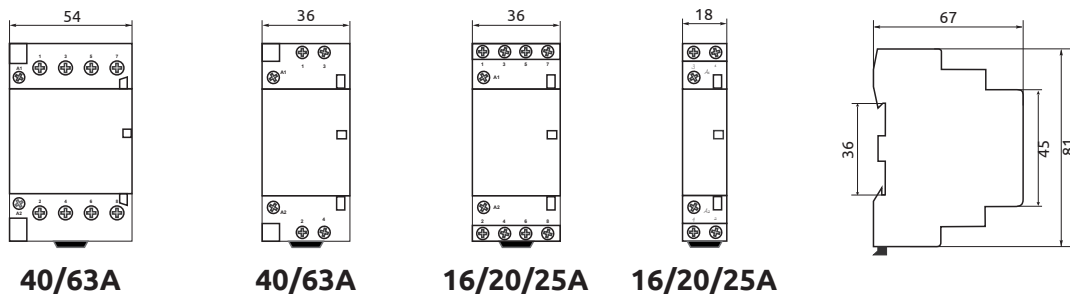




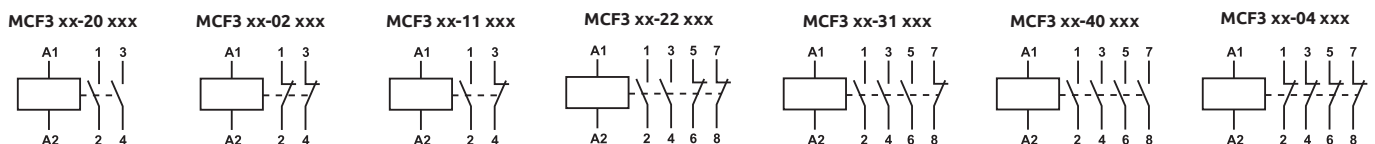
Technical specifications

Series	MCF3												
Standards	IEC 61095, IEC 60947-4-1												
Number of poles	2					4							
Rated current I <sub>n</sub> , A (AC-1, AC-7a)	16	20	25	40	63	16	20	25	40	63			
Power P, kW (AC-1, AC-7a)	~230V		3	4	5.2	8.4	13	3		4	5.2	8.4	13
	~400V		9	12	15.6	25	39	9		12	15.6	25	39
Rated current I <sub>n</sub> , A (AC-3, AC-7b)	6	6	8.5	15	15	6	6	8.5	15	15			
Power P, kW (AC-3, AC-7b)	~230V		1.1	1.9	2.5	4	6.2	1.1		1.9	2.5	4	6.2
	~400V		2.5	3	4	11	18	2.5		3	4	11	18
Complete set of contact groups, NO/NC	20, 11, 02					22, 40, 04, 31							
Bolt clamping torque, Nm (load chain)	0.8		3.5			0.8		3.5					
Bolt clamping torque, Nm (control chain)	0.8												
Cross-section of connecting conductors, mm <sup>2</sup>	1-4		2.5-16			1-4		2.5-16					
Rated voltage U <sub>n</sub> , V	~230/400												
Rated frequency f, Hz	50/60												
Rated operating voltage of control circuits U <sub>c</sub> , V	~24/230												
Rated voltage of the insulation U <sub>i</sub> , V	500												
Rated impulse withstand voltage U <sub>imp</sub> , V	4000												
Switching wear resistance (number of cycles on/off)	100 000/1 000 000 (electrical/mechanical)												
Response time, s	0.05												
Degree of protection	IP20												
Application category	AC-1, AC-3, AC-7a, AC-7b												
Connecting of additional devices	yes												
DIN rail mounting	TN35												
Operating position	any												

Overall dimensions



Schematic diagrams




## Modular contactors MCF3, MCF3i

~230V


**MCF3**

**16A**




Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
MCF31611230	Modular contactor MCF3 16A 1NO 1NC 230V	16	12	120	0,115	1,440	14,600
MCF31602230	Modular contactor MCF3 16A 2NC 230V	16	12	120	0,115	1,440	14,600
MCF31620230	Modular contactor MCF3 16A 2NO 230V	16	12	120	0,115	1,440	14,600
MCF31622230	Modular contactor MCF3 16A 2NO 2NC 230V	16	6	60	0,201	1,260	12,800
MCF31631230	Modular contactor MCF3 16A 3NO 1NC 230V	16	6	60	0,201	1,260	12,800
MCF31640230	Modular contactor MCF3 16A 4NO 230V	16	6	60	0,201	1,260	12,800
MCF31604230	Modular contactor MCF3 16A 4NC 230V	16	6	60	0,201	1,260	12,800

**20A**




MCF32011230	Modular contactor MCF3 20A 1NO 1NC 230V	20	12	120	0,117	1,460	14,800
MCF32002230	Modular contactor MCF3 20A 2NC 230V	20	12	120	0,117	1,460	14,800
MCF32020230	Modular contactor MCF3 20A 2NO 230V	20	12	120	0,117	1,460	14,800
MCF32022230	Modular contactor MCF3 20A 2NO 2NC 230V	20	6	60	0,204	1,280	13,000
MCF32031230	Modular contactor MCF3 20A 3NO 1NC 230V	20	6	60	0,204	1,280	13,000
MCF32040230	Modular contactor MCF3 20A 4NO 230V	20	6	60	0,204	1,280	13,000
MCF32004230	Modular contactor MCF3 20A 4NC 230V	20	6	60	0,204	1,280	13,000

**25A**




MCF32511230	Modular contactor MCF3 25A 1NO 1NC 230V	25	12	120	0,120	1,500	14,800
MCF32502230	Modular contactor MCF3 25A 2NC 230V	25	12	120	0,120	1,500	14,800
MCF32520230	Modular contactor MCF3 25A 2NO 230V	25	12	120	0,120	1,500	14,800
MCF32522230	Modular contactor MCF3 25A 2NO 2NC 230V	25	6	60	0,207	1,300	13,200
MCF32531230	Магнітний пускач MCF3 25A 3NO 1NC 230V	25	6	60	0,207	1,300	13,200
MCF32540230	Modular contactor MCF3 25A 4NO 230V	25	6	60	0,207	1,300	13,200
MCF32504230	Modular contactor MCF3 25A 4NC 230V	25	6	60	0,207	1,300	13,200

**40A**

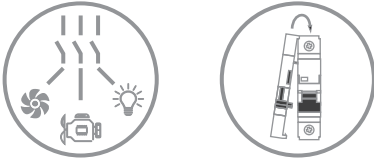


MCF34011230	Modular contactor MCF3 40A 1NO 1NC 230V	40	6	60	0,230	1,440	14,600
MCF34002230	Modular contactor MCF3 40A 2NC 230V	40	6	60	0,230	1,440	14,600
MCF34020230	Modular contactor MCF3 40A 2NO 230V	40	6	60	0,230	1,440	14,600
MCF34022230	Modular contactor MCF3 40A 2NO 2NC 230V	40	4	40	0,330	1,380	14,000
MCF34031230	Modular contactor MCF3 40A 3NO 1NC 230V	40	4	40	0,330	1,380	13,600
MCF34040230	Modular contactor MCF3 40A 4NO 230V	40	4	40	0,330	1,380	13,600
MCF34004230	Modular contactor MCF3 40A 4NC 230V	40	4	40	0,330	1,380	13,600

**63A**



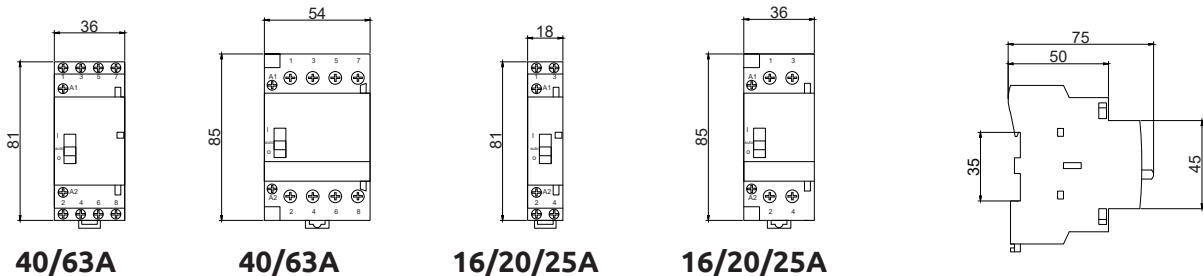
MCF36311230	Modular contactor MCF3 63A 1NO 1NC 230V	63	6	60	0,235	1,470	14,900
MCF36302230	Modular contactor MCF3 63A 2NC 230V	63	6	60	0,235	1,470	14,900
MCF36320230	Modular contactor MCF3 63A 2NO 230V	63	6	60	0,235	1,470	14,900
MCF36322230	Modular contactor MCF3 63A 2NO 2NC 230V	63	4	40	0,335	1,400	14,200
MCF36331230	Modular contactor MCF3 63A 3NO 1NC 230V	63	4	40	0,335	1,400	14,200
MCF36340230	Modular contactor MCF3 63A 4NO 230V	63	4	40	0,335	1,400	14,200
MCF36304230	Modular contactor MCF3 63A 4NC 230V	63	4	40	0,335	1,400	14,200



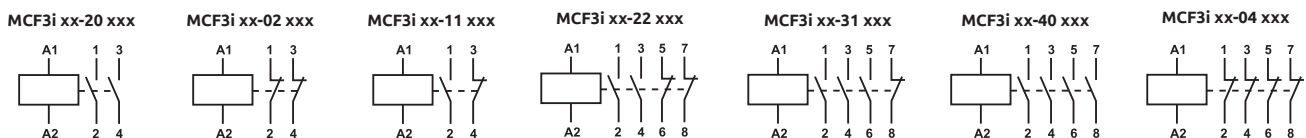
Technical specifications

Series	MCF3i									
Standards	IEC 61095, IEC 60947-4-1									
Number of poles	2					4				
Rated current $I_n$ , A (AC-1, AC-7a)	16	20	25	40	63	16	20	25	40	63
Power P, kW (AC-1, AC-7a)	~230V					~400V				
	3	4	5.2	8.4	13	3	4	5.2	8.4	13
Rated current $I_n$ , A (AC-3, AC-7b)	~230V					~400V				
	6	6	8.5	15	15	6	6	8.5	15	15
Power P, kW (AC-3, AC-7b)	~230V					~400V				
	1.1	1.9	2.5	4	6.2	1.1	1.9	2.5	4	6.2
Complete set of contact groups, NO/NC	20, 11, 02					22, 40, 04, 31				
Bolt clamping torque, Nm (load chain)	0.8		3.5			0.8		3.5		
Bolt clamping torque, Nm (control chain)	0.8									
Cross-section of connecting conductors, mm <sup>2</sup>	1-4		2.5-16			1-4		2.5-16		
Rated voltage $U_n$ , V	~230/400									
Rated frequency f, Hz	50/60									
Rated operating voltage of control circuits $U_c$ , V	~24/230									
Rated voltage of the insulation $U_i$ , V	500									
Rated impulse withstand voltage $U_{imp}$ , V	4000									
Switching wear resistance (number of cycles on/off)	100 000/1 000 000 (electrical/mechanical)									
Response time, s	0.05									
Degree of protection	IP20									
Application category	AC-1, AC-3, AC-7a, AC-7b									
Connecting of additional devices	yes									
DIN rail mounting	TN35									
Operating position	any									

Overall dimensions



Schematic diagrams



## Modular contactors MCF3, MCF3i

~230V

MCF3

16A



Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
MCF3i1611230	Modular contactor MCF3i 16A 1NO 1NC 230V	16	12	120	0,120	1,500	15,200
MCF3i1602230	Modular contactor MCF3i 16A 2NC 230V	16	12	120	0,120	1,500	15,200
MCF3i1620230	Modular contactor MCF3i 16A 2NO 230V	16	12	120	0,120	1,500	15,200
MCF3i1622230	Modular contactor MCF3i 16A 2NO 2NC 230V	16	6	60	0,206	1,320	13,400
MCF3i1631230	Modular contactor MCF3i 16A 3NO 1NC 230V	16	6	60	0,206	1,320	13,400
MCF3i1640230	Modular contactor MCF3i 16A 4NO 230V	16	6	60	0,206	1,320	13,400
MCF3i1604230	Modular contactor MCF3i 16A 4NC 230V	16	6	60	0,206	1,320	13,400

20A



MCF3i2011230	Modular contactor MCF3i 20A 1NO 1NC 230V	20	12	120	0,123	1,520	15,400
MCF3i2002230	Modular contactor MCF3i 20A 2NC 230V	20	12	120	0,123	1,520	15,400
MCF3i2020230	Modular contactor MCF3i 20A 2NO 230V	20	12	120	0,123	1,520	15,400
MCF3i2022230	Modular contactor MCF3i 20A 2NO 2NC 230V	20	6	60	0,209	1,340	13,600
MCF3i2031230	Modular contactor MCF3i 20A 3NO 1NC 230V	20	6	60	0,209	1,340	13,600
MCF3i2040230	Modular contactor MCF3i 20A 4NO 230V	20	6	60	0,209	1,340	13,600
MCF3i2004230	Modular contactor MCF3i 20A 4NC 230V	20	6	60	0,209	1,340	13,600

25A



MCF3i2511230	Modular contactor MCF3i 25A 1NO 1NC 230V	25	12	120	0,125	1,560	15,400
MCF3i2502230	Modular contactor MCF3i 25A 2NC 230V	25	12	120	0,125	1,560	15,400
MCF3i2520230	Modular contactor MCF3i 25A 2NO 230V	25	12	120	0,125	1,560	15,400
MCF3i2522230	Modular contactor MCF3i 25A 2NO 2NC 230V	25	6	60	0,212	1,360	13,800
MCF3i2531230	Modular contactor MCF3i 25A 3NO 1NC 230V	25	6	60	0,212	1,360	13,800
MCF3i2540230	Modular contactor MCF3i 25A 4NO 230V	25	6	60	0,212	1,360	13,800
MCF3i2504230	Modular contactor MCF3i 25A 4NC 230V	25	6	60	0,212	1,360	13,800

40A



MCF3i4011230	Modular contactor MCF3i 40A 1NO 1NC 230V	40	6	60	0,235	1,500	15,200
MCF3i4002230	Modular contactor MCF3i 40A 2NC 230V	40	6	60	0,235	1,500	15,200
MCF3i4020230	Modular contactor MCF3i 40A 2NO 230V	40	6	60	0,235	1,500	15,200
MCF3i4022230	Modular contactor MCF3i 40A 2NO 2NC 230V	40	4	40	0,335	1,440	14,600
MCF3i4031230	Modular contactor MCF3i 40A 3NO 1NC 230V	40	4	40	0,335	1,440	14,200
MCF3i4040230	Modular contactor MCF3i 40A 4NO 230V	40	4	40	0,335	1,440	14,200
MCF3i4004230	Modular contactor MCF3i 40A 4NC 230V	40	4	40	0,335	1,440	14,200

63A



MCF3i6311230	Modular contactor MCF3i 63A 1NO 1NC 230V	63	6	60	0,240	1,530	15,500
MCF3i6302230	Modular contactor MCF3i 63A 2NC 230V	63	6	60	0,240	1,530	15,500
MCF3i6320230	Modular contactor MCF3i 63A 2NO 230V	63	6	60	0,240	1,530	15,500
MCF3i6322230	Modular contactor MCF3i 63A 2NO 2NC 230V	63	4	40	0,340	1,460	14,800
MCF3i6331230	Modular contactor MCF3i 63A 3NO 1NC 230V	63	4	40	0,340	1,460	14,800
MCF3i6340230	Modular contactor MCF3i 63A 4NO 230V	63	4	40	0,340	1,460	14,800
MCF3i6304230	Modular contactor MCF3i 63A 4NC 230V	63	4	40	0,340	1,460	14,800



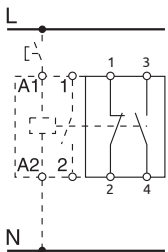
**Technical specifications**

Series	MF/AX		
Standards	IEC 61095, IEC 60947-4-1		
Rated voltage $U_n$ , V	130V DC	230V AC	240V AC
Application category	DC13	AC15	AC12
Rated current $I_n$ , A	1	2	5
Use with a starter	MCF3, MCF3i		
Rated frequency $f$ , Hz	50/60		
Rated voltage of the insulation $U_i$ , V	500		
Rated impulse withstand voltage $U_{imp}$ , V	4000		
Switching wear resistance (number of cycles on/off)	100 000/1 000 000 (electrical/mechanical)		
Degree of protection	IP20		
Protection class	II		
Cross-section of connecting conductors, mm <sup>2</sup>	up to 2.5		
Connection side	on the right side		

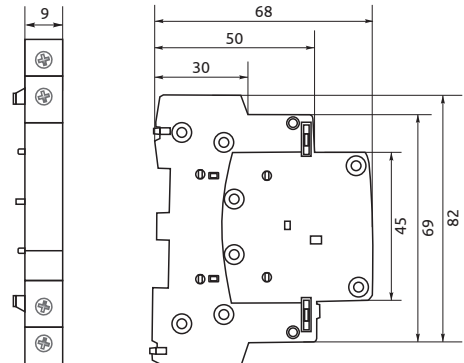
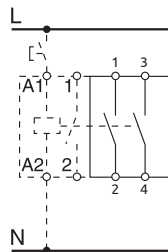
**Schematic diagrams**

**Overall dimensions**

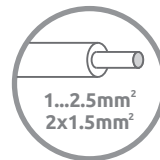
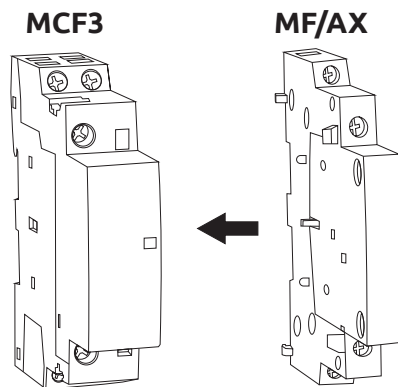
MF/AX 1NO+1NC



MF/AX 2NO



**Mounting an additional device MF/AX**



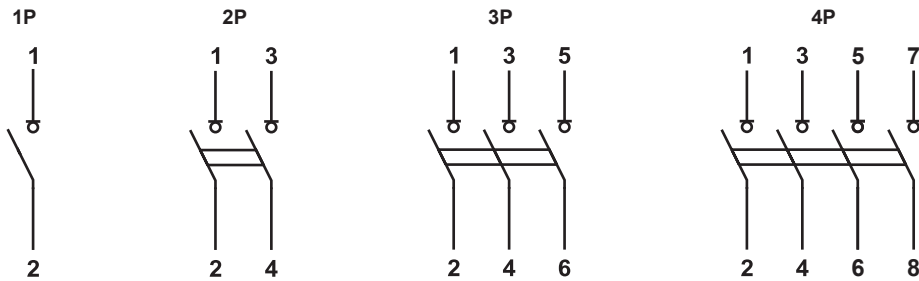
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
MF/AX11	Contact Auxiliary MF/AX11 1NO+1NC for MCF3	1	1	0,030	0,030	0,030
MF/AX20	Contact Auxiliary MF/AX20 2NO for MCF3	1	1	0,030	0,030	0,030



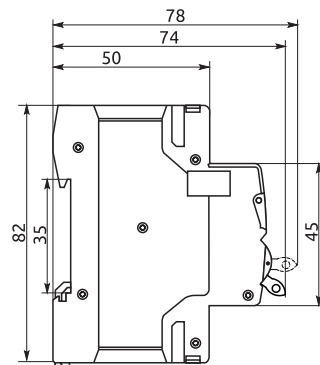
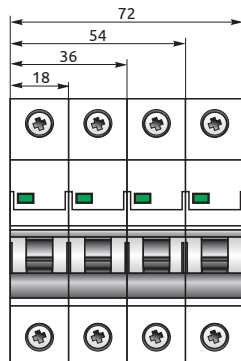
**Technical specifications**

Series	FSD3
Standards	IEC 60947-3
Number of poles	1, 2, 3, 4
Rated current $I_n$ , A	10, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125
Rated voltage $U_n$ , V	~230/400
Rated frequency $f$ , Hz	50/60
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	6000
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25
Switching wear resistance (number of cycles on/off)	10 000/20 000 (electrical/mechanical)
Degree of protection	IP20
Application category	AC-22
DIN rail mounting	TN35
Connecting of busbar	PIN/FORK
Sealing option ON/OFF	yes
Connecting of additional devices	yes
Operating position	any
Width, mm	18

**Schematic diagrams**



**Overall dimensions**



## Switch disconnectors FSD3

1P



Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
FSD31010	Switch disconnector FSD3 1P 10A	10	12	240	0,084	1,000	20,100
FSD31016	Switch disconnector FSD3 1P 16A	16	12	240	0,084	1,000	20,100
FSD31020	Switch disconnector FSD3 1P 20A	20	12	240	0,086	1,030	20,600
FSD31025	Switch disconnector FSD3 1P 25A	25	12	240	0,086	1,030	20,600
FSD31032	Switch disconnector FSD3 1P 32A	32	12	240	0,087	1,040	20,900
FSD31040	Switch disconnector FSD3 1P 40A	40	12	240	0,087	1,040	20,900
FSD31050	Switch disconnector FSD3 1P 50A	50	12	240	0,087	1,040	20,900
FSD31063	Switch disconnector FSD3 1P 63A	63	12	240	0,088	1,050	21,100
FSD31080	Switch disconnector FSD3 1P 80A	80	12	240	0,091	1,050	23,400
FSD31100	Switch disconnector FSD3 1P 100A	100	12	240	0,093	1,170	23,800
FSD31125	Switch disconnector FSD3 1P 125A	125	12	240	0,095	1,200	24,400

2P



FSD32010	Switch disconnector FSD3 2P 10A	10	6	120	0,168	1,000	20,100
FSD32016	Switch disconnector FSD3 2P 16A	16	6	120	0,168	1,000	20,100
FSD32020	Switch disconnector FSD3 2P 20A	20	6	120	0,172	1,030	20,600
FSD32025	Switch disconnector FSD3 2P 25A	25	6	120	0,172	1,030	20,600
FSD32032	Switch disconnector FSD3 2P 32A	32	6	120	0,174	1,040	20,800
FSD32040	Switch disconnector FSD3 2P 40A	40	6	120	0,174	1,040	20,800
FSD32050	Switch disconnector FSD3 2P 50A	50	6	120	0,174	1,040	20,800
FSD32063	Switch disconnector FSD3 2P 63A	63	6	120	0,176	1,050	21,100
FSD32080	Switch disconnector FSD3 2P 80A	80	6	120	0,182	1,050	23,400
FSD32100	Switch disconnector FSD3 2P 100A	100	6	120	0,186	1,170	23,800
FSD32125	Switch disconnector FSD3 2P 125A	125	6	120	0,190	1,220	24,400

3P



FSD33010	Switch disconnector FSD3 3P 10A	10	4	80	0,258	1,030	20,100
FSD33016	Switch disconnector FSD3 3P 16A	16	4	80	0,258	1,030	20,100
FSD33020	Switch disconnector FSD3 3P 20A	20	4	80	0,259	1,030	20,600
FSD33025	Switch disconnector FSD3 3P 25A	25	4	80	0,261	1,040	20,600
FSD33032	Switch disconnector FSD3 3P 32A	32	4	80	0,261	1,040	20,800
FSD33040	Switch disconnector FSD3 3P 40A	40	4	80	0,262	1,050	20,800
FSD33050	Switch disconnector FSD3 3P 50A	50	4	80	0,263	1,050	20,800
FSD33063	Switch disconnector FSD3 3P 63A	63	4	80	0,263	1,050	21,100
FSD33080	Switch disconnector FSD3 3P 80A	80	4	80	0,267	1,050	23,400
FSD33100	Switch disconnector FSD3 3P 100A	100	4	80	0,279	1,170	23,800
FSD33125	Switch disconnector FSD3 3P 125A	125	4	80	0,285	1,200	24,400

4P



FSD34010	Switch disconnector FSD3 4P 10A	10	3	60	0,336	1,010	20,100
FSD34016	Switch disconnector FSD3 4P 16A	16	3	60	0,336	1,010	20,100
FSD34020	Switch disconnector FSD3 4P 20A	20	3	60	0,344	1,030	20,600
FSD34025	Switch disconnector FSD3 4P 25A	25	3	60	0,344	1,030	20,600
FSD34032	Switch disconnector FSD3 4P 32A	32	3	60	0,348	1,040	20,900
FSD34040	Switch disconnector FSD3 4P 40A	40	3	60	0,348	1,040	20,900
FSD34050	Switch disconnector FSD3 4P 50A	50	3	60	0,352	1,050	21,100
FSD34063	Switch disconnector FSD3 4P 63A	63	3	60	0,353	1,060	21,200
FSD34080	Switch disconnector FSD3 4P 80A	80	3	60	0,355	1,120	22,900
FSD34100	Switch disconnector FSD3 4P 100A	100	3	60	0,372	1,170	23,900
FSD34125	Switch disconnector FSD3 4P 125A	125	3	60	0,380	1,200	24,400

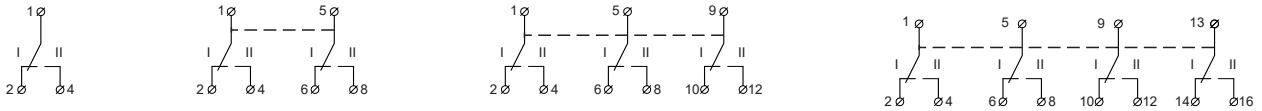
FSD3



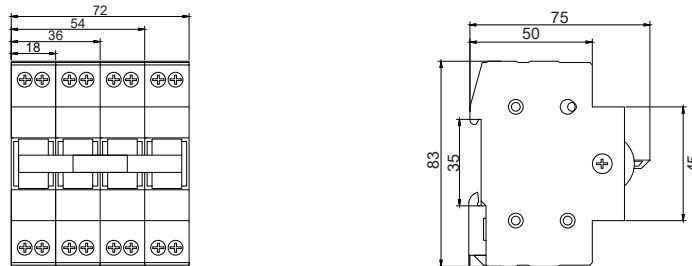
Technical specifications

Series	FSD2
Standards	IEC 60947-3, EN 60947-3
Number of poles	1, 2, 3, 4
Rated current $I_n$ , A	10, 16, 20, 25, 32, 40, 50, 63
Rated voltage $U_n$ , V	~230/400
Rated frequency $f$ , Hz	50/60
Rated conditional short-circuit current, kA	2,5
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	6000
Cross-section of connecting conductors, mm <sup>2</sup>	1.5-16mm <sup>2</sup> - single-core 1.5-10mm <sup>2</sup> - stranded (PZ1, max. 1,2Nm)
Switching wear resistance (number of cycles on/off)	4 000/20 000 (electrical/mechanical)
Degree of protection	IP20
Application category	AC-22
DIN rail mounting	TN35
Connecting of additional devices	no
Operating position	any
Width, mm	18

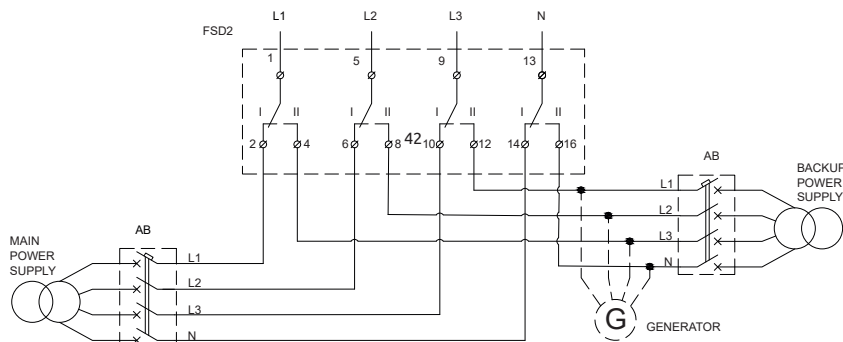
Schematic diagrams



Overall dimensions



Connection diagram



## Load Switches FSD2 (1-0-2)

### 1P



Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
FSD21010	Load Switch FSD2 1P 10A 1-0-2	10	12	240	0,067	0,804	16,000
FSD21016	Load Switch FSD2 1P 16A 1-0-2	16	12	240	0,067	0,804	16,000
FSD21020	Load Switch FSD2 1P 20A 1-0-2	20	12	240	0,069	0,828	16,500
FSD21025	Load Switch FSD2 1P 25A 1-0-2	25	12	240	0,069	0,828	16,500
FSD21032	Load Switch FSD2 1P 32A 1-0-2	32	12	240	0,071	0,852	17,400
FSD21040	Load Switch FSD2 1P 40A 1-0-2	40	12	240	0,071	0,852	17,400
FSD21050	Load Switch FSD2 1P 50A 1-0-2	50	12	240	0,073	0,876	17,500
FSD21063	Load Switch FSD2 1P 63A 1-0-2	63	12	240	0,073	0,876	17,500

### 2P



FSD22010	Load Switch FSD2 2P 10A 1-0-2	10	6	120	0,141	0,846	16,900
FSD22016	Load Switch FSD2 2P 16A 1-0-2	16	6	120	0,141	0,846	16,900
FSD22020	Load Switch FSD2 2P 20A 1-0-2	20	6	120	0,143	0,858	17,100
FSD22025	Load Switch FSD2 2P 25A 1-0-2	25	6	120	0,143	0,858	17,100
FSD22032	Load Switch FSD2 2P 32A 1-0-2	32	6	120	0,145	0,870	17,400
FSD22040	Load Switch FSD2 2P 40A 1-0-2	40	6	120	0,145	0,870	17,400
FSD22050	Load Switch FSD2 2P 50A 1-0-2	50	6	120	0,147	0,882	17,600
FSD22063	Load Switch FSD2 2P 63A 1-0-2	63	6	120	0,147	0,882	17,600

### 3P



FSD23010	Load Switch FSD2 3P 10A 1-0-2	10	4	80	0,214	0,865	17,100
FSD23016	Load Switch FSD2 3P 16A 1-0-2	16	4	80	0,214	0,865	17,100
FSD23020	Load Switch FSD2 3P 20A 1-0-2	20	4	80	0,216	0,864	17,200
FSD23025	Load Switch FSD2 3P 25A 1-0-2	25	4	80	0,216	0,864	17,200
FSD23032	Load Switch FSD2 3P 32A 1-0-2	32	4	80	0,218	0,872	17,400
FSD23040	Load Switch FSD2 3P 40A 1-0-2	40	4	80	0,218	0,872	17,400
FSD23050	Load Switch FSD2 3P 50A 1-0-2	50	4	80	0,220	0,880	17,600
FSD23063	Load Switch FSD2 3P 63A 1-0-2	63	4	80	0,220	0,880	17,600

### 4P



FSD24010	Load Switch FSD2 4P 10A 1-0-2	10	3	60	0,294	0,882	17,600
FSD24016	Load Switch FSD2 4P 16A 1-0-2	16	3	60	0,294	0,882	17,600
FSD24020	Load Switch FSD2 4P 20A 1-0-2	20	3	60	0,296	0,888	17,700
FSD24025	Load Switch FSD2 4P 25A 1-0-2	25	3	60	0,296	0,888	17,700
FSD24032	Load Switch FSD2 4P 32A 1-0-2	32	3	60	0,298	0,894	17,800
FSD24040	Load Switch FSD2 4P 40A 1-0-2	40	3	60	0,298	0,894	17,800
FSD24050	Load Switch FSD2 4P 50A 1-0-2	50	3	60	0,300	0,900	18,000
FSD24063	Load Switch FSD2 4P 63A 1-0-2	63	3	60	0,300	0,900	18,000

FSD2



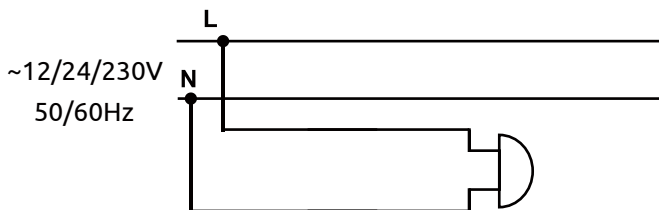
### Technical specifications

Series	FBE
Standard	IEC60947-5-1
Rated voltage $U_n$ , V	~12/24/230
Rated frequency $f$ , Hz	50/60
Rated voltage of the insulation $U_i$ , V	500
Rated impulse withstand voltage $U_{imp}$ , V	5000
Consumption power $P$ , W	8
Maximum volume, dB	75
Cross-section of connecting conductors, $mm^2$	up to 6
DIN rail mounting	TN35
Degree of protection	IP20
Connecting of busbar	no
Operating position	any

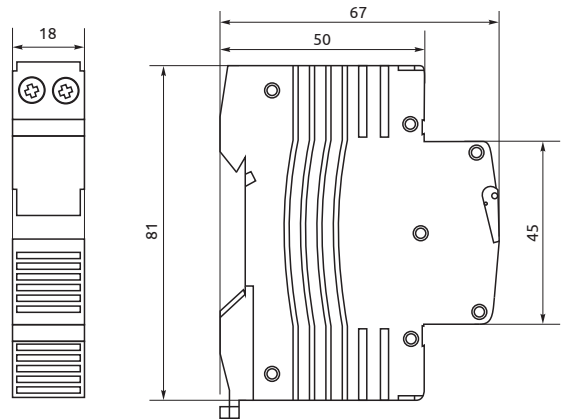
### Features

- It is used in various control and automation circuits as an audible signaling device.
- It is used as a household call.

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FBE012	Modular electric bell FBE 12V	12	120	0,062	0,830	7,900
FBE230	Modular electric bell FBE 230V	12	120	0,064	0,850	8,130
FBE024	Modular electric bell FBE 24V	12	120	0,067	0,890	8,500



### Technical specifications

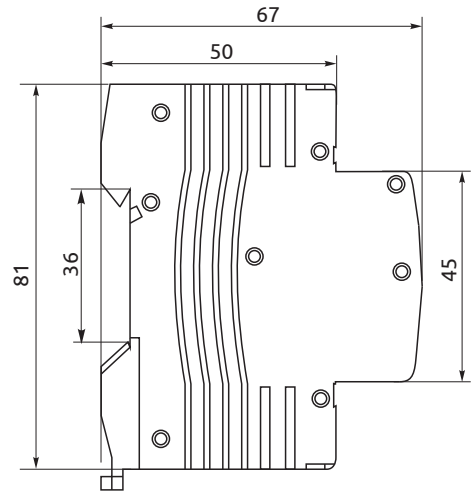
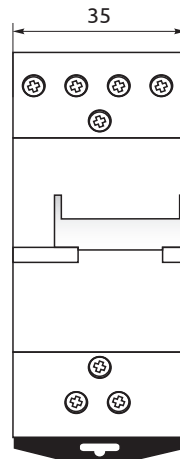
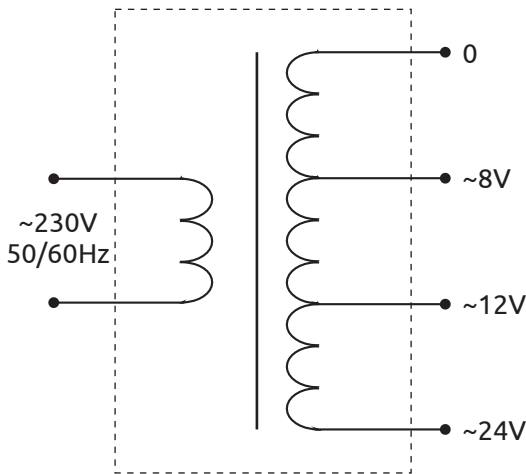
Series	TRF
Standard	IEC 61558-2-6
Rated voltage Un1, V (primary winding)	~230
Rated voltage Un2, V (secondary winding)	~8, 12, 24
Rated voltage of the insulation Ui, V	500
Rated impulse withstand voltage Uimp, V	5000
Rated frequency f, Hz	50/60
Consumption power P, W	8
Cross-section of connecting conductors, mm <sup>2</sup>	up to 6
DIN rail mounting	TN35
Degree of protection	IP20
Connecting of busbar	no

### Features

- Reduced voltage in AC circuits

### Schematic diagrams

### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
TRF24	Modular step-down transformer TRF24 230V/24V	6	60	0,319	1,990	19,600



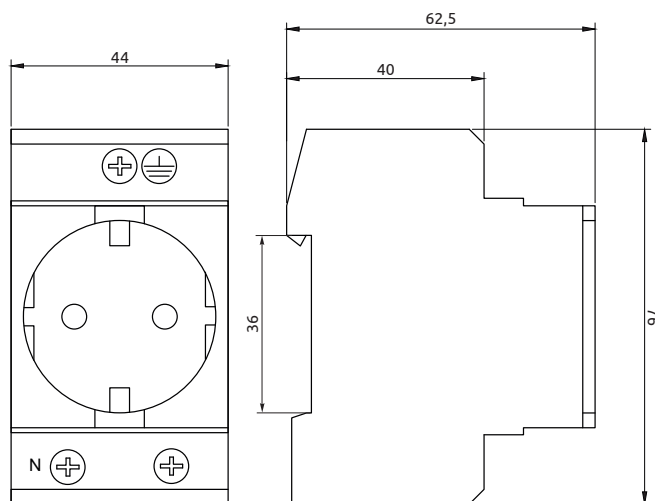
### Technical specifications

Series	RMD16
Standard	IEC 60947-5-1
Rated voltage $U_n$ , V	~250
Rated current $I_n$ , A	16
Rated frequency $f$ , Hz	50/60
Cross-section of connecting conductors, mm <sup>2</sup>	up to 6
DIN rail mounting	TN35
Connecting of busbar	no
Degree of protection	IP20

### Features

- Providing electricity during repair or maintenance work in the switchboard.

### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
RMD16	DIN socket RMD16	5	100	0,130	0,650	13,000



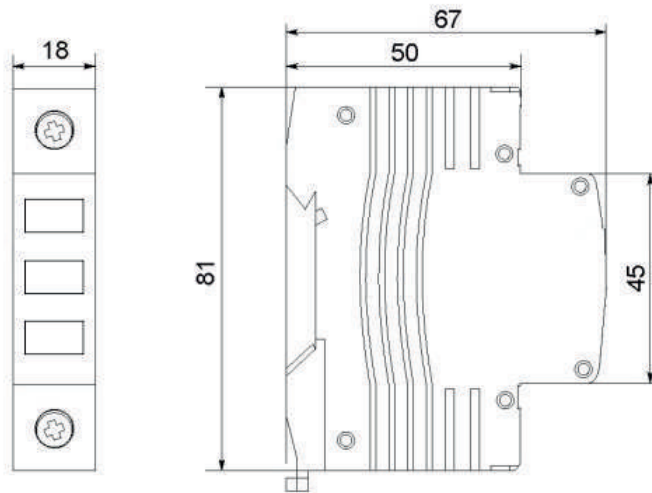
### Technical specifications

Series	FMI3
Standards	IEC 60947-5-1
Rated voltage $U_n$ , V	3x230 (-25...+10%)
Rated current $I_n$ , A	≤3
Rated frequency $f$ , Hz	50/60
Cross-section of connecting conductors, mm <sup>2</sup>	0,5-2,5
DIN rail mounting	TN35
Degree of protection	IP20

### Features

- Designed to display the presence of phase voltages in a three-phase AC network.

### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FMI3230	Signal lamp FMI3 red-yellow-green 230V	1	120	0,125	0,125	15,000



### Time relays

- multifunctional
- switching on and off delays
- cyclic
- digital (electronic)

Use in automation and control systems for equipment such as pumps, motors, lighting, heating, etc.



### Temperature regulators

They are used to maintain a given temperature regime, heating of premises, control of heating and cooling devices.



### Voltage control relays

They are used to monitor the mains voltage and shut down equipment in the event of an increase or decrease in the mains voltage, asymmetry, or incorrect phase sequence.



### Twilight switches

- twilight relay
- staircase lighting relay

They are used to automatically turn on the lighting at dusk and turn it off at dawn. For turning on and off the lighting on stairs with a delay or from different floors.



### Impulse relays

- Pulse - bistable relays with memory

They are used in automation systems to control lighting or any device from different points.



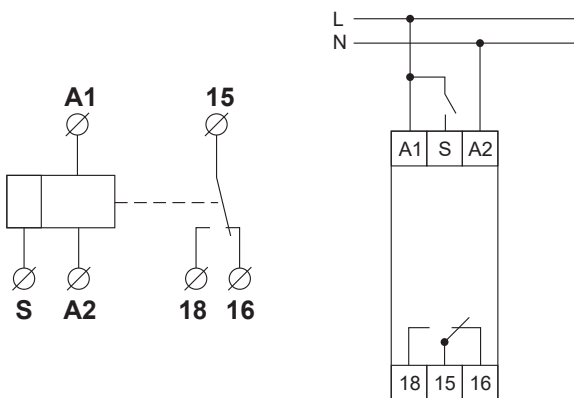
It is used for different switching options depending on the time. Used in automation and equipment control systems.



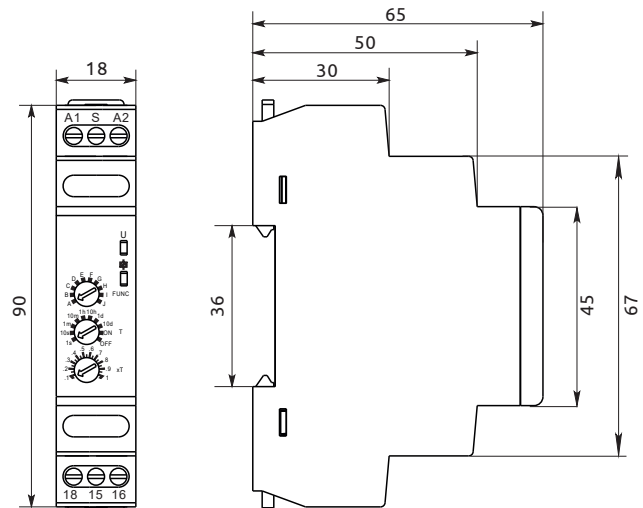
**Technical specifications**

Series	FRT14 12
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
Pulse terminal	S
AC/DC supply voltage, V	12-240
Rated frequency f, Hz	50/60
Time range	0.1s - 10 days
Installation accuracy	<5%
Repeat accuracy	<0.2%
Number of contacts	1 C/O
Rated current of contacts I <sub>n</sub> , A	8A/AC1
Insulation voltage U <sub>i</sub> , V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
Bolt clamping torque, Nm	0.5
DIN rail mounting	TN35

**Schematic diagrams**



**Overall dimensions**



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
FRT14 12	Multifunction time relay FRT14 12 12-240VAC/DC,50/60HZ	1	100	0,070	0,080	8,000



It is used to delay the switching after the supply voltage is applied.

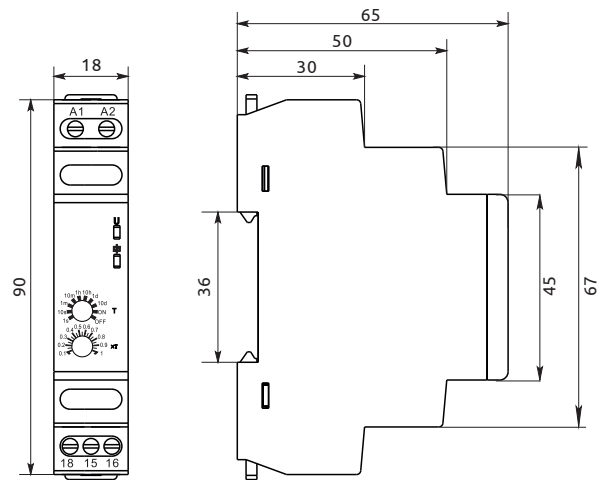
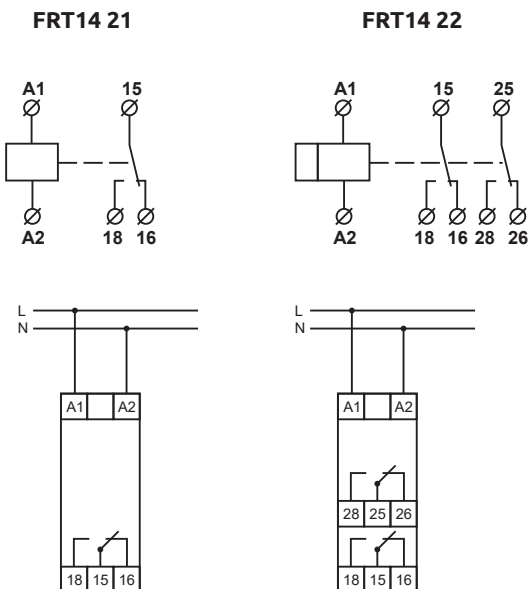


**Technical specifications**

Series	FRT14 21	FRT14 22
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7	
Power supply terminals	A1, A2	
AC/DC supply voltage, V	12-240	24-240
Rated frequency f, Hz	50/60	
Time range	0.1s - 10 days	
Installation accuracy	<5%	
Repeat accuracy	<0.2%	
Number of contacts	1 C/O	2 C/O
Rated current of contacts I <sub>n</sub> , A	8A/AC1	
Insulation voltage U <sub>i</sub> , V	250	
Degree of protection	IP20	
Pollution level	3	
Electrical wear resistance	10 <sup>5</sup>	
Mechanical wear resistance	10 <sup>6</sup>	
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5	
DIN rail mounting	TN35	

**Schematic diagrams**

**Overall dimensions**



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRT14 21	Switch-off delay relay FRT14 21	1	100	0,070	0,080	8,000
FRT14 22	Switch-off delay relay FRT14 22	1	100	0,080	0,090	9,000

# Modular relays FR Switch-on delay relay FRT14 41/42



It is used to delay the switching after the supply voltage is applied.



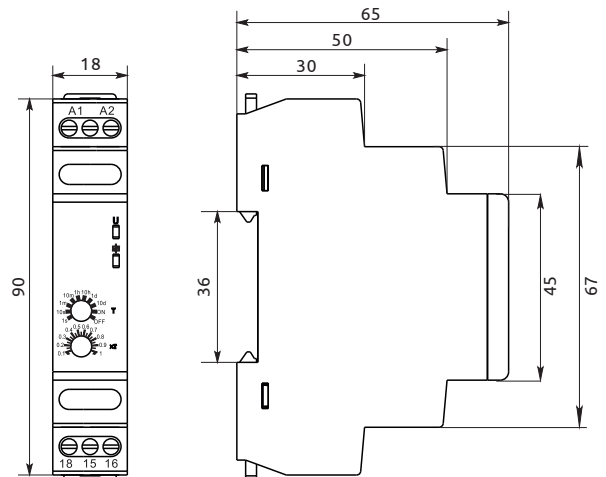
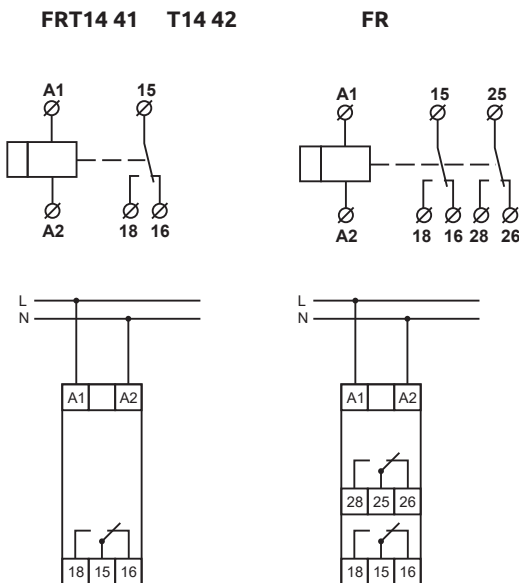
FR

## Technical specifications

Series	FRT14 41	FRT14 41
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7	
Power supply terminals	A1, A2	
AC/DC supply voltage, V	12-240	24-240
Rated frequency f, Hz	50/60	
Time range	0.1s - 10 days	
Installation accuracy	<5%	
Repeat accuracy	<0.2%	
Number of contacts	1 C/O	2 C/O
Rated current of contacts I <sub>n</sub> , A	8A/AC1	
Insulation voltage U <sub>i</sub> , V	250	
Degree of protection	IP20	
Pollution level	3	
Electrical wear resistance	10 <sup>5</sup>	
Mechanical wear resistance	10 <sup>6</sup>	
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5	
DIN rail mounting	TN35	

## Schematic diagrams

## Overall dimensions



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
FRT14 41	Switch-on delay relay FRT14 41	1	100	0,070	0,080	8,000
FRT14 42	Switch-on delay relay FRT14 42	1	100	0,080	0,090	9,000



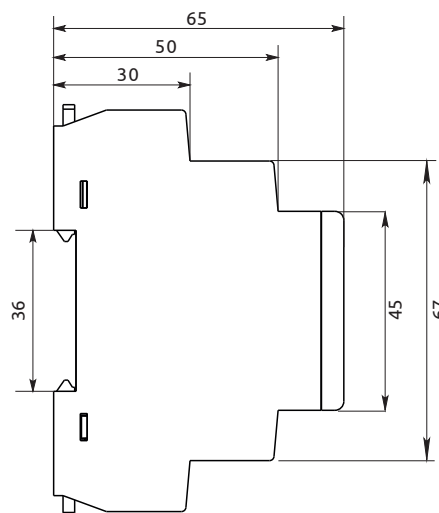
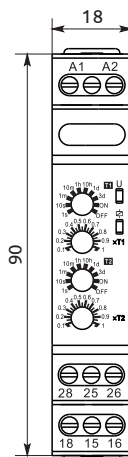
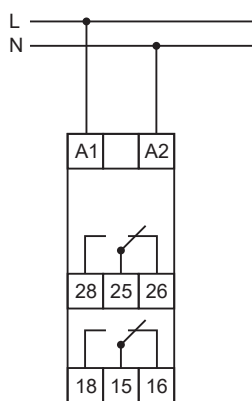
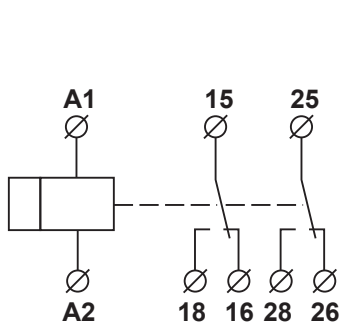
It is used to delay the switching after the supply voltage is applied.



### Technical specifications

Series	FRT14 43
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
AC/DC supply voltage, V	24-240
Rated frequency f, Hz	50/60
Time range	0.1s - 10 days
Installation accuracy	<5%
Repeat accuracy	<0.2%
Number of contacts	2 C/O
Rated current of contacts I <sub>n</sub> , A	8A/AC1
Insulation voltage U <sub>i</sub> , V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRT14 43	Switch-on delay relay FRT14 43 24-240VAC/DC,50/60HZ	1	100	0,080	0,090	9,000



It is used to delay the switching after the supply voltage is applied.

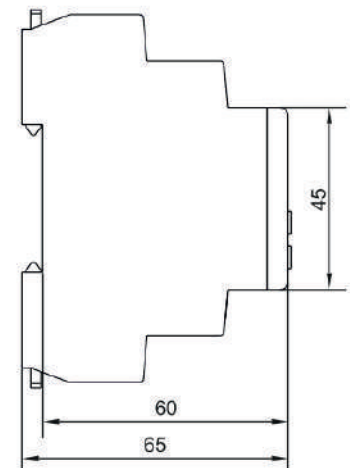
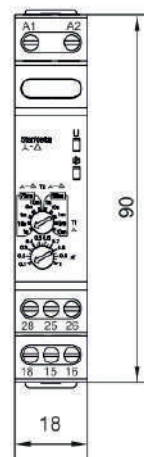
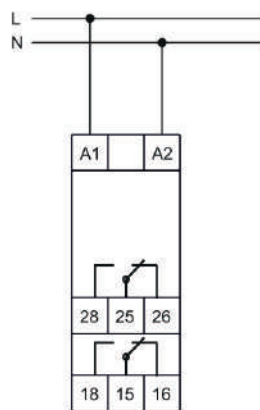
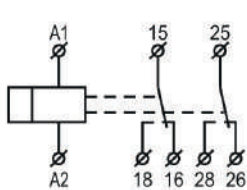


**Technical specifications**

Series	FRT47
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
Rated voltage of the AC/DC control circuit, V	12-240
Insulation voltage $U_i$ , V	250
Rated frequency $f$ , Hz	50/60
Operating setpoint time for the star circuit	0.1s - 10 minutes
Switching time, ms	75/150
Time reference error	<5%
Maximum switched current of AC 1/AC15 contacts, A	16/3
Number of contacts	2 C/O
Own power consumption, VA	1
Degree of protection	IP20
Pollution level	3
Wear resistance (electrical/mechanical)	$10^5/10^6$
Cross-section of connecting conductors, mm <sup>2</sup>	0.5 ... 2.5
Bolt clamping torque, Nm	0.5
DIN rail mounting	yes

**Schematic diagrams**

**Overall dimensions**



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRT47	Star/delta time relay FRT47	1	100	0,100	0,100	10,00

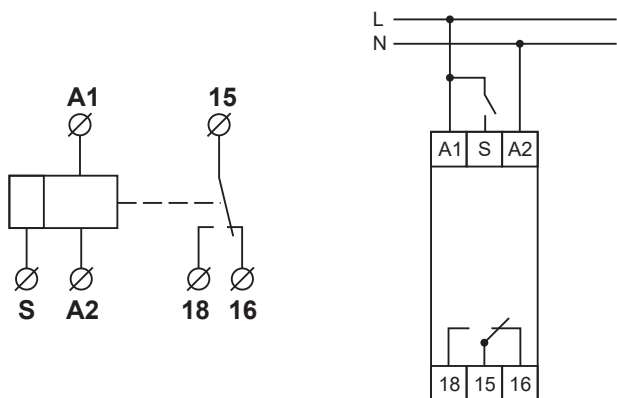


It is used for mechanisms that require intermittent operation. When the supply voltage is applied, the switching is cyclic, with the specified time intervals T1, T2 separately.

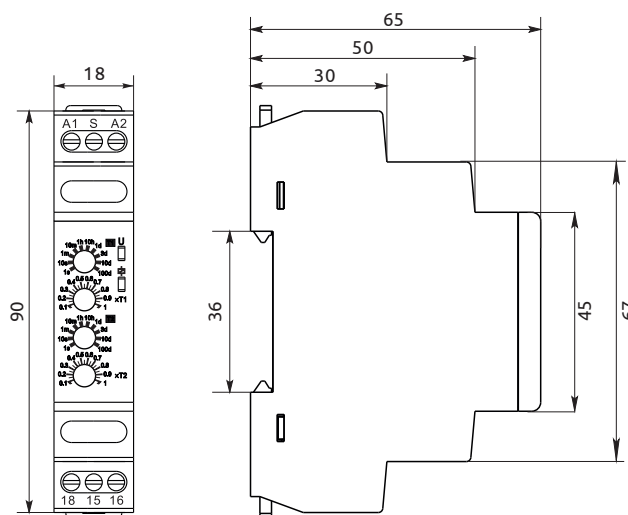
### Technical specifications

Series	FRT14 51
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
Pulse terminal	S
AC supply voltage, V	220
Rated frequency f, Hz	50/60
Time range	0.1s - 100 days
Installation accuracy	<5%
Repeat accuracy	<0.2%
Number of contacts	1 C/O
Rated current of contacts I <sub>n</sub> , A	8A/AC1
Insulation voltage U <sub>i</sub> , V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRT14 51	Cyclic relay FRT14 51	1	100	0,070	0,080	8,000

# Modular relays FR

## Digital multifunction time relay FRT14 62



Use in automation and equipment control systems. It is used for various switching options depending on the time.

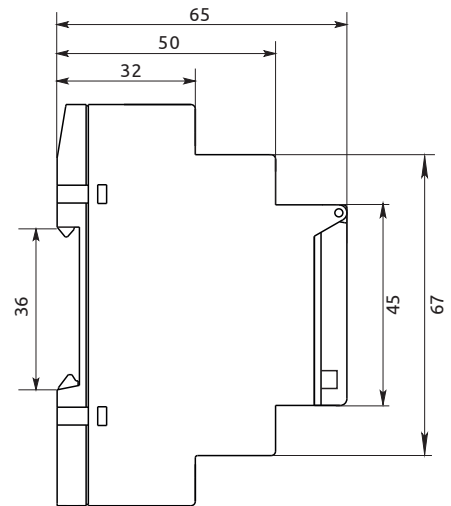
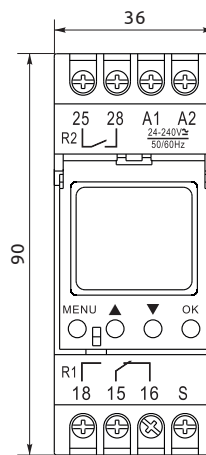
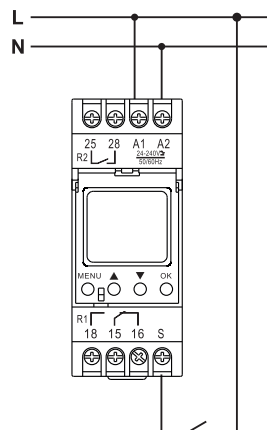
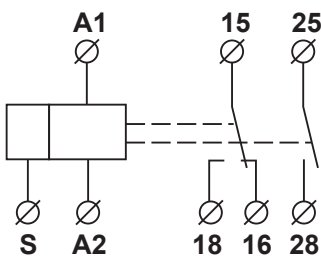


### Technical specifications

Series	FRT14 62
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
Pulse terminal	S
AC/DC supply voltage, V	24-240
Rated frequency f, Hz	50/60
Time range s, min	0-9999, 0-9999
Repeat accuracy	max.±3s/24h 25°C
Reading information	LCD display with backlight
Saving data	10 years
Rated current of contacts I <sub>n</sub> , A	8A/AC1
Number of contacts	1C/O - 1/NO
Insulation voltage U <sub>i</sub> , V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35

### Schematic diagrams

### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FRT14 62	Digital multifunction time relay FRT14 62	1	50	0,120	0,125	6,300

**Modular relays FR**  
**Single channel digital weekly time switch FRT14 71**

FR



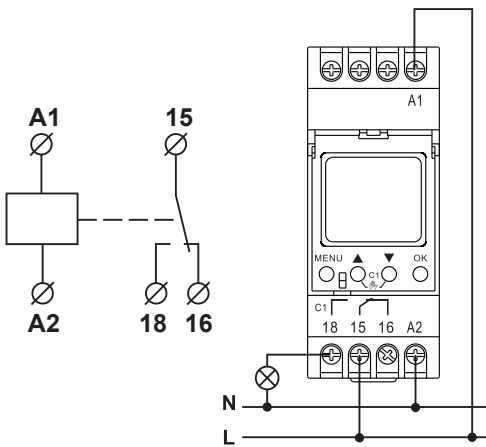
It is used to configure the switching on and off depending on the time during the week.



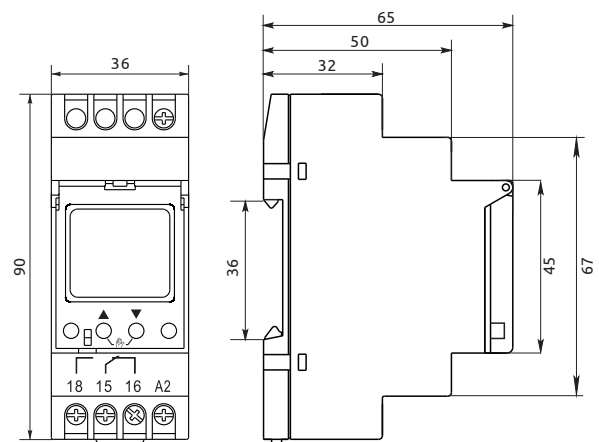
**Technical specifications**

Series	FRT14 71
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
AC supply voltage, V	220-240
Rated frequency f, Hz	50/60
Power consumption P, W	1
Sensitivity to voltage changes	±10%
Number of channels	1
Number of programs	52
Programs	weekly, daily, impulse
Operating modes	manual, automatic, holiday
Summer/winter time	off, automatic change
Time error	1s at 25°C
Battery backup	3 years
Number of contacts	1C/O
Rated current of contacts AC1, A/V	16/250
Switching capacity VA/AC1, W/DC	4000/384
Insulation voltage Ui, V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35
Permissible humidity	50% / 40°C

**Schematic diagrams**



**Overall dimensions**



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FRT14 71	Single channel digital weekly time switch FRT14 71	1	50	0,120	0,125	6,300

## Modular relays FR Astronomic multifunction timer FRT14 81



It is used to set the device to turn on or off depending on the time during the week or year. The astronomical function allows the relay to be used without a light sensor.

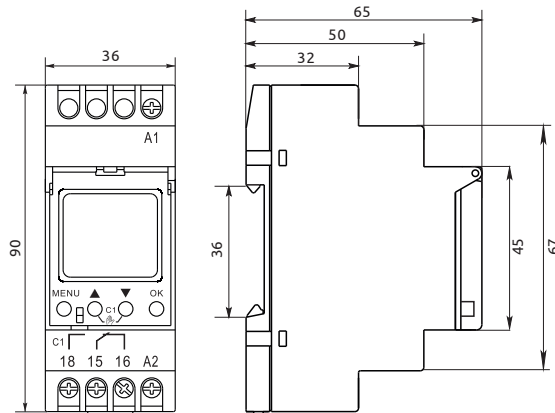
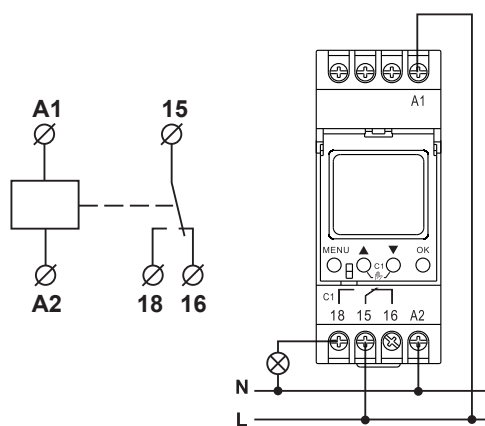


FR

### Technical specifications

Series	FRT14 81
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
AC/DC supply voltage, V	24-264
Rated frequency f, Hz	50/60
Power consumption P, W	1
Sensitivity to voltage changes	±10%
Number of channels	1
Number of programs	40
Programs	weekly, annual and astronomical
Operating modes	manual, automatic, holiday, random
Summer/winter time	off, automatic change
Time error	1s at 20°C
Battery backup	3 years
Number of contacts	1C/O
Rated current of contacts AC1, A/V	16/250
Switching capacity VA/AC1, W/DC	4000/384
Insulation voltage Ui, V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35
Permissible humidity	50% / 40°C

### Schematic diagrams



### Overall dimensions

Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FRT14 81	Astronomic multifunction timer FRT14 81	1	50	0,120	0,125	6,300

# Modular relays FR

## Single phase pump protection relay FRD311

FR



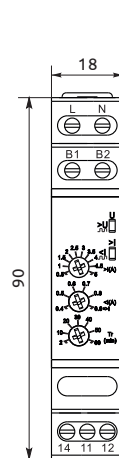
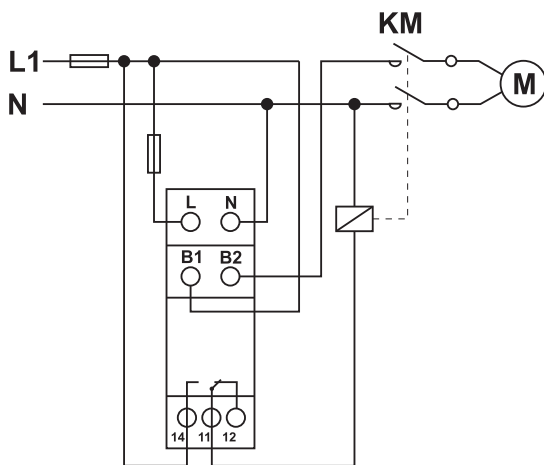
It is used to protect a single-phase pump.  
It monitors current consumption, overvoltage,  
and has a delay time adjustment.



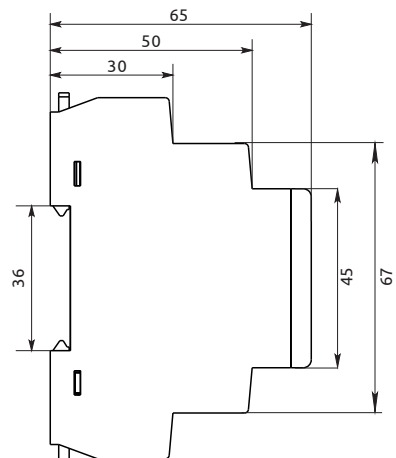
### Technical specifications

Series	FRD311
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Number of phases	L-N
Supply voltage $U_n$ , V, AC	220±20%
Input current contacts	B1-B2
Rated frequency $f$ , Hz	50/60
Current settings, A	0.5~5
Current protection settings, A	(0.4-0.9) x current setpoint value
Overvoltage switching value, V	265
Reset time of current protection, min	2~60
Current protection trip delay, s	4
Overvoltage trip delay, s	1
Reset mode	manual, automatic
Class of operation	10
Rated current of contacts $I_n$ , A	<8/AC1
Number of contacts	1C/O
Insulation voltage $U_i$ , V, AC	250
Mechanical wear resistance	10 <sup>6</sup>
Electrical wear resistance	10 <sup>6</sup>
Degree of protection	IP20
Pollution level	3
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2.5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRD311	Single phase pump protection relay FRD311 220V, 50/60HZ	1	100	0,070	0,075	7,500



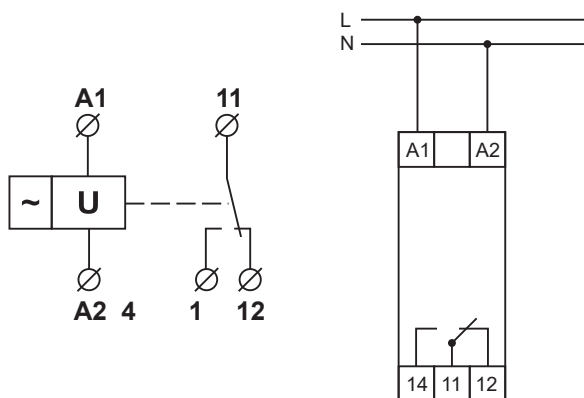
It is used to monitor the mains voltage and shut down the equipment in case of an increase or decrease in the mains voltage.



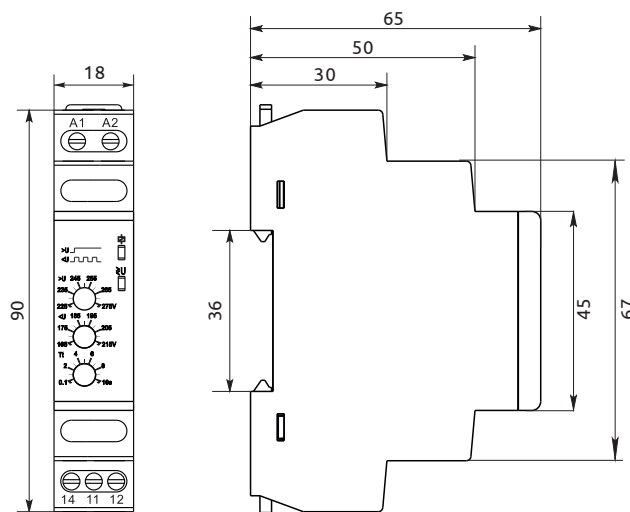
### Technical specifications

Series	FRV11
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
AC supply voltage, V	220
Rated frequency f, Hz	50/60
Voltage range, AC/V	150-275
U> limit value, V	225~275
U< limit value, V	165~215
Voltage measurement error	≤1%
Response delay, s	0.1~10
The error of the operation delay, s	±5%+0.1
Hysteresis	±3%
Insulation voltage Ui, V	250
Rated current of contacts In, A	8A/AC1
Number of contacts	1C/O
Mechanical wear resistance	10 <sup>6</sup>
Electrical wear resistance	10 <sup>6</sup>
Degree of protection	IP20
Pollution level	3
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRV11	Single phase voltage monitoring relay FRV11 230V,50/60HZ	1	100	0,070	0,075	7,500

# Modular relays FR

## Three phase voltage monitoring relay FRV13 2

FR



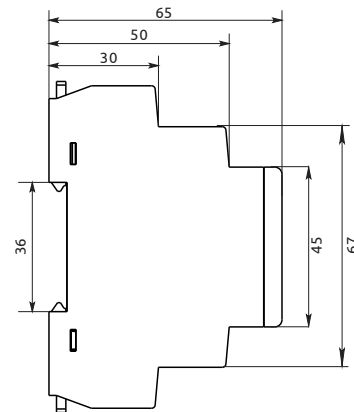
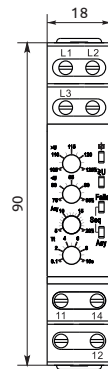
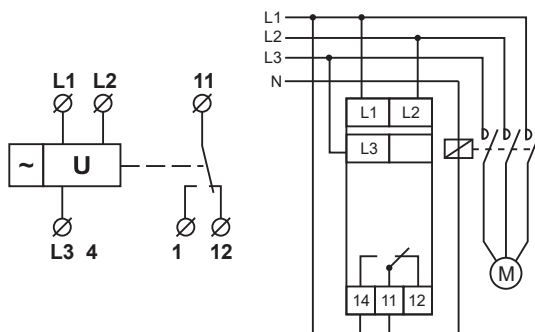
It is used to monitor the input three-phase supply voltage for undervoltage and overvoltage, incorrect phase sequence, and asymmetry.



### Technical specifications

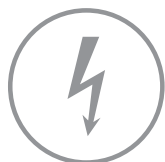
Series	FRV13 2
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Number of phases	L1, L2, L3
Supply voltage Un, V	208/220/230/240/380/400/415/440/460/480
Operating voltage range, V	165-528
Rated frequency f, Hz	50/60
U> setting value, V	(105%-125%)xUn
U< setting value, V	(75%-95%)xUn
Setting up asymmetry	adjustable 5%~20%, fixed 8%
U> switching delay, s	adjustable 0.1~10, fixed 2
U< switching delay, s	adjustable 0.1~10, fixed 2
Asymmetry switching delay, s	adjustable 0.1~10, fixed 2
Hysteresis	fixed 2%
Switching delay time for incorrect sequence and phase failure, s	<0.5
Error delay, s	±10%+0.1
Setting error of the handle	1% x per scale value
Insulation voltage Ui, V	415
Number of contacts	1C/O
Rated current of AC1, A/V contacts	8/250
Mechanical wear resistance	10 <sup>6</sup>
Electrical wear resistance	10 <sup>6</sup>
Degree of protection	IP20
Pollution level	3
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRV13 2	Three phase voltage monitoring relay FRV13 2 3x208-480VAC	1	100	0,081	0,085	8,500



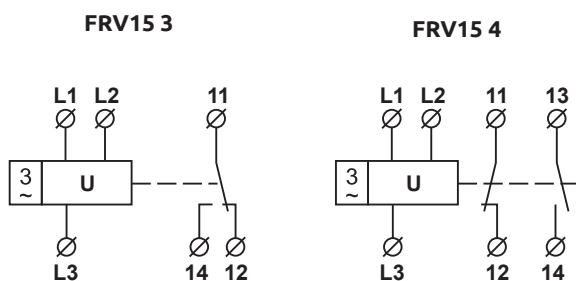
It is used to monitor the input three-phase supply voltage for undervoltage and overvoltage, incorrect phase sequence, and asymmetry.



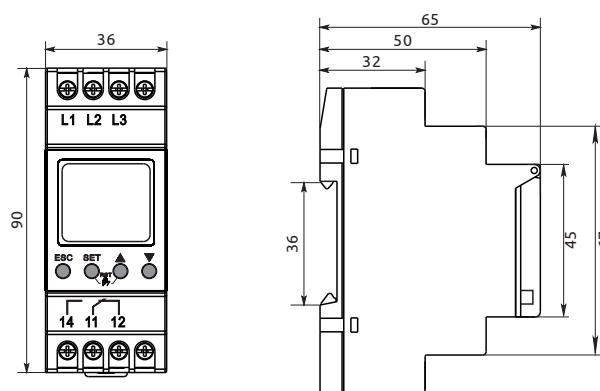
### Technical specifications

Series	FRV15 3	FRV15 4
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7	
Number of phases	L1, L2, L3	
AC supply voltage, V/Hz	200~500/50	
U> overvoltage value, V	OFF-381~500	
U< the value of the down voltage, V	260~379 OFF	
Setting up asymmetry	OFF-5%-20%	
U> overload trip delay, s	0.1~20	
U< underload trip delay, s	0.1~20	
Asymmetry switching delay, s	0.1~20	
Switch-on delay, s	0.1~30	
Reset delay, s	0.1~30	
Hysteresis voltage, V	5	
Asymmetry hysteresis	2%	
Delay in case of phase failure, s	≤0.2	
Insulation voltage Ui, V	415	
Number of contacts	1C/O	NO+NC
Rated current of AC1, A/V contacts	8/250	
Mechanical wear resistance	10 <sup>6</sup>	
Electrical wear resistance	10 <sup>6</sup>	
Degree of protection	IP20	
Pollution level	3	
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2.5	
DIN rail mounting	TN35	

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FRV15 3	Digital voltage monitoring relay FRV15 3	1	50	0,120	0,125	6,500

FRV15 4	Digital voltage monitoring relay FRV15 4	1	50	0,150	0,155	7,750
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The relay is used to measure temperature and, depending on it, controls heating, cooling or other equipment. It has a pre-alarm contact.



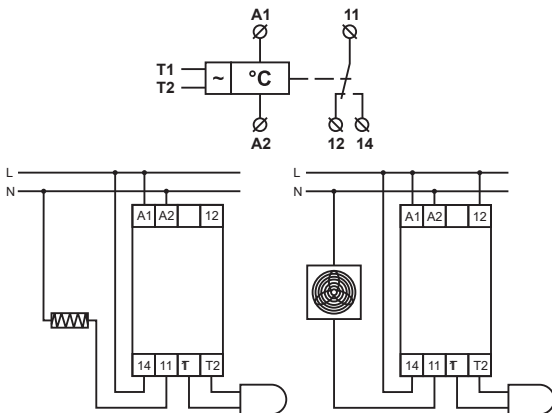
**Technical specifications**

Series	FRT11
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
AC/DC supply voltage, V	24-240
Rated frequency f, Hz	50/60
Measuring terminal	T1, T2
Temperature control range, °C	-5...+40
Hysteresis, °C	-0.5...+3
Rated current of AC1, A/V contacts	16/250
Switching capacity VA/AC1, W/DC	4000, 300
Number of contacts	1 C/O
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2.5
DIN rail mounting	TN35

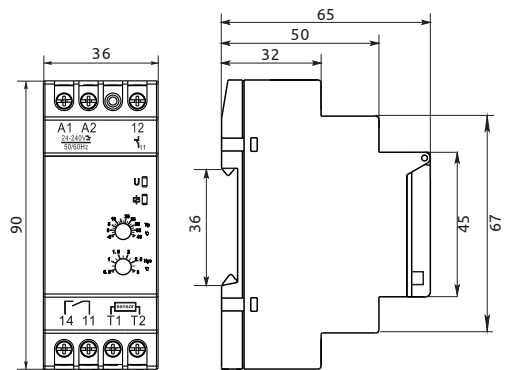
**Temperature sensor**

Measuring element	NTC
Overall size of the sensor	Ø6x50
Sensor material	steel
Cable length and size mm <sup>2</sup> /m	2x0.5/2.5
Cable material	high temperature PVC

**Schematic diagrams**



**Overall dimensions**



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRT11	Temperature regulator FRT11 24-240VAC/DC,50/60HZ	1	50	0,200	0,205	10,250



The relay is used to measure temperature and, depending on it, controls heating, cooling or other equipment. It has a pre-alarm contact.



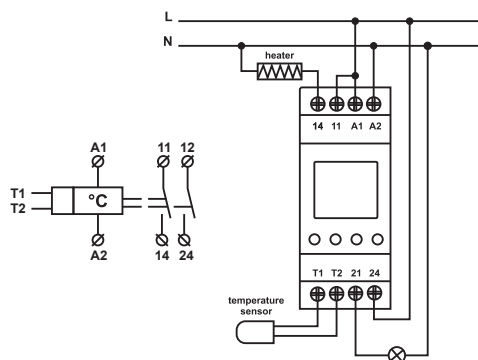
### Technical specifications

Series	FRT12
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
Supply voltage AC, V	24-240
Rated frequency f, Hz	50/60
Measuring terminal	T1, T2
Signal terminal	21, 24
Output terminal	11, 14
Temperature range, °C	-25...+130
Hysteresis, °C	+1...+30
Adjustment range, °C	-9...+9
Setting value of the step, °C	1
Display	LCD
Rated current of AC1, A/V contacts	16/250
Switching capacity VA/AC1, W/DC	4000, 300
Number of contacts	2 NO
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2.5
DIN rail mounting	TN35

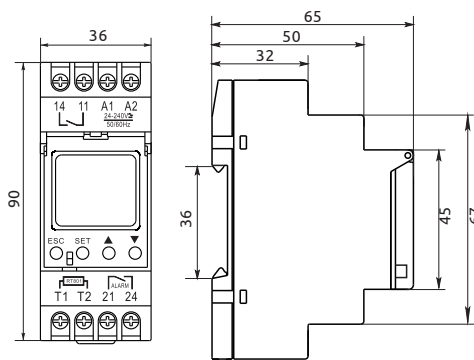
### Temperature sensor

Measuring element	NTC
Overall size of the sensor	Ø6x50
Sensor material	steel
Cable length and size mm <sup>2</sup> /m	2x0.3/2.5
Cable material	silicone

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FRT12	Digital temperature relay FRT12 24-240VAC/DC, 50/60HZ	1	50	0,210	0,212	10,600



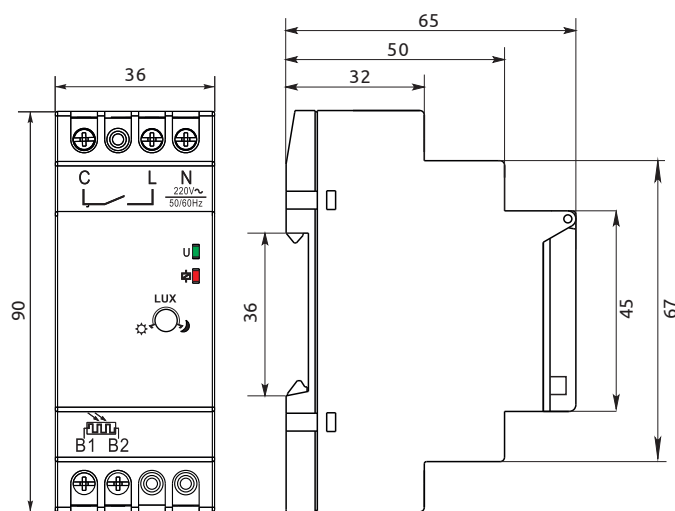
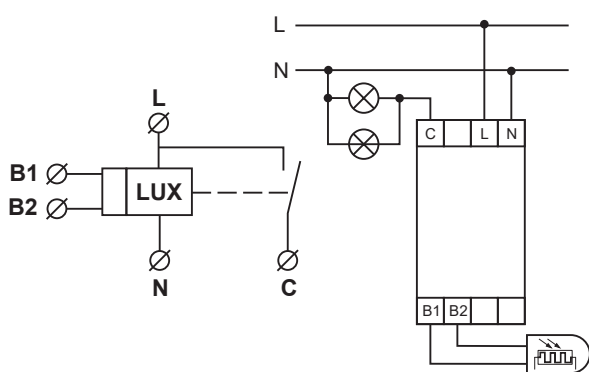
It is used to control lighting devices depending on the illumination (darkness).



### Technical specifications

Series	FRS21	
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7	
Supply voltage AC, V	220	
Rated frequency f, Hz	50/60	
Sensitivity threshold	2~100 Lux	
Switch-on delay, s	2-5	
Shutdown delay, s	10-15	
Hysteresis (on/off ratio)	1.20	
Number of contacts	1 NO	
Rated current of AC1, A/V contacts	25/250	
Maximum load P, W:	incandescent lamp	3 000
	halogen lamp	3 000
	fluorescent lamp (compartmentalized)	1 000
	fluorescent lamp (not composed)	1 300
Insulation voltage $U_i$ , V	250	
Degree of protection	IP20	
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5	
DIN rail mounting	TN35	

### Schematic diagrams



### Overall dimensions

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRS21	Twilight switch FRS21 230V,50/60HZ	1	50	0,140	0,145	7,250



It is used on staircases and corridors; after triggering, a certain time specified by the user passes, and the relay turns off the lighting.

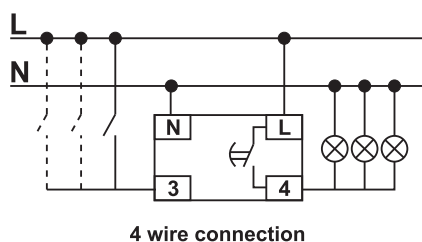
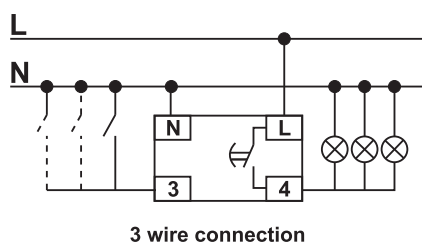


FR

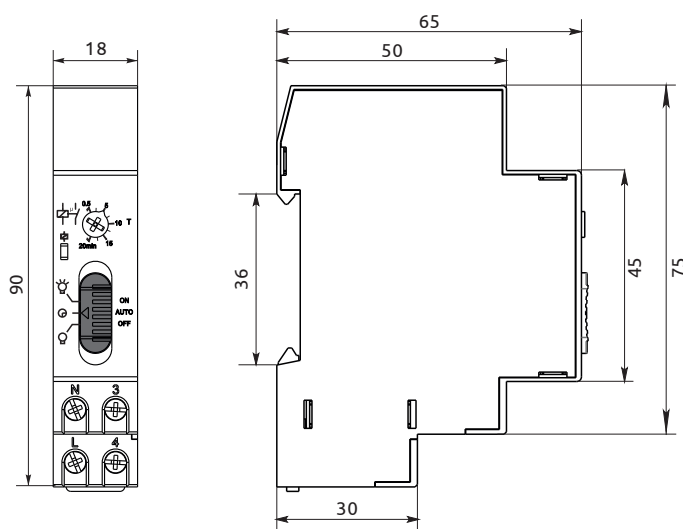
### Technical specifications

Series	FRT14 6	
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7	
Supply voltage AC, V	220-240	
Rated frequency f, Hz	50/60	
Rated current of AC1, A/V contacts	16/250	
Incandescent lamp load P, W	2 000	
Fluorescent lamp load P, W:	lead-lag chain	1 000
	inductive-capacitive	1 000
	in parallel with the compendiums	650
Inductive load $\cos \varphi=0.6/230V$ , W	650	
Time range, min	0.5~20	
Installation accuracy	$\leq 5\%$	
Repetition accuracy	$\leq 0.2\%$	
Maximum load of the backlit switch, mA	50	
Insulation voltage $U_i$ , V	250	
Degree of protection	IP20	
Pollution level	3	
Electrical wear resistance	$10^5$	
Mechanical wear resistance	$10^6$	
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5	
DIN rail mounting	TN35	

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
FRT14 6	Staircase lighting timer FRT14 6	1	100	0,070	0,075	7,500	

# Modular relays FR

## Pulse relay with memory function and switch-off delay FRT21

FR



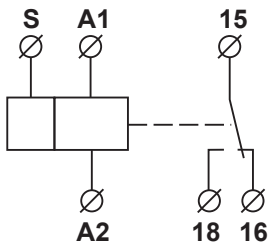
A pulse relay is a bistable relay with memory that is used to control the switching on and off of electrical circuits from different locations.



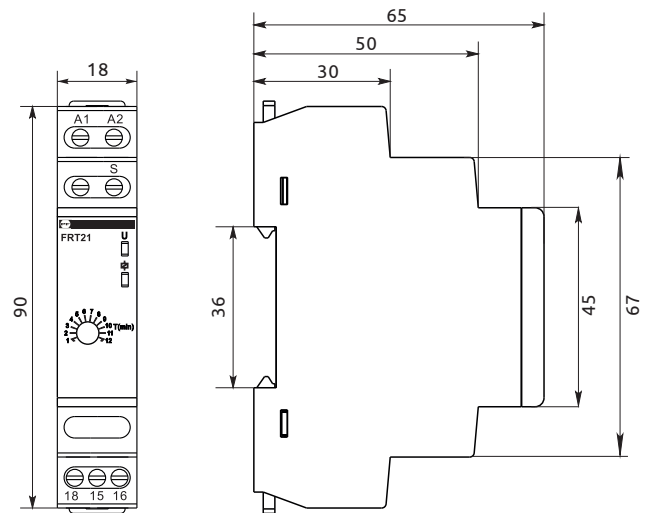
### Technical specifications

Series	FRT21
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7
Power supply terminals	A1, A2
Pulse terminal	S
Supply voltage AC, V	230
Rated frequency f, Hz	50/60
Control current, mA	<1
Consumed power P, W	<0.8
Time setting range, min	1-12
Number of contacts	1 C/O
Rated current of AC1, A/V contacts	10A/250
Insulation voltage Ui, V	250
Degree of protection	IP20
Pollution level	3
Electrical wear resistance	10 <sup>5</sup>
Mechanical wear resistance	10 <sup>6</sup>
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
FRT21	Pulse relay with memory function and switch-off delay FRT21 230V, 50/60HZ	1	100	0,060	0,062	6,200

## Modular relays FR

### Pulse relay with memory function FRT25 1/2



A pulse relay is a bistable relay with memory that is used to control the switching on and off of electrical circuits from different locations.



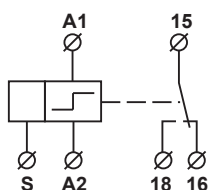
FR

### Technical specifications

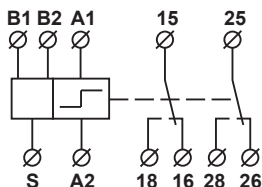
Series	FRT25 1	FRT25 2
Standards	EN/IEC 60730-1, EN/IEC 60730-2-7	
Power supply terminals	A1, A2	
Pulse terminal	S	
AC/DC supply voltage, V	24-240	
Rated frequency f, Hz	50/60	
Power indicator	green LED	
Output indicator	red LED	
Current of AC contacts, A	15:3	
Number of contacts	1 C/O	2 C/O
Rated current of AC1, A/V contacts	10A/250	
Insulation voltage $U_i$ , V	250	
Degree of protection	IP20	
Pollution level	3	
Electrical wear resistance	$10^5$	
Mechanical wear resistance	10	
Cross-section of connecting conductors, mm <sup>2</sup>	0.5-2,5	
DIN rail mounting	TN35	

### Schematic diagrams

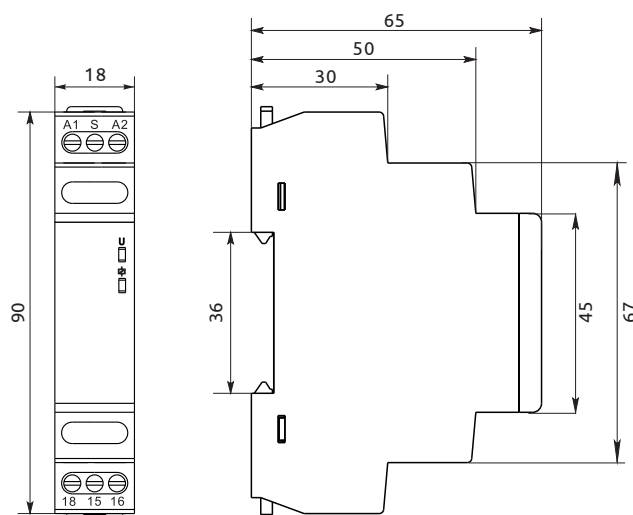
FRT25 1



FRT25 2



### Overall dimensions



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
FRT25 1	Pulse relay with memory function FRT25 1 24-240VAC/DC,50/60HZ	1	100	0,060	0,065	6,500
FRT25 2	Pulse relay with memory function FRT25 2 2C/O 24-240VAC/DC, 50/60HZ	1	100	0,080	0,085	8,500

## Modular relays FR

### Single-phase voltage and current monitoring relay FRVA1S-63A

FR



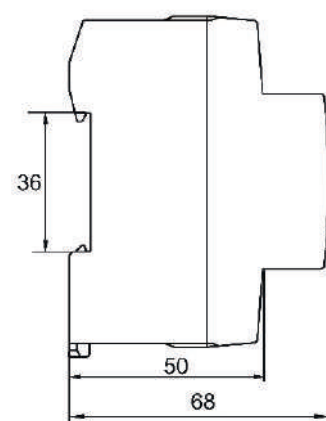
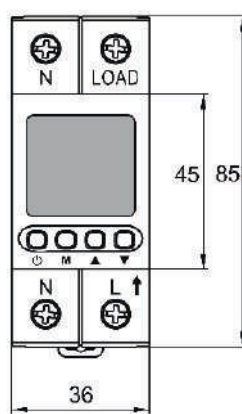
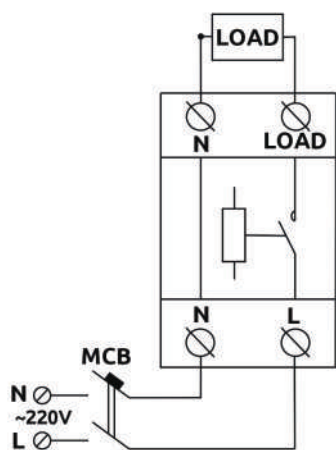
It is used to monitor the input three-phase supply voltage for undervoltage and overvoltage, incorrect phase sequence, and asymmetry.



#### Technical specifications

Series	FRVA1s
Standards	EN/IEC 60730-1
Rated voltage $U_n$ , V	230
Rated frequency $f$ , Hz	50/60
Rated insulation voltage $U_i$ , V	400
Number and type of contacts	2NO
Maximum switching current $I_{max}$ , A (for 10 minutes)	80
Current setpoint range, A	1-63
Setpoint at overvoltage, V	220-300
Setpoint at voltage reduction, V	80-210
Accuracy of voltage measurement, %	1
Switch-on delay, s	5-600
Затримка спрацювання при перевантаженні, s	0-600
Password function	ON/OFF
Degree of protection	IP20
Wear resistance (electrical/mechanical)	$10^4/10^6$
Cross-section of connecting conductors, $mm^2$	0.5...25
Bolt clamping torque, Nm	3, 5
DIN rail mounting	TN35

#### Schematic diagrams



#### Overall dimensions

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRVA1S-63A	Single-phase voltage and current monitoring relay FRVA1S-63A	1	100	0,060	0,065	6,500

## Modular relays FR

### Single-phase voltage and current monitoring relay FRVA1-63A



It is used to monitor the input three-phase supply voltage for undervoltage and overvoltage, incorrect phase sequence, and asymmetry.

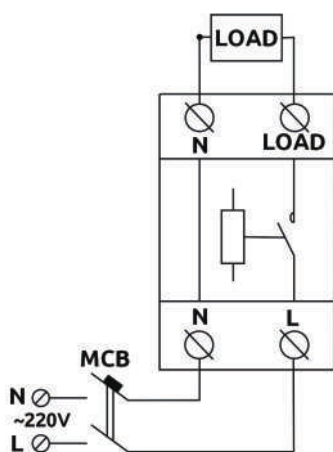


FR

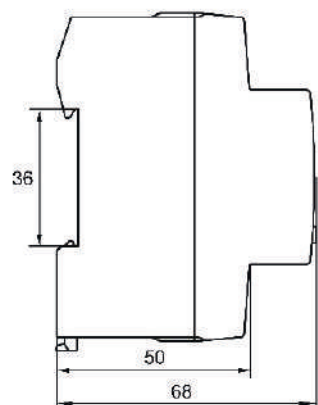
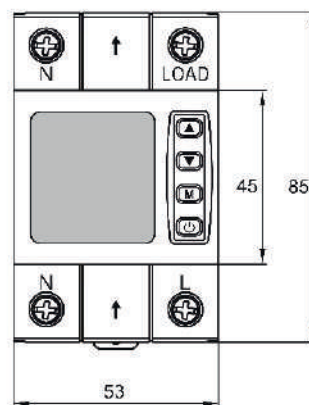
### Technical specifications

Series	FRVA1
Standards	EN/IEC 60730-1
Rated voltage $U_n$ , V	230
Rated frequency $f$ , Hz	50/60
Rated insulation voltage $U_i$ , V	400
Number and type of contacts	3NO
Maximum switching current $I_{max}$ , A (for 10 minutes)	90
Current setpoint range, A	1-63
Setpoint at overvoltage, V	220-280
Setpoint at voltage reduction, V	80-210
Accuracy of voltage measurement, %	1
Switch-on delay, s	5-600
Затримка спрацювання при перевантаженні, s	0-600
Password function	ON/OFF
Degree of protection	IP20
Wear resistance (electrical/mechanical)	$10^4/10^6$
Cross-section of connecting conductors, $mm^2$	0.5...25
Bolt clamping torque, Nm	3, 5
DIN rail mounting	TN35

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FRVA1-63A	Single-phase voltage and current monitoring relay FRVA1-63A	1	100	0,060	0,065	6,500

## Modular relays FR Three-phase voltage and current monitoring relay FRVA3-63A

FR



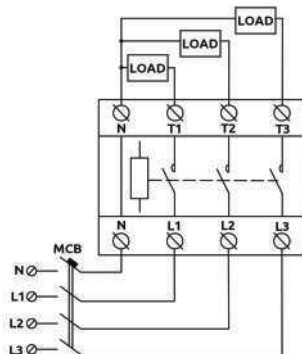
It is used to monitor the input three-phase supply voltage for undervoltage and overvoltage, incorrect phase sequence, and asymmetry.



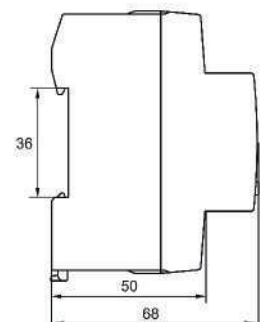
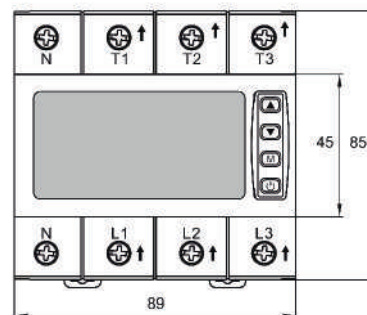
### Technical specifications

Series	FRVA3
Standards	EN/IEC 60730-1
Rated voltage $U_n$ , V	230
Rated frequency $f$ , Hz	50/60
Rated insulation voltage $U_i$ , V	400
Number and type of contacts	4NO
Maximum switching current $I_{max}$ , A (for 10 minutes)	90
Current setpoint range, A	1-63
Setpoint at overvoltage, V	220-280
Setpoint at voltage reduction, V	80-210
Accuracy of voltage measurement, %	1
Switch-on delay, s	5-600
Затримка спрацювання при перевантаженні, s	0-600
Password function	ON/OFF
Degree of protection	IP20
Wear resistance (electrical/mechanical)	$10^4/10^6$
Cross-section of connecting conductors, $mm^2$	0.5...25
Bolt clamping torque, Nm	3, 5
DIN rail mounting	TN35
Control range at asymmetry, V	20-99-OFF
Asymmetry response delay, s	10
Duration of overcurrent, s	OFF-1-20
Setting the operating mode	asynchronous/synchronous

### Schematic diagrams



### Overall dimensions



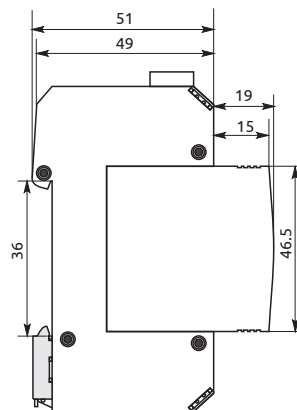
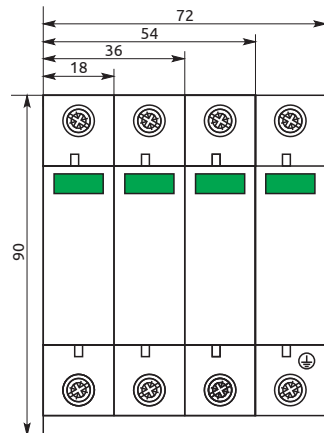
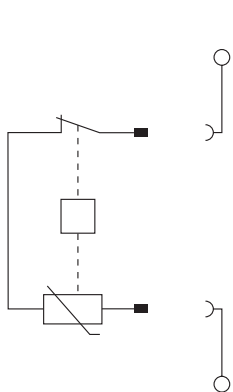
Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
FRVA3-63A	Three-phase voltage and current monitoring relay FRVA3-63A	1	100	0,060	0,065	6,500



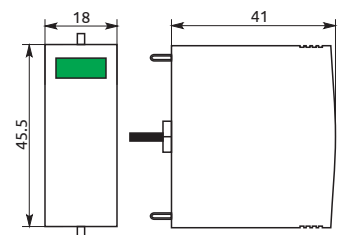
Technical specifications

Series	MOP-C
Standard	IEC/EN 61643-11
Class (IEC/EN/VDE)	II/T2/C
Number of poles	1, 2, 3, 4
Continuous operation voltage (AC) $U_c$ , V	275
Rated voltage $U_n$ , V	230
Short-term overvoltage (TOV) $U_t$ (AC)	335V/5s withstands 440V/120 min
Rated frequency $f$ , Hz	50/60
Rated discharge current $I_n$ (8/20), kA	20
Maximum discharge current $I_{max}$ (8/20), kA	40
Protection level $U_p$ - at $I_n$ (8/20), kV	<1.8
Accompanying current $I_{fi}$	no
Response time $t_A$ , ns	<25
Leakage current $I_{pe}$ at $U_c$ , mA	<0.2
Bolt clamping torque, Nm	3.0
Fuse (if main >125A), gG	125A
Disconnecting capacity of $I_{scrr}$	20kA / 50Hz
Body material	thermoplastic; flammability class UL 94 V-0
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25
Degree of protection	IP20
DIN rail mounting	TN35
Connecting of busbar	PIN/FORK
Operating position	any

Schematic diagrams



Unit MOP-C



Overall dimensions

## Surge protection devices MOP

MOP-C

1P



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
MOP1-C275/20	Surge protection devices MOP 1P-C 275/20	1	50	0,140	0,140	7,000

2P



MOP2-C275/20	Surge protection devices MOP 2P-C 275/20	1	50	0,270	0,270	13,500
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3P



MOP3-C275/20	Surge protection devices MOP 3P-C 275/20	1	50	0,430	0,430	21,500
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4P



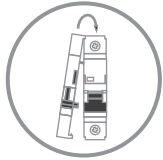
MOP4-C275/20	Surge protection devices MOP 4P-C 275/20	1	50	0,530	0,530	26,500
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Unit



MOPC275/20	Overvoltage Limiter MOPC275/20	1	50	0,070	0,070	3,500
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## Motor protection circuit breakers FMP

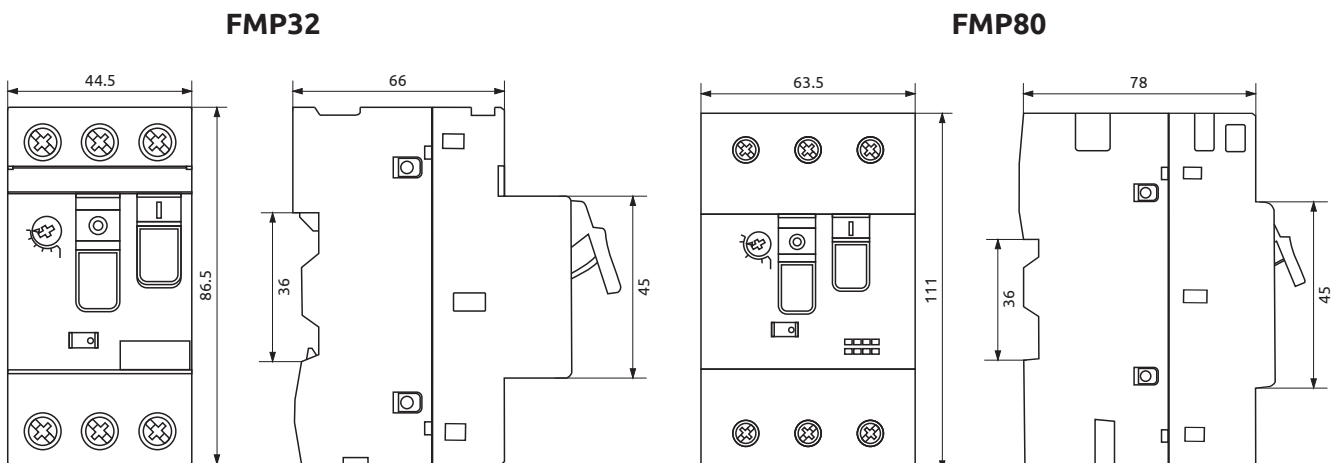


FMP

### Technical specifications

Series	FMP32		FMP80																	
Standards	IEC/EN 60947-4-1 IEC/EN 60947-2																			
Rated operating voltage $U_n$ , V	230/240	400/415	660/690																	
Rated frequency $f$ , Hz	50/60																			
Number of poles	3																			
Time-current characteristic	D																			
Current control range $I_n$ , A	0.1-0.16	0.16-0.25	0.25-0.4	0.4-0.63	0.63-1	1-1.6	1.6-2.5	2.5-4	4-6.3	6-10	10-16	9-14	13-18	16-20	17-23	20-25	24-32	25-40	40-63	56-80
Estimated motor power $P$ , kW	230/240V	-	-	-	-	-	0.37	0.75	1.1	2.2	2.2	3	4	4.5	5.5	5.5	7.5	11	15	22
	400/415V	-	-	-	-	0.37	0.75	1.5	2.2	4	4	5.5	7.5	8	11	11	15	18.5	30	40
	660/690V	-	-	-	0.37	0.55	1.1	1.5	3	4	7.5	7.5	9	11	12	15	18.5	25	33	55
Limit switching capacity $I_{cu}$ , A	400/415V	10 000												15 000						
	660/690V	3 000												-	-	-				
Insulation voltage $U_i$ , V	800																			
Rated pulse voltage $U_{imp}$ , V	8 000																			
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)																			
Connecting of additional devices	yes																			
Cross-section of connecting conductors, mm <sup>2</sup>	up to 25												up to 35							
Degree of protection	IP20																			
Bolt clamping torque, Nm	2.5												3.5							
Connecting of busbar	no																			
DIN rail mounting	TN35																			
Operating position	vertical, horizontal, with a deviation of no more than 5°																			
Trip unit technology	electromagnetic/thermal																			

### Overall dimensions



## Motor protection circuit breakers FMP

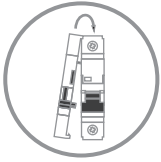
FMP



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FMP0016	Motor protection circuit breaker FMP 0.1-0.16A	1	50	0,245	0,245	12,600
FMP0025	Motor protection circuit breaker FMP 0.16-0.25A	1	50	0,245	0,245	12,600
FMP0040	Motor protection circuit breaker FMP 0.25-0.4A	1	50	0,245	0,245	12,600
FMP0063	Motor protection circuit breaker FMP 0.4-0.63A	1	50	0,245	0,245	12,600
FMP0100	Motor protection circuit breaker FMP 0.63-1A	1	50	0,245	0,245	12,600
FMP0160	Motor protection circuit breaker FMP 1-1.6A	1	50	0,250	0,250	12,900
FMP0250	Motor protection circuit breaker FMP 1.6-2.5A	1	50	0,250	0,250	12,900
FMP0400	Motor protection circuit breaker FMP 2.5-4A	1	50	0,250	0,250	12,900
FMP0630	Motor protection circuit breaker FMP 4-6.3A	1	50	0,250	0,250	12,900
FMP1000	Motor protection circuit breaker FMP 6-10A	1	50	0,250	0,250	12,900
FMP1400	Motor protection circuit breaker FMP 9-14A	1	50	0,252	0,252	13,000
FMP1600	Motor protection circuit breaker FMP 10-16A	1	50	0,252	0,252	13,000
FMP1800	Motor protection circuit breaker FMP 13-18A	1	50	0,252	0,252	13,000
FMP2000	Motor protection circuit breaker FMP 16-20A	1	50	0,252	0,252	13,000
FMP2300	Motor protection circuit breaker FMP 17-23A	1	50	0,252	0,252	13,000
FMP2500	Motor protection circuit breaker FMP 20-25A	1	50	0,252	0,252	13,000
FMP3200	Motor protection circuit breaker FMP 24-32A	1	50	0,252	0,252	13,000
FMP4000	Motor protection circuit breaker FMP 25-40A	1	20	0,700	0,700	14,400
FMP6300	Motor protection circuit breaker FMP 40-63A	1	20	0,730	0,730	15,300
FMP8000	Motor protection circuit breaker FMP 56-80A	1	20	0,750	0,750	15,400

# Additional devices for motor protection circuit breakers

## Auxiliary contact (side) F/ACs

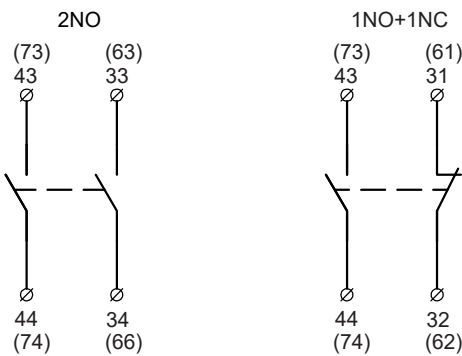


Additional devices

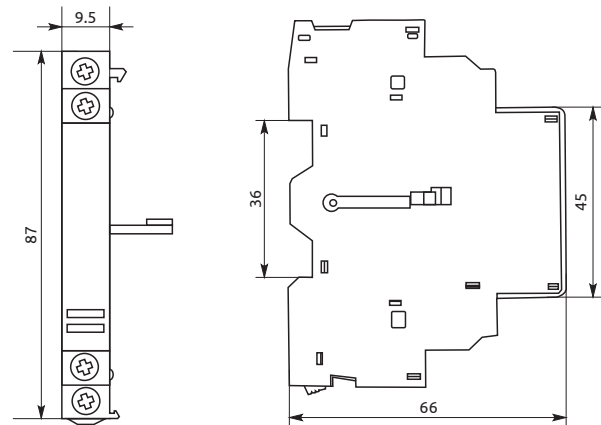
### Technical specifications

Series	F/ACs-1	F/ACs-2
Standard	IEC/EN 60947-5-1	
Use with a circuit breaker	FMP32	FMP80
Contact group	1NO+1NC, 2NO	
Rated voltage $U_n$ , V	240/415AC, 250/400DC	
Rated frequency $f$ , Hz	50/60	
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)	
Conditional thermal current $I_{th}$ , A	5	
Rated current $I_n$ , AC-15	1.5A at 240V, 1A at 415V	
Rated current $I_n$ , DC-13	0.2A at 250V, 0.1A at 400V	
Rated insulation voltage $U_i$ , V	690	
Rated pulse voltage $U_{imp}$ , V	4 000	
Degree of protection	IP20	
Cross-section of connecting conductors, mm <sup>2</sup>	up to 2.5	
Connection side	on the left side	
Operating position	any	

### Schematic diagrams



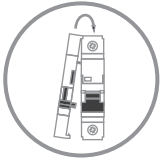
### Overall dimensions



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
ACs111	Auxiliary contact (side) F/ACs1-11 for FMP32	1	150	0,040	0,040	6,000
ACs120	Auxiliary contact (side) F/ACs-1-20 for FMP32	1	150	0,040	0,040	6,000
ACs211	Auxiliary contact (side) F/ACs-2-11 for FMP80	1	100	0,040	0,040	4,000
ACs220	Auxiliary contact (side) F/ACs-2-20 for FMP80	1	100	0,040	0,040	4,000

# Additional devices for motor protection circuit breakers

## Signal contact F/ALCs

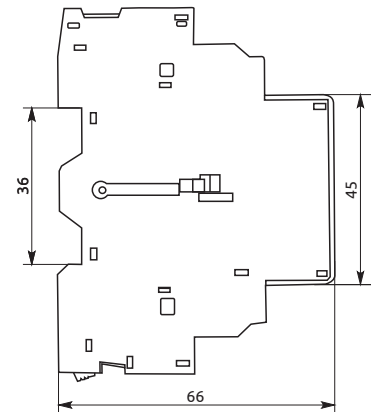
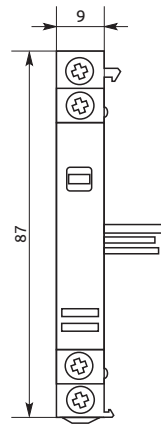
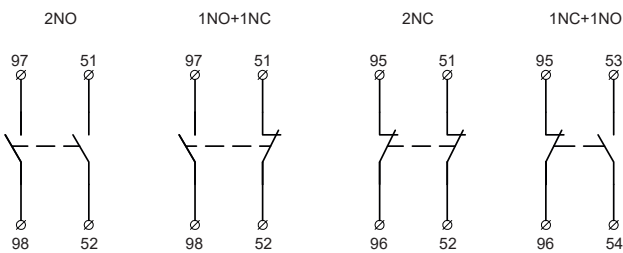


Additional devices

### Technical specifications

Series	F/ALCs
Standard	IEC/EN 60947-5-1
Use with a circuit breaker	FMP32
Contact group	1NO+1NC, 2NO, 1NC+1NO, 2NC
Rated voltage $U_n$ , V	240/415AC, 250/400DC
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)
Conditional thermal current $I_{th}$ , A	5
Rated current $I_n$ , AC-15	1.5A at 240V, 1A at 415V
Rated current $I_n$ , DC-13	0.2A at 250V, 0.1A at 400V
Rated insulation voltage $U_i$ , V	690
Rated pulse voltage $U_{imp}$ , V	4 000
Degree of protection	IP20
Cross-section of connecting conductors, $mm^2$	up to 2.5
Connection side	on the left side
Operating position	any

### Schematic diagrams



### Overall dimensions

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
ALCs0101	Signaling contact F/ALCs-0101 2NC for FMP32	1	150	0,040	0,040	6,000
ALCs0110	Signaling contact F/ALCs-0110 NO+NC for FMP32	1	150	0,040	0,040	6,000
ALCs1001	Signaling contact F/ALCs-1001 NO+NC for FMP32	1	150	0,040	0,040	6,000
ALCs1010	Signaling contact F/ALCs-1010 2NO for FMP32	1	150	0,040	0,040	6,000

# Additional devices for motor protection circuit breakers

## Shunt release F/SRs

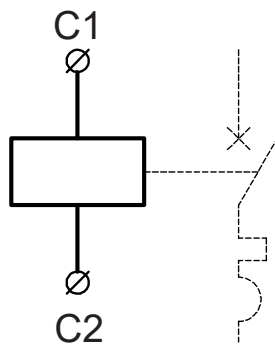


### Technical specifications

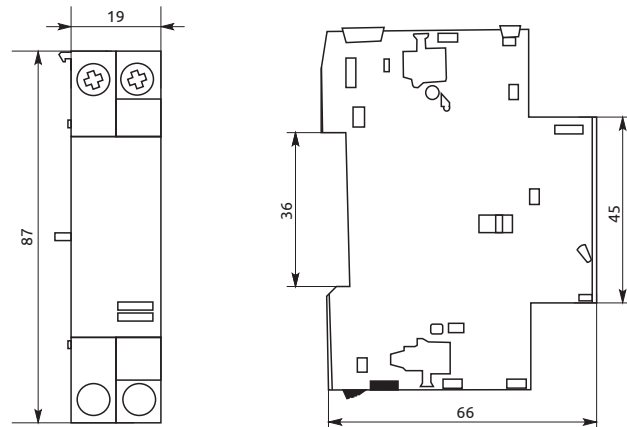
Series	F/SRs
Standard	IEC/EN 60947-2
Use with a circuit breaker	FMP32
Rated voltage $U_n$ , V	230/400
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)
Tripping voltage of the starter, $U_n$	70-110%
Rated insulation voltage $U_i$ , V	690
Rated pulse voltage $U_{imp}$ , V	6 000
Degree of protection	IP20
Cross-section of connecting conductors, $mm^2$	up to 2.5
Connection side	on the right side
Operating position	any

Additional devices

### Schematic diagrams



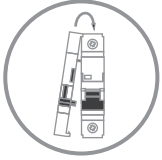
### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/SRs230	Shunt release F/SRs release for FMP32 230V	1	100	0,090	0,090	9,000
F/SRs400	Shunt release F/SRs release for FMP32 400V	1	100	0,090	0,090	9,000

# Additional devices for motor protection circuit breakers

## Undervoltage release F/UVs

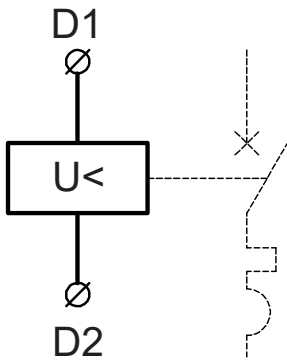


Additional devices

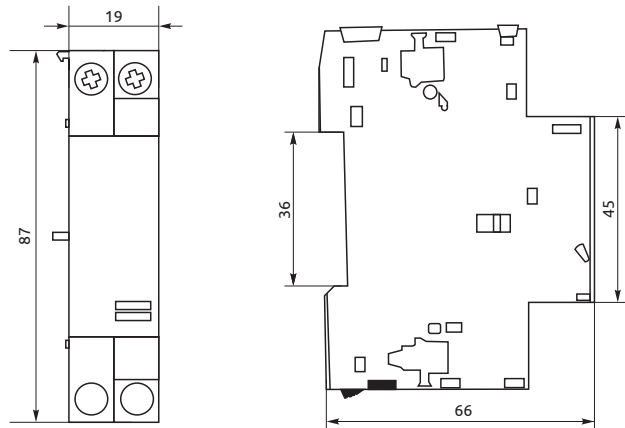
### Technical specifications

Series	F/UVs
Standard	IEC/EN 60947-2
Use with a circuit breaker	FMP32
Rated voltage $U_n$ , V	230/400
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)
Normal operation mode $U_n$ , V	85-110%
Disconnection zone $U_n$ , V	35-70%
Prohibition on the inclusion of $U_n$ , V	$\leq 35\%$
Rated insulation voltage $U_i$ , V	690
Rated pulse voltage $U_{imp}$ , V	6 000
Degree of protection	IP20
Cross-section of connecting conductors, $mm^2$	up to 2.5
Connection side	on the right side
Operating position	any

### Schematic diagrams



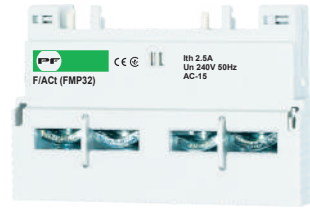
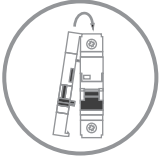
### Overall dimensions



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/UVs230	Undervoltage release F/UVs for FMP32 230V	1	240	0,100	0,100	24,000
F/UVs400	Undervoltage release F/UVs for FMP32 400V	1	240	0,100	0,100	24,000

## Additional devices for motor protection circuit breakers

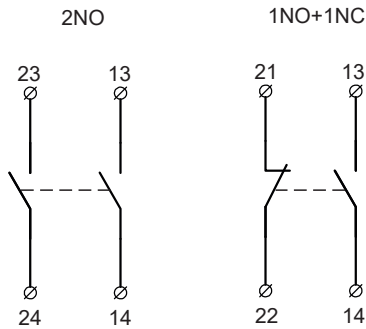
### Auxiliary contact (top) F/ACT



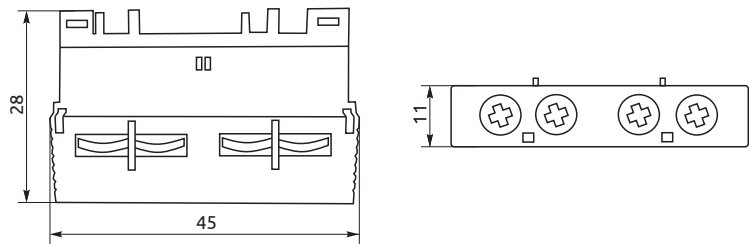
### Technical specifications

Series	F/ACT
Standard	IEC/EN 60947-5-1
Use with a circuit breaker	FMP32
Contact group	1NO+1NC, 2NO
Rated voltage $U_n$ , V	240AC, 60DC
Rated frequency $f$ , Hz	50/60
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)
Conditional thermal current $I_{th}$ , A	2.5
Rated current $I_n$ , AC-15	0.5A at 240V
Rated current $I_n$ , DC-13	0.15A at 60V
Rated insulation voltage $U_i$ , V	250
Rated pulse voltage $U_{imp}$ , V	2 500
Degree of protection	IP20
Cross-section of connecting conductors, mm <sup>2</sup>	up to 2.5
Connection side	from the top
Operating position	any

### Schematic diagrams



### Overall dimensions



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
ACT111	Auxiliary contact (top) F/ACT-1-11 for FMP32	1	100	0,020	0,020	2,000
ACT120	Auxiliary contact (top) F/ACT-1-20 for FMP32	1	100	0,020	0,020	2,000

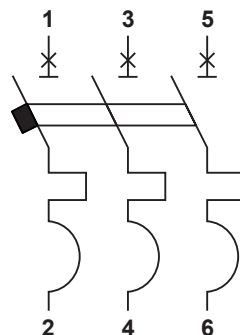


Technical specifications

FMC

Series	FMC1/3U	FMC2/3U	FMC3/3U	FMC4/3U	FMC5/3U	FMC6/3U	FMC7/3U	
Standard	IEC 60947-2							
Rated current of the disconnecter $I_n$ , A	10, 16, 20, 25, 32, 40, 50, 63	16, 20, 25, 32, 40, 50, 63, 75, 80, 100, 125	32, 40, 50, 63, 80, 100, 125, 140, 150, 160, 175, 180, 200, 225, 250	225, 250, 300, 315, 320, 350, 400	400, 450, 500, 630	600, 630, 700, 800	800, 1000, 1250, 1600	
Time-current characteristic	3-5 $I_n$ , 5-10 $I_n$ , 8-12 $I_n$							
Rated frequency $f$ , Hz	50/60							
Rated insulation voltage $U_i$ , V	500			800				
Rated operating voltage $U_n$ , V	400			690				
Rated pulse voltage $U_{imp}$ , V	8000							
Number of poles	3							
Rated operating breaking capacity $I_{cs}$ , kA (AC 380/415V)	17,5	17,5	25	25	25	35	40	
Maximum operating breaking capacity $I_{cu}$ , kA (AC 380/415V)	35	35	50	50	50	70	80	
Front connection with tires	yes	yes	yes	yes	yes	yes	yes	
Rear tire connection	yes	yes	yes	yes	yes	yes	yes	
Installing an independent disconnecter	yes	yes	yes	yes	yes	yes	yes	
Installing a minimum voltage disconnecter	yes	yes	yes	yes	yes	yes	yes	
Establishing additional contact	yes	yes	yes	yes	yes	yes	yes	
Establishing a signal contact	yes	yes	yes	yes	yes	yes	yes	
Installing the manual drive	yes	yes	yes	yes	yes	yes	yes	
Installing the dithering control unit	yes	yes	yes	yes	yes	yes	yes	
Switching wear resistance (number of cycles on/off)	electric	6 000	6 000	2 500	1 500	1 000	1 000	1 000
	mechanical	10 000	10 000	8 500	5 000	4 000	4 000	4 000
Trip unit technology	electromagnetic/thermal							
Connecting the switches	handpiece/tire							
Net weight, kg	0.85	1.14	1.80	4.90	6.70	8.20	17.75 19.55	

Schematic diagrams



## Moulded case circuit breakers FMC

3-5In	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg			
				Packaging	Box	Unit	Packaging	Box	
<b>FMC1/3U</b>	FMC13U0010/5	Molded case circuit breaker FMC1/3U 3P 10A 35kA (3-5In)	10	1	12	0,950	0,950	11,800	
	FMC13U0016/5	Molded case circuit breaker FMC1/3U 3P 16A 35kA (3-5In)	16	1	12	0,950	0,950	11,800	
	FMC13U0020/5	Molded case circuit breaker FMC1/3U 3P 20A 35kA (3-5In)	20	1	12	0,950	0,950	11,800	
	FMC13U0025/5	Molded case circuit breaker FMC1/3U 3P 25A 35kA (3-5In)	25	1	12	0,950	0,950	11,800	
	FMC13U0032/5	Molded case circuit breaker FMC1/3U 3P 32A 35kA (3-5In)	32	1	12	0,950	0,950	11,800	
	FMC13U0040/5	Molded case circuit breaker FMC1/3U 3P 40A 35kA (3-5In)	40	1	12	0,950	0,950	11,800	
	FMC13U0050/5	Molded case circuit breaker FMC1/3U 3P 50A 35kA (3-5In)	50	1	12	0,950	0,950	11,800	
	FMC13U0063/5	Molded case circuit breaker FMC1/3U 3P 63A 35kA (3-5In)	63	1	12	0,950	0,950	11,800	
<b>FMC2/3U</b>	FMC23U0016/5	Molded case circuit breaker FMC2/3U 3P 16A 35kA (3-5In)	16	1	12	1,240	1,240	15,300	
	FMC23U0020/5	Molded case circuit breaker FMC2/3U 3P 20A 35kA (3-5In)	20	1	12	1,240	1,240	15,300	
	FMC23U0025/5	Molded case circuit breaker FMC2/3U 3P 25A 35kA (3-5In)	25	1	12	1,240	1,240	15,300	
	FMC23U0032/5	Molded case circuit breaker FMC2/3U 3P 32A 35kA (3-5In)	32	1	12	1,240	1,240	15,300	
	FMC23U0040/5	Molded case circuit breaker FMC2/3U 3P 40A 35kA (3-5In)	40	1	12	1,240	1,240	15,300	
	FMC23U0050/5	Molded case circuit breaker FMC2/3U 3P 50A 35kA (3-5In)	50	1	12	1,240	1,240	15,300	
	FMC23U0063/5	Molded case circuit breaker FMC2/3U 3P 63A 35kA (3-5In)	63	1	12	1,240	1,240	15,300	
	FMC23U0080/5	Molded case circuit breaker FMC2/3U 3P 80A 35kA (3-5In)	80	1	12	1,240	1,240	15,300	
	FMC23U0100/5	Molded case circuit breaker FMC2/3U 3P 100A 35kA (3-5In)	100	1	12	1,240	1,240	15,300	
	FMC23U0125/5	Molded case circuit breaker FMC2/3U 3P 125A 35kA (3-5In)	125	1	12	1,240	1,240	15,300	
	<b>FMC3/3U</b>	FMC33U0032/5	Molded case circuit breaker FMC3/3U 3P 32A 50kA (3-5In)	32	1	8	1,900	1,900	15,600
FMC33U0040/5		Molded case circuit breaker FMC3/3U 3P 40A 50kA (3-5In)	40	1	8	1,900	1,900	15,600	
FMC33U0050/5		Molded case circuit breaker FMC3/3U 3P 50A 50kA (3-5In)	50	1	8	1,900	1,900	15,600	
FMC33U0063/5		Molded case circuit breaker FMC3/3U 3P 63A 50kA (3-5In)	63	1	8	1,900	1,900	15,600	
FMC33U0080/		Molded case circuit breaker FMC3/3U 3P 80A 50kA (3-5In)	80	1	8	1,900	1,900	15,600	
FMC33U0100/5		Molded case circuit breaker FMC3/3U 3P 100A 50kA (3-5In)	100	1	8	1,900	1,900	15,600	
FMC33U0125/		Molded case circuit breaker FMC3/3U 3P 125A 50kA (3-5In)	125	1	8	1,900	1,900	15,600	
FMC33U0140/5		Molded case circuit breaker FMC3/3U 3P 140A 50kA (3-5In)	140	1	8	1,900	1,900	15,600	
FMC33U0160/5		Molded case circuit breaker FMC3/3U 3P 160A 50kA (3-5In)	160	1	8	1,900	1,900	15,600	
FMC33U0175/5		Molded case circuit breaker FMC3/3U 3P 175A 50kA (3-5In)	175	1	8	1,900	1,900	15,600	
FMC33U0180/5		Molded case circuit breaker FMC3/3U 3P 180A 50kA (3-5In)	180	1	8	1,900	1,900	15,600	
FMC33U0200/5		Molded case circuit breaker FMC3/3U 3P 200A 50kA (3-5In)	200	1	8	1,900	1,900	15,600	
FMC33U0225/5		Molded case circuit breaker FMC3/3U 3P 225A 50kA (3-5In)	225	1	8	1,900	1,900	15,600	
FMC33U0250/5		Molded case circuit breaker FMC3/3U 3P 250A 50kA (3-5In)	250	1	8	1,900	1,900	15,600	
<b>FMC4/3U</b>		FMC43U0225/5	Molded case circuit breaker FMC4/3U 3P 225A 50kA (3-5In)	225	1	2	5,150	5,150	10,700
		FMC43U0250/5	Molded case circuit breaker FMC4/3U 3P 250A 50kA (3-5In)	250	1	2	5,150	5,150	10,700
	FMC43U0300/5	Molded case circuit breaker FMC4/3U 3P 300A 50kA (3-5In)	300	1	2	5,150	5,150	10,700	
	FMC43U0315/5	Molded case circuit breaker FMC4/3U 3P 315A 50kA (3-5In)	315	1	2	5,150	5,150	10,700	
	FMC43U0320/5	Molded case circuit breaker FMC4/3U 3P 320A 50kA (3-5In)	320	1	2	5,150	5,150	10,700	
	FMC43U0350/5	Molded case circuit breaker FMC4/3U 3P 350A 50kA (3-5In)	350	1	2	5,150	5,150	10,700	
	FMC43U0400/5	Molded case circuit breaker FMC4/3U 3P 400A 50kA (3-5In)	400	1	2	5,150	5,150	10,700	
	<b>FMC5/3U</b>	FMC53U0400/5	Molded case circuit breaker FMC5/3U 3P 400A 50kA (3-5In)	400	1	2	7,200	7,200	14,800
FMC53U0500/5		Molded case circuit breaker FMC5/3U 3P 500A 50kA (3-5In)	500	1	2	7,200	7,200	14,800	
FMC53U0630/5		Molded case circuit breaker FMC5/3U 3P 630A 50kA (3-5In)	630	1	2	7,200	7,200	14,800	
<b>FMC6/3U</b>	FMC63U0600/5	Molded case circuit breaker FMC6/3U 3P 600A 70kA (3-5In)	600	1	1	8,950	8,950	8,950	
	FMC63U0630/5	Molded case circuit breaker FMC6/3U 3P 630A 70kA (3-5In)	630	1	1	8,950	8,950	8,950	
	FMC63U0700/5	Molded case circuit breaker FMC6/3U 3P 700A 70kA (3-5In)	700	1	1	8,950	8,950	8,950	
	FMC63U0800/5	Molded case circuit breaker FMC6/3U 3P 800A 70kA (3-5In)	800	1	1	8,950	8,950	8,950	
<b>FMC7/3U</b>	FMC73U0800/5	Molded case circuit breaker FMC7/3U 3P 800A 80kA (3-5In)	800	1	1	20,350	20,350	20,350	
	FMC73U1000/5	Molded case circuit breaker FMC7/3U 3P 100A 80kA (3-5In)	1000	1	1	20,350	20,350	20,350	
	FMC73U1250/5	Molded case circuit breaker FMC7/3U 3P 1250A 80kA (3-5In)	1250	1	1	20,350	20,350	20,350	
	FMC73U1600/5	Molded case circuit breaker FMC7/3U 3P 1600A 80kA (3-5In)	1600	1	1	22,200	22,200	22,200	

FMC

## Moulded case circuit breakers FMC

5-10In	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>FMC1/3U</b>	FMC13U0010/10	Molded case circuit breaker FMC1/3U 3P 10A 35kA (5-10In)	10	1	12	0,950	0,950	11,800
	FMC13U0016/10	Molded case circuit breaker FMC1/3U 3P 16A 35kA (5-10In)	16	1	12	0,950	0,950	11,800
	FMC13U0020/10	Molded case circuit breaker FMC1/3U 3P 20A 35kA (5-10In)	20	1	12	0,950	0,950	11,800
	FMC13U0025/10	Molded case circuit breaker FMC1/3U 3P 25A 35kA (5-10In)	25	1	12	0,950	0,950	11,800
	FMC13U0032/10	Molded case circuit breaker FMC1/3U 3P 32A 35kA (5-10In)	32	1	12	0,950	0,950	11,800
	FMC13U0040/10	Molded case circuit breaker FMC1/3U 3P 40A 35kA (5-10In)	40	1	12	0,950	0,950	11,800
	FMC13U0050/10	Molded case circuit breaker FMC1/3U 3P 50A 35kA (5-10In)	50	1	12	0,950	0,950	11,800
	FMC13U0063/10	Molded case circuit breaker FMC1/3U 3P 63A 35kA (5-10In)	63	1	12	0,950	0,950	11,800
<b>FMC2/3U</b>	FMC23U0016/10	Molded case circuit breaker FMC2/3U 3P 16A 35kA (5-10In)	16	1	12	1,240	1,240	15,300
	FMC23U0020/10	Molded case circuit breaker FMC2/3U 3P 20A 35kA (5-10In)	20	1	12	1,240	1,240	15,300
	FMC23U0025/10	Molded case circuit breaker FMC2/3U 3P 25A 35kA (5-10In)	25	1	12	1,240	1,240	15,300
	FMC23U0032/10	Molded case circuit breaker FMC2/3U 3P 32A 35kA (5-10In)	32	1	12	1,240	1,240	15,300
	FMC23U0040/10	Molded case circuit breaker FMC2/3U 3P 40A 35kA (5-10In)	40	1	12	1,240	1,240	15,300
	FMC23U0050/10	Molded case circuit breaker FMC2/3U 3P 50A 35kA (5-10In)	50	1	12	1,240	1,240	15,300
	FMC23U0063/10	Molded case circuit breaker FMC2/3U 3P 63A 35kA (5-10In)	63	1	12	1,240	1,240	15,300
	FMC23U0080/10	Molded case circuit breaker FMC2/3U 3P 80A 35kA (5-10In)	80	1	12	1,240	1,240	15,300
	FMC23U0100/10	Molded case circuit breaker FMC2/3U 3P 100A 35kA (5-10In)	100	1	12	1,240	1,240	15,300
	FMC23U0125/10	Molded case circuit breaker FMC2/3U 3P 125A 35kA (5-10In)	125	1	12	1,240	1,240	15,300
<b>FMC3/3U</b>	FMC33U0032/10	Molded case circuit breaker FMC3/3U 3P 32A 50kA (5-10In)	32	1	8	1,900	1,900	15,600
	FMC33U0040/10	Molded case circuit breaker FMC3/3U 3P 40A 50kA (5-10In)	40	1	8	1,900	1,900	15,600
	FMC33U0050/10	Molded case circuit breaker FMC3/3U 3P 50A 50kA (5-10In)	50	1	8	1,900	1,900	15,600
	FMC33U0063/10	Molded case circuit breaker FMC3/3U 3P 63A 50kA (5-10In)	63	1	8	1,900	1,900	15,600
	FMC32U0075/10	Molded case circuit breaker FMC2/3U 3P 75A 35kA (5-10In)	75	1	8	1,900	1,900	15,600
	FMC33U0080/10	Molded case circuit breaker FMC3/3U 3P 80A 50kA (5-10In)	80	1	8	1,900	1,900	15,600
	FMC33U0100/10	Molded case circuit breaker FMC3/3U 3P 100A 50kA (5-10In)	100	1	8	1,900	1,900	15,600
	FMC33U0125/10	Molded case circuit breaker FMC3/3U 3P 125A 50kA (5-10In)	125	1	8	1,900	1,900	15,600
	FMC33U0140/10	Molded case circuit breaker FMC3/3U 3P 140A 50kA (5-10In)	140	1	8	1,900	1,900	15,600
	FMC33U0160/10	Molded case circuit breaker FMC3/3U 3P 160A 50kA (5-10In)	160	1	8	1,900	1,900	15,600
	FMC33U0180/10	Molded case circuit breaker FMC3/3U 3P 180A 50kA (5-10In)	180	1	8	1,900	1,900	15,600
	FMC33U0200/10	Molded case circuit breaker FMC3/3U 3P 200A 50kA (5-10In)	200	1	8	1,900	1,900	15,600
	FMC33U0225/10	Molded case circuit breaker FMC3/3U 3P 225A 50kA (5-10In)	225	1	8	1,900	1,900	15,600
	FMC33U0250/10	Molded case circuit breaker FMC3/3U 3P 250 50kA (5-10In)	250	1	8	1,900	1,900	15,600
<b>FMC4/3U</b>	FMC43U0225/10	Molded case circuit breaker FMC4/3U 3P 225A 50kA (5-10In)	225	1	2	5,150	5,150	10,700
	FMC43U0250/10	Molded case circuit breaker FMC4/3U 3P 250A 50kA (5-10In)	250	1	2	5,150	5,150	10,700
	FMC43U0315/10	Molded case circuit breaker FMC4/3U 3P 315A 50kA (5-10In)	315	1	2	5,150	5,150	10,700
	FMC43U0320/10	Molded case circuit breaker FMC4/3U 3P 320A 50kA (5-10In)	320	1	2	5,150	5,150	10,700
	FMC43U0350/10	Molded case circuit breaker FMC4/3U 3P 350A 50kA (5-10In)	350	1	2	5,150	5,150	10,700
	FMC43U0400/10	Molded case circuit breaker FMC4/3U 3P 400A 50kA (5-10In)	400	1	2	5,150	5,150	10,700
<b>FMC5/3U</b>	FMC53U0400/10	Molded case circuit breaker FMC5/3U 3P 400A 50kA (5-10In)	400	1	2	7,200	7,200	14,800
	FMC53U0450/10	Molded case circuit breaker FMC5/3U 3P 450A 50kA (5-10In)	450	1	2	7,200	7,200	14,800
	FMC53U0500/10	Molded case circuit breaker FMC5/3U 3P 500A 50kA (5-10In)	500	1	2	7,200	7,200	14,800
	FMC53U0630/10	Molded case circuit breaker FMC5/3U 3P 630A 50kA (5-10In)	630	1	2	7,200	7,200	14,800
<b>FMC6/3U</b>	FMC63U0630/10	Molded case circuit breaker FMC6/3U 3P 630A 70kA (5-10In)	630	1	1	8,950	8,950	8,950
	FMC63U0700/10	Molded case circuit breaker FMC6/3U 3P 700A 70kA (5-10In)	700	1	1	8,950	8,950	8,950
	FMC63U0800/10	Molded case circuit breaker FMC6/3U 3P 800A 70kA (5-10In)	800	1	1	8,950	8,950	8,950
<b>FMC7/3U</b>	FMC73U0800/10	Molded case circuit breaker FMC7/3U 3P 800A 80kA (5-10In)	800	1	1	20,350	20,350	20,350
	FMC73U1000/10	Molded case circuit breaker FMC7/3U 3P 1000A 80kA (5-10In)	1000	1	1	20,350	20,350	20,350
	FMC73U1250/10	Molded case circuit breaker FMC7/3U 3P 1250A 80kA (5-10In)	1250	1	1	20,350	20,350	20,350
	FMC73U1600/10	Molded case circuit breaker FMC7/3U 3P 1600A 80kA (5-10In)	1600	1	1	22,200	22,200	22,200

## Moulded case circuit breakers FMC

8-12In	Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
				Packaging	Box	Unit	Packaging	Box
<b>FMC1/3U</b>	FMC13U0010	Molded case circuit breaker FMC1/3U 3P 10A 35kA (8-12In)	10	1	12	0,950	0,950	11,800
	FMC13U001	Molded case circuit breaker FMC1/3U 3P 16A 35kA (8-12In)	16	1	12	0,950	0,950	11,800
	FMC13U0020	Molded case circuit breaker FMC1/3U 3P 20A 35kA (8-12In)	20	1	12	0,950	0,950	11,800
	FMC13U0025	Molded case circuit breaker FMC1/3U 3P 25A 35kA (8-12In)	25	1	12	0,950	0,950	11,800
	FMC13U0032	Molded case circuit breaker FMC1/3U 3P 32A 35kA (8-12In)	32	1	12	0,950	0,950	11,800
	FMC13U0040	Molded case circuit breaker FMC1/3U 3P 40A 35kA (8-12In)	40	1	12	0,950	0,950	11,800
	FMC13U0050	Molded case circuit breaker FMC1/3U 3P 50A 35kA (8-12In)	50	1	12	0,950	0,950	11,800
	FMC13U0063	Molded case circuit breaker FMC1/3U 3P 63A 35kA (8-12In)	63	1	12	0,950	0,950	11,800
<b>FMC2/3U</b>	FMC23U0010	Molded case circuit breaker FMC2/3U 3P 10A 35kA (8-12In)	10	1	12	1,240	1,240	15,300
	FMC23U0016	Molded case circuit breaker FMC2/3U 3P 16A 35kA (8-12In)	16	1	12	1,240	1,240	15,300
	FMC23U0020	Molded case circuit breaker FMC2/3U 3P 20A 35kA (8-12In)	20	1	12	1,240	1,240	15,300
	FMC23U0025	Molded case circuit breaker FMC2/3U 3P 25A 35kA (8-12In)	25	1	12	1,240	1,240	15,300
	FMC23U0032	Molded case circuit breaker FMC2/3U 3P 32A 35kA (8-12In)	32	1	12	1,240	1,240	15,300
	FMC23U0040	Molded case circuit breaker FMC2/3U 3P 40A 35kA (8-12In)	40	1	12	1,240	1,240	15,300
	FMC23U0050	Molded case circuit breaker FMC2/3U 3P 50A 35kA (8-12In)	50	1	12	1,240	1,240	15,300
	FMC23U0063	Molded case circuit breaker FMC2/3U 3P 63A 35kA (8-12In)	63	1	12	1,240	1,240	15,300
	FMC23U0075	Molded case circuit breaker FMC2/3U 3P 75A 35kA (8-12In)	75	1	12	1,240	1,240	15,300
	FMC23U0080	Molded case circuit breaker FMC2/3U 3P 80A 35kA (8-12In)	80	1	12	1,240	1,240	15,300
	FMC23U0100	Molded case circuit breaker FMC2/3U 3P 100A 35kA (8-12In)	100	1	12	1,240	1,240	15,300
	FMC23U0125	Molded case circuit breaker FMC2/3U 3P 125A 35kA (8-12In)	125	1	12	1,240	1,240	15,300
<b>FMC3/3U</b>	FMC33U0063	Molded case circuit breaker FMC3/3U 3P 63A 50kA (8-12In)	63	1	8	1,900	1,900	15,600
	FMC33U0080	Molded case circuit breaker FMC3/3U 3P 80A 50kA (8-12In)	80	1	8	1,900	1,900	15,600
	FMC33U0100	Molded case circuit breaker FMC3/3U 3P 100A 50kA (8-12In)	100	1	8	1,900	1,900	15,600
	FMC33U0125	Molded case circuit breaker FMC3/3U 3P 125A 50kA (8-12In)	125	1	8	1,900	1,900	15,600
	FMC33U0140	Molded case circuit breaker FMC3/3U 3P 140A 50kA (8-12In)	140	1	8	1,900	1,900	15,600
	FMC33U0150	Molded case circuit breaker FMC3/3U 3P 150A 50kA (8-12In)	150	1	8	1,900	1,900	15,600
	FMC33U0160	Molded case circuit breaker FMC3/3U 3P 160A 50kA (8-12In)	160	1	8	1,900	1,900	15,600
	FMC33U0175	Molded case circuit breaker FMC3/3U 3P 175A 50kA (8-12In)	175	1	8	1,900	1,900	15,600
	FMC33U0180	Molded case circuit breaker FMC3/3U 3P 180A 50kA (8-12In)	180	1	8	1,900	1,900	15,600
	FMC33U0200	Molded case circuit breaker FMC3/3U 3P 200A 50kA (8-12In)	200	1	8	1,900	1,900	15,600
	FMC33U0225	Molded case circuit breaker FMC3/3U 3P 225A 50kA (8-12In)	225	1	8	1,900	1,900	15,600
	FMC33U0250	Molded case circuit breaker FMC3/3U 3P 250A 50kA (8-12In)	250	1	8	1,900	1,900	15,600
<b>FMC4/3U</b>	FMC43U0225	Molded case circuit breaker FMC4/3U 3P 225A 50kA (8-12In)	225	1	2	5,150	5,150	10,700
	FMC43U0250	Molded case circuit breaker FMC4/3U 3P 250A 50kA (8-12In)	250	1	2	5,150	5,150	10,700
	FMC43U0300	Molded case circuit breaker FMC4/3U 3P 300A 50kA (8-12In)	300	1	2	5,150	5,150	10,700
	FMC43U0315	Molded case circuit breaker FMC4/3U 3P 315A 50kA (8-12In)	315	1	2	5,150	5,150	10,700
	FMC43U0320	Molded case circuit breaker FMC4/3U 3P 320A 50kA (8-12In)	320	1	2	5,150	5,150	10,700
	FMC43U0350	Molded case circuit breaker FMC4/3U 3P 350A 50kA (8-12In)	350	1	2	5,150	5,150	10,700
	FMC43U0400	Molded case circuit breaker FMC4/3U 3P 400A 50kA (8-12In)	400	1	2	5,150	5,150	10,700
	<b>FMC5/3U</b>	FMC53U0400	Molded case circuit breaker FMC5/3U 3P 400A 50kA (8-12In)	400	1	2	7,200	7,200
FMC53U0450		Molded case circuit breaker FMC5/3U 3P 450A 50kA (8-12In)	450	1	2	7,200	7,200	14,800
FMC53U0500		Molded case circuit breaker FMC5/3U 3P 500A 50kA (8-12In)	500	1	2	7,200	7,200	14,800
FMC53U0630		Molded case circuit breaker FMC5/3U 3P 630A 50kA (8-12In)	630	1	2	7,200	7,200	14,800
<b>FMC6/3U</b>	FMC63U0600	Molded case circuit breaker FMC6/3U 3P 600A 70kA (8-12In)	600	1	1	8,950	8,950	8,950
	FMC63U0630	Molded case circuit breaker FMC6/3U 3P 630A 70kA (8-12In)	630	1	1	8,950	8,950	8,950
	FMC63U0700	Molded case circuit breaker FMC6/3U 3P 700A 70kA (8-12In)	700	1	1	8,950	8,950	8,950
	FMC63U0800	Molded case circuit breaker FMC6/3U 3P 800A 70kA (8-12In)	800	1	1	8,950	8,950	8,950
<b>FMC7/3U</b>	FMC73U0800	Molded case circuit breaker FMC7/3U 3P 800A 80kA (8-12In)	800	1	1	20,350	20,350	20,350
	FMC73U1000	Molded case circuit breaker FMC7/3U 3P 1000A 80kA (8-12In)	1000	1	1	20,350	20,350	20,350
	FMC73U1250	Molded case circuit breaker FMC7/3U 3P 1250A 80kA (8-12In)	1250	1	1	20,350	20,350	20,350
	FMC73U1600	Molded case circuit breaker FMC7/3U 3P 1600A 80kA (8-12In)	1600	1	1	22,200	22,200	22,200

FMC

## Additional devices for circuit breakers FMC

### Auxiliary contact F/AX

- **Auxiliary contact F/AX** is used to enable or disable auxiliary devices.
- Monitoring of the device status - whether its main contacts are closed or open (regardless of the reasons that caused the opening).

#### The algorithm of the contact is additional

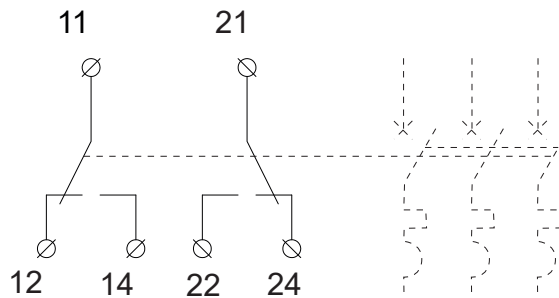
Normally open contacts are closed when the circuit breaker is manually switched on.

Contacts are opened when the circuit breaker is manually switched off or in case of emergency.



Series	F/AX	
Standard	IEC/EN 60947-5-1	
Switching current, A	10	
Rated current (at ~400V) In, A	1	
Rated current (at ~230V) In, A	0.4	
Rated frequency f, Hz	50/60	
Rated voltage Un, V	230/400	
Number of contact groups	FMC1/3U- FMC3/3U 1 C/O	FMC4/3U- FMC7/3U 2 C/O
Wire length	200mm	
Connection side	on the left/right side	
Operating position	any	

### Schematic diagrams



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
F/AX1L	Auxiliary contact F/AX1 (left) for FMC1 1NO+1NC	1	1	0,020	0,020	0,020
F/AX1R	Auxiliary contact F/AX1 (right) for FMC1 1NO+1NC	1	1	0,020	0,020	0,020
F/AX2L	Auxiliary contact F/AX2 (left) for FMC2 1NO+1NC	1	1	0,020	0,020	0,020
F/AX2R	Auxiliary contact F/AX2 (right) for FMC2 1NO+1NC	1	1	0,020	0,020	0,020
F/AX3L	Auxiliary contact F/AX3 (left) for FMC3 1NO+1NC	1	1	0,020	0,020	0,020
F/AX3R	Auxiliary contact F/AX3 (right) for FMC3 1NO+1NC	1	1	0,020	0,020	0,020
F/AX4L	Auxiliary contact F/AX4 (left) for FMC4 2NO+2NC	1	1	0,060	0,060	0,060
F/AX4	Auxiliary contact F/AX4 (right) for FMC4 2NO+2NC	1	1	0,060	0,060	0,060
F/AX5L	Auxiliary contact F/AX5 (left) for FMC5 2NO+2NC	1	1	0,080	0,080	0,080
F/AX5R	Auxiliary contact F/AX5 (right) for FMC5 2NO+2NC	1	1	0,080	0,080	0,080
F/AX6L	Auxiliary contact F/AX6 (left) for FMC6 2NO+2NC	1	1	0,100	0,100	0,100
F/AX6R	Auxiliary contact F/AX6 (right) for FMC6 2NO+2NC	1	1	0,100	0,100	0,100
F/AX7L	Auxiliary contact F/AX7 (left) for FMC7 2NO+2NC	1	1	0,090	0,090	0,090
F/AX7R	Auxiliary contact F/AX7 (right) for FMC7 2NO+2NC	1	1	0,090	0,090	0,090

## Additional devices for circuit breakers FMC

### Signal contact F/AL

#### ● Signal contact F/AL

is used to signal the status of the circuit breaker in case of emergency shutdown.

When the circuit breaker is switched on or off, unless there has been an emergency shutdown, the signal contact is off.

When the circuit breaker trips or the "TEST" button is pressed, the signal contact is activated.

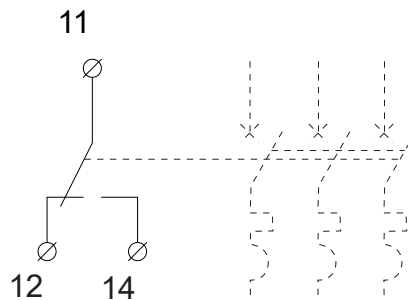
After the switch mechanism is actuated, the signal contact is turned off (goes to the initial state).



Series	F/AL
Standard	IEC/EN 60947-5-1
Switching current, A	10
Rated current (at ~400V), A	1
Rated current (at ~230V), A	0.4
Rated frequency f, Hz	50/60
Rated voltage Un, V	230/400
Number of contact groups	1 C/O
Wire length	200mm
Connection side	on the left/right side
Operating position	any

Additional devices

### Schematic diagrams



Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
F/AL1L	Signal contact F/AL1L for FMC1 (left)	1	1	0,010	0,010	0,010
F/AL1R	Signal contact F/AL1R for FMC1 (right)	1	1	0,010	0,010	0,010
F/AL2L	Signal contact F/AL2L for FMC2 (left)	1	1	0,020	0,020	0,020
F/AL2R	Signal contact F/AL2R for FMC2 (right)	1	1	0,020	0,020	0,020
F/AL3L	Signal contact F/AL3L for FMC3 (left)	1	1	0,020	0,020	0,020
F/AL3R	Signal contact F/AL3R for FMC3 (right)	1	1	0,020	0,020	0,020
F/AL4L	Signal contact F/AL4L for FMC4 (left)	1	1	0,030	0,030	0,030
F/AL4R	Signal contact F/AL4R for FMC4 (right)	1	1	0,030	0,030	0,030
F/AL5L	Signal contact F/AL5L до FMC5 (left)	1	1	0,050	0,050	0,050
F/AL5R	Signal contact F/AL5R for FMC5 (right)	1	1	0,050	0,050	0,050
F/AL6L	Signal contact F/AL6L for FMC6 (left)	1	1	0,040	0,040	0,040
F/AL6R	Signal contact F/AL6R for FMC6 (right)	1	1	0,040	0,040	0,040
F/AL7L	Signal contact F/AL7L for FMC7 (left)	1	1	0,020	0,020	0,020
F/AL7R	Signal contact F/AL7R for FMC7 (right)	1	1	0,020	0,020	0,020

## Additional devices for circuit breakers FMC

### Shunt release F/SH

- Shunt release F/SH is used to remotely disconnect the circuit breaker.

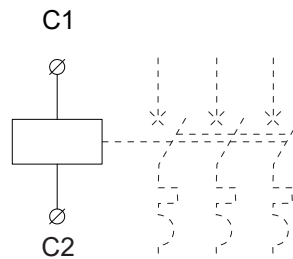
#### The operating algorithm of the independent disconnecter

When the set voltage is applied to the independent disconnecter, the circuit breaker trips.



Series	F/SH
Standard	IEC/EN 60947-5-1
Rated frequency f, Hz	50/60
Rated voltage Un, V	230/400
Operating range, Ui	70-135%
Wire length	150mm
Connection side	on the left/right side

#### Schematic diagrams

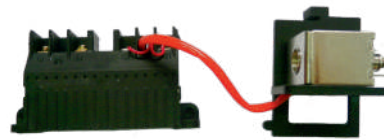


	Order code	Full name of	Packaging, pcs			Gross weight, kg	
			Packaging	Box	Unit	Packaging	Box
<b>FMC1</b>	F/SH1230L	Shunt release F/SH1 (left) for FMC1 AC230V	1	1	0,030	0,030	0,030
	F/SH1400L	Shunt release F/SH1 (left) for FMC1 AC400V	1	1	0,030	0,030	0,030
	F/SH1230R	Shunt release F/SH1 (right) for FMC1 AC230V	1	1	0,030	0,030	0,030
	F/SH1400R	Shunt release F/SH1 (right) for FMC1 AC400V	1	1	0,030	0,030	0,030
<b>FMC2</b>	F/SH2230L	Shunt release F/SH2 (left) for FMC2 AC230V	1	1	0,030	0,030	0,030
	F/SH2400L	Shunt release F/SH2 (left) for FMC2 AC400V	1	1	0,030	0,030	0,030
	F/SH2230R	Shunt release F/SH2 (right) for FMC2 AC230V	1	1	0,030	0,030	0,030
	F/SH2400R	Shunt release F/SH2 (right) for FMC2 AC400V	1	1	0,030	0,030	0,030
<b>FMC3</b>	F/SH3230L	Shunt release F/SH3 (left) for FMC3 AC230V	1	1	0,040	0,040	0,040
	F/SH3400L	Shunt release F/SH3 (left) for FMC3 AC400V	1	1	0,040	0,040	0,040
	F/SH3230R	Shunt release F/SH3 (right) for FMC3 AC230V	1	1	0,040	0,040	0,040
	F/SH3400R	Shunt release F/SH3 (right) for FMC3 AC400V	1	1	0,040	0,040	0,040
<b>FMC4</b>	F/SH4230L	Shunt release F/SH4 (left) for FMC4 AC230V	1	1	0,110	0,110	0,110
	F/SH4400L	Shunt release F/SH4 (left) for FMC4 AC400V	1	1	0,110	0,110	0,110
	F/SH4230R	Shunt release F/SH4 (right) for FMC4 AC230V	1	1	0,110	0,110	0,110
	F/SH4400R	Shunt release F/SH4 (right) for FMC4 AC400V	1	1	0,110	0,110	0,110
<b>FMC5</b>	F/SH5230L	Shunt release F/SH5 (left) for FMC5 AC230V	1	1	0,110	0,110	0,110
	F/SH5400L	Shunt release F/SH5 (left) for FMC5 AC400V	1	1	0,110	0,110	0,110
	F/SH5230R	Shunt release F/SH5 (right) for FMC5 AC230V	1	1	0,110	0,110	0,110
	F/SH5400R	Shunt release F/SH5 (right) for FMC5 AC400V	1	1	0,110	0,110	0,110
<b>FMC6</b>	F/SH6230L	Shunt release F/SH6 (left) for FMC6 AC230V	1	1	0,170	0,170	0,170
	F/SH6400L	Shunt release F/SH6 (left) for FMC6 AC400V	1	1	0,170	0,170	0,170
	F/SH6230R	Shunt release F/SH6 (right) for FMC6 AC230V	1	1	0,170	0,170	0,170
	F/SH6400R	Shunt release F/SH6 (right) for FMC6 AC400V	1	1	0,170	0,170	0,170
<b>FMC7</b>	F/SH7230L	Shunt release F/SH7 (left) for FMC7 AC230V	1	1	0,150	0,150	0,150
	F/SH7400L	Shunt release F/SH7 (left) for FMC7 AC400V	1	1	0,150	0,150	0,150
	F/SH7230R	Shunt release F/SH7 (right) for FMC7 AC230V	1	1	0,150	0,150	0,150
	F/SH7400R	Shunt release F/SH7 (right) for FMC7 AC400V	1	1	0,150	0,150	0,150

## Additional devices for circuit breakers FMC

### Voltage control release F/UV

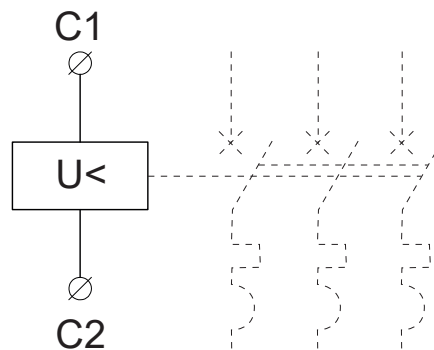
- **Voltage control release F/UV**  
is used to control the voltage drop.



Series	F/UV
Standard	IEC/EN 60947-5-1
Rated voltage $U_n$ , V	230
Rated frequency $f$ , Hz	50/60
Normal operation mode $U_n$ , V	85-110%
Disconnection zone $U_n$ , V	35-70%
Prohibition on the inclusion of $U_n$ , V	$\leq 35\%$
Connection side	on the left/right side

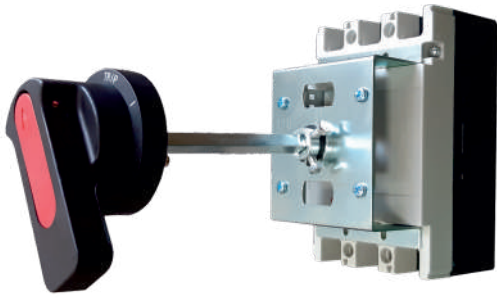
Additional devices

### Schematic diagrams



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
F/UV1230	Voltage control release F/UV1 for FMC1 AC230V230	1	1	0,200	0,200	0,200
F/UV2230	Voltage control release F/UV2 for FMC2 AC230V400	1	1	0,200	0,200	0,200
F/UV3230	Voltage control release F/UV3 for FMC3 AC230V230	1	1	0,200	0,200	0,200
F/UV4230	Voltage control release F/UV4 for FMC4 AC230V400	1	1	0,200	0,200	0,200
F/UV5230	Voltage control release F/UV5 for FMC5 AC230V230	1	1	0,200	0,200	0,200
F/UV6230	Voltage control release F/UV6 for FMC6 AC230V400	1	1	0,200	0,200	0,200
F/UV7230	Voltage control release F/UV7 for FMC7 AC230V230	1	1	0,200	0,200	0,200

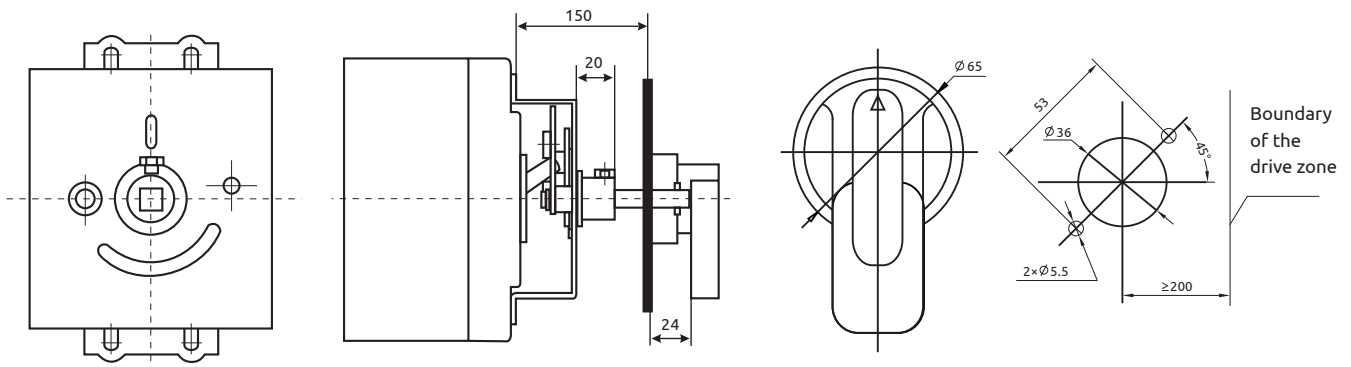
## Additional devices for circuit breakers FMC Manual remote rotary drive F/HB



FMC switches can also be used with a manual remote rotary actuator (F/HB). The handle of the manual actuator is mounted on the switchgear door and is kinematically connected to the switch handle via a lever, which allows the switch to be opened and closed when the switchgear door is closed.

The length of the metal rod is 150mm. It is possible to manufacture a rod of a non-standard length to order, which is agreed individually with the customer.

### Overall dimensions



Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
F/HB1	Manual remote rotary drive F/HB1 for FMC 1	1	1	0,540	0,540	0,540	
F/HB2	Manual remote rotary drive F/HB2 for FMC 2	1	1	0,600	0,600	0,600	
F/HB3	Manual remote rotary drive F/HB3 for FMC 3	1	1	0,600	0,600	0,600	
F/HB4	Manual remote rotary drive F/HB4 for FMC 4	1	1	1,300	1,300	1,300	
F/HB5	Manual remote rotary drive F/HB5 for FMC 5	1	1	1,500	1,500	1,500	
F/HB6	Manual remote rotary drive F/HB6 for FMC 6	1	1	1,700	1,700	1,700	
F/HB7	Manual remote rotary drive F/HB7 for FMC 7	1	1	3,200	3,200	3,200	

## Additional devices for circuit breakers FMC Remote control unit MROM

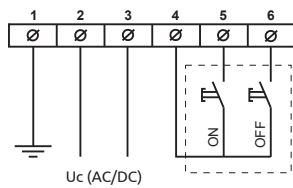
- Degree of protection: Ip40.
- Can be quickly mounted on a circuit breaker.
- Easy connection of control circuits and protection against contact with live parts.
- Increased safety of operation, provides manual and remote control of the circuit breaker.
- Remote units are used in automatic transfer switching and workflow automation systems.



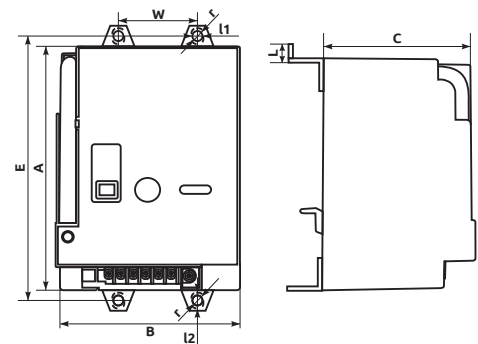
Additional devices

Type of switch	Drive control voltage $U_c$ , V	Wear resistance (number of on/off cycles)	Current value for drive control, A	Power consumption, W
FMC1 FMC2 FMC3	AC 110-220V DC 100-220V DC 24V	14 000	0.5	14
FMC4 FMC5	AC 230V, AC 110V DC 220V, DC 110V DC 24V	6 000	2	35
FMC6 FMC7	AC 230/400V	6 000	7.5	200

### Schematic diagrams



### Overall dimensions



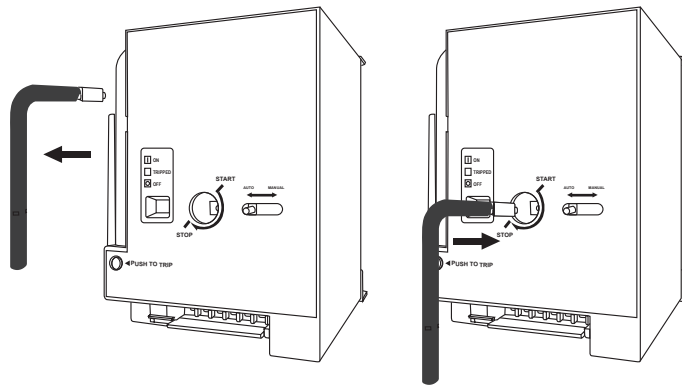
#### Type of switch

#### Dimensions, mm

Type of switch	A	B	C	E	H	L	W	r	l1	l2
FMC1	100	72	77	117	10	17	25	5	4	6
FMC2	115	90	77	133	12	14	30			
FMC3	115	90	77	135	14	15	33	10	5	6
FMC4	173	126	113	196	25	20	45	7		
FMC5	174	127	113	200	22	20	57	7		
FMC6	174	127	113	243	40	40	70			
FMC7	175	127	114	305	20	35	67		6	5

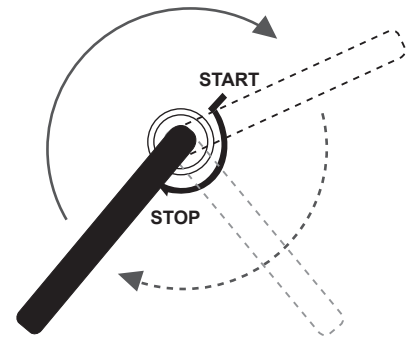
Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
MROM31	Remote control unit MROM 3/1 for FMC 1	1	1	0,960	0,960	0,960	
MROM32	Remote control unit MROM 3/2 for FMC 2	1	1	1,450	1,450	1,450	
MROM33	Remote control unit MROM 3/3 for FMC 3	1	1	1,500	1,500	1,500	
MROM34	Remote control unit MROM 3/4 for FMC 4	1	1	3,890	3,890	3,890	
MROM35	Remote control unit MROM 3/5 for FMC 5	1	1	4,200	4,200	4,200	
MROM36	Remote control unit MROM 3/6 for FMC 6	1	1	4,300	4,300	4,300	
MROM37	Remote control unit MROM 3/7 for FMC 7	1	1	4,700	4,700	4,700	

## Additional devices for circuit breakers FMC Remote control unit MROM



Status indication:  
0 - disabled;  
I - enabled or disabled automatically.

**I** ON **0** OFF



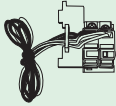



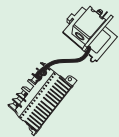
### Automatic (remote) control mode:

Turn the manual/auto switch to the "manual" position and operate the switch using the control buttons.

### Manual control mode:

Turn the manual/auto switch to the "auto" position and use the handle attached to the actuator to turn the switch on or off.

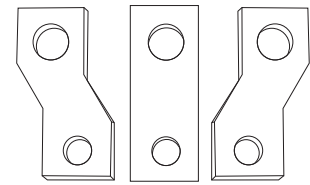
## Possible options for equipping FMC circuit breakers with additional devices

Types of internal devices	FMC1 FMC2 FMC3	FMC4 FMC5	FMC6	FMC7
Additional contact F/AX 	on the right/left side	on the right/left side	on the right/left side	on the right/left side
Additional contact (two blocks) F/AX 	on the right/left side	on the right/left side	on the right/left side	on the right/left side
Signal contact F/AL 	on the right/left side	on the right/left side	on the right/left side	on the right/left side
Shunt release F/SH 	on the right/left side	on the right/left side	on the right/left side	on the right/left side
Voltage control release F/UV 	on the right side	on the right side	on the left side	on the left side

- The additional contact F/AX, signal contact F/AL, independent release F/SH, and minimum voltage release F/UV **are installed when ordering** the circuit breaker.
- F/HB manual remote control actuator, MROM remote control unit **is installed on site by the user.**
- After all the stages of installation, the circuit breaker **is scrapped with a 5-year warranty.**

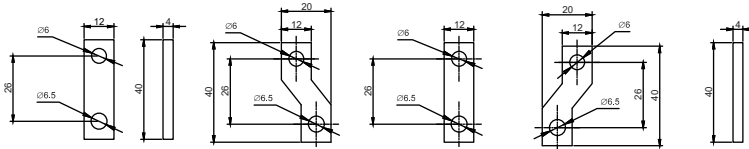
## Additional devices for circuit breakers FMC Front connection plate KSHP

FMC switches can be equipped with adapter busbars. They are used on FMC series circuit breakers in the process of modernization of facilities when replacing old types of circuit breakers. Adapter busbars are not included in the scope of delivery and must be ordered separately. They are supplied in a set of 3 or 6 pieces. It is possible to manufacture adapter rails on an individual order.

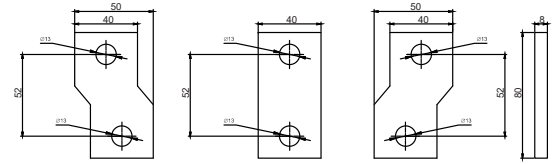


### Overall dimensions

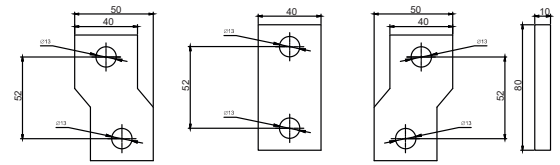
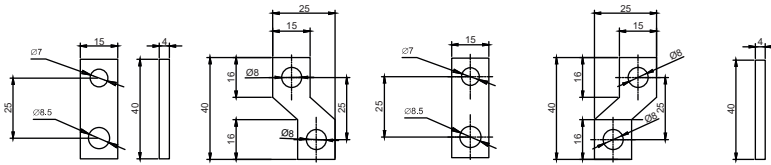
#### FMC1/3U



#### FMC5/3U, FMC6/3U

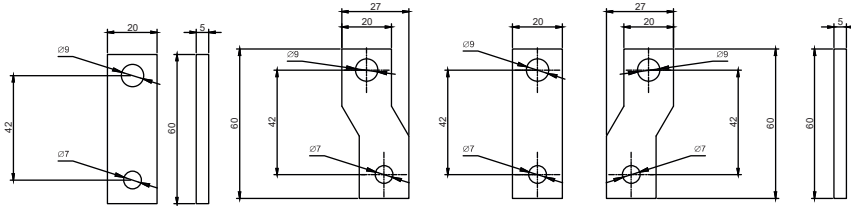


#### FMC2/3U

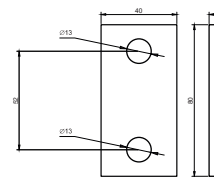


Additional devices

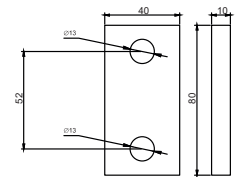
#### FMC3/3U



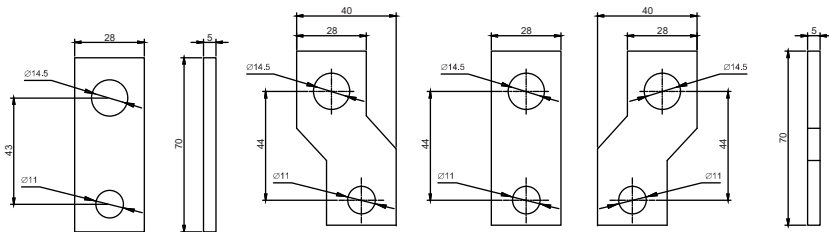
#### FMC5/3U



#### FMC6/3U



#### FMC4/3U



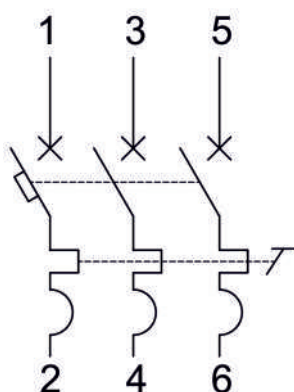
Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
KSHP31	Front connection plate 3/1 (3 pcs.) straight for FMC1	1	1	0,040	0,040	0,040
KSHP313	Front connection plate 3/1 (3 pcs.) offset for FMC1	1	1	0,040	0,040	0,040
KSHP32	Front connection plate 3/2 (3 pcs.) straight for FMC2	1	1	0,050	0,050	0,050
KSHP323	Front connection plate 3/2 (3 pcs.) offset for FMC2	1	1	0,050	0,050	0,050
KSHP33	Front connection plate 3/3 (3 pcs.) straight for FMC3	1	1	0,140	0,140	0,140
KSHP333	Front connection plate 3/3 (3 pcs.) offset for FMC3	1	1	0,140	0,140	0,140
KSHP34	Front connection plate 3/4 (3 pcs.) straight for FMC4	1	1	0,350	0,350	0,350
KSHP343	Front connection plate 3/4 (3 pcs.) offset for FMC4	1	1	0,350	0,350	0,350
KSHP35	Front connection plate 3/5 (3 pcs.) straight for FMC5	1	1	0,730	0,730	0,730
KSHP353	Front connection plate 3/5 (3 pcs.) offset for FMC5	1	1	0,730	0,730	0,730
KSHP36	Front connection plate 3/6 (3 pcs.) straight for FMC6	1	1	0,970	0,970	0,970
KSHP363	Front connection plate 3/6 (3 pcs.) offset for FMC6	1	1	0,970	0,970	0,970



Technical specifications

Series	FMC1S/3U	FMC2S/3U	FMC3S/3U	FMC4S/3U	FMC5S/3U	FMC6S/3U	
Maximum current size	63	125	250	400	630	800	
Rated current of the disconnecter I <sub>n</sub> , A	10, 16, 20, 25, 32, 40, 50, 63	16, 20, 25, 32, 40, 50, 63, 80, 100, 125	63, 80, 100, 125, 140, 150, 160, 180, 200, 225, 250	225, 250, 300, 315, 350, 400	400, 500, 600, 630	600, 630, 700, 800	
Time-current characteristic	3-5I <sub>n</sub> , 5-10I <sub>n</sub> , 8-12I <sub>n</sub>						
Standard	IEC60947-2						
Number of poles	3						
Thermomagnetic control of I <sub>r</sub> (xI <sub>n</sub> )	0.8/0.9/1						
Rated operating voltage U <sub>n</sub> , V	690						
Rated insulation voltage U <sub>i</sub> , V	800						
Rated pulse voltage U <sub>imp</sub> , V	8000						
Rated frequency f, Hz	50/60						
Rated breaking capacity I <sub>cs</sub> , kA (AC 380/415 V)	17,5	17,5	25	25	25	35	
Maximum breaking capacity I <sub>cu</sub> , kA (AC 380/415 V)	35	35	50	50	50	70	
Switching wear resistance (number of cycles on/off)	electric	7000	7000	1000	1500	1000	1000
	mechanical	10000	10000	3500	5000	4000	4000
Front connection with tires	yes	yes	yes	yes	yes	yes	
Rear tire connection	yes	yes	yes	yes	yes	yes	
Establishing a signal contact	yes	yes	yes	yes	yes	yes	
Establishing a shunt release	yes	yes	yes	yes	yes	yes	
Establishing a voltage control release	yes	yes	yes	yes	yes	yes	
Establishing additional contact	yes	yes	yes	yes	yes	yes	
Installing the manual drive	yes	yes	yes	yes	yes	yes	
Installing the dithering control unit	yes	yes	yes	yes	yes	yes	
Trip unit technology	electromagnetic/thermal						
Net weight, kg	0.95	1.24	1.90	5.15	7.20	8.95	

Schematic diagrams



## Moulded case circuit breakers with thermal adjustable FMC\_S

Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FMC1S/3U</b>	FMC1S016 Molded case circuit breaker with thermal adjustable FMC1S 3P 16A 36kA	16	1	12	0,950	0,950	11,800
	FMC1S020 Molded case circuit breaker with thermal adjustable FMC1S 3P 20A 36kA	20	1	12	0,950	0,950	11,800
	FMC1S025 Molded case circuit breaker with thermal adjustable FMC1S 3P 25A 36kA	25	1	12	0,950	0,950	11,800
	FMC1S032 Molded case circuit breaker with thermal adjustable FMC1S 3P 32A 36kA	32	1	12	0,950	0,950	11,800
	FMC1S040 Molded case circuit breaker with thermal adjustable FMC1S 3P 40A 36kA	40	1	12	0,950	0,950	11,800
	FMC1S050 Molded case circuit breaker with thermal adjustable FMC1S 3P 50A 36kA	50	1	12	0,950	0,950	11,800
	FMC1S063 Molded case circuit breaker with thermal adjustable FMC1S 3P 63A 36kA	63	1	12	0,950	0,950	11,800
<b>FMC2S/3U</b>	FMC2S016 Molded case circuit breaker with thermal adjustable FMC2S 3P 16A 50kA	16	1	12	1,240	1,240	15,300
	FMC2S025 Molded case circuit breaker with thermal adjustable FMC2S 3P 25A 50kA	25	1	12	1,240	1,240	15,300
	FMC2S032 Molded case circuit breaker with thermal adjustable FMC2S 3P 32A 50kA	32	1	12	1,240	1,240	15,300
	FMC2S040 Molded case circuit breaker with thermal adjustable FMC2S 3P 40A 50kA	40	1	12	1,240	1,240	15,300
	FMC2S050 Molded case circuit breaker with thermal adjustable FMC2S 3P 50A 50kA	50	1	12	1,240	1,240	15,300
	FMC2S063 Molded case circuit breaker with thermal adjustable FMC2S 3P 63A 50kA	63	1	12	1,240	1,240	15,300
	FMC2S080 Molded case circuit breaker with thermal adjustable FMC2S 3P 80A 50kA	80	1	12	1,240	1,240	15,300
	FMC2S100 Molded case circuit breaker with thermal adjustable FMC2S 3P 100A 50kA	100	1	12	1,240	1,240	15,300
	FMC2S125 Molded case circuit breaker with thermal adjustable FMC2S 3P 125A 50kA	125	1	12	1,240	1,240	15,300
<b>FMC3S/3U</b>	FMC3S063 Molded case circuit breaker with thermal adjustable FMC3S 3P 63A 50kA	63	1	8	1,900	1,900	15,600
	FMC3S100 Molded case circuit breaker with thermal adjustable FMC3S 3P 100A 50kA	100	1	8	1,900	1,900	15,600
	FMC3S125 Molded case circuit breaker with thermal adjustable FMC3S 3P 125A 50kA	125	1	8	1,900	1,900	15,600
	FMC3S160 Molded case circuit breaker with thermal adjustable FMC3S 3P 160A 50kA	160	1	8	1,900	1,900	15,600
	FMC3S180 Molded case circuit breaker with thermal adjustable FMC3S 3P 180A 50kA	180	1	8	1,900	1,900	15,600
	FMC3S200 Molded case circuit breaker with thermal adjustable FMC3S 3P 200A 50kA	200	1	8	1,900	1,900	15,600
	FMC3S225 Molded case circuit breaker with thermal adjustable FMC3S 3P 225A 50kA	225	1	8	1,900	1,900	15,600
	FMC3S250 Molded case circuit breaker with thermal adjustable FMC3S 3P 250A 50kA	250	1	8	1,900	1,900	15,600
<b>FMC4S/3U</b>	FMC4S225 Molded case circuit breaker with thermal adjustable FMC4S 3P 225A 85kA	225	1	2	5,150	5,150	10,700
	FMC4S250 Molded case circuit breaker with thermal adjustable FMC4S 3P 250A 85kA	250	1	2	5,150	5,150	10,700
	FMC4S300 Molded case circuit breaker with thermal adjustable FMC4S 3P 300A 85kA	300	1	2	5,150	5,150	10,700
	FMC4S315 Molded case circuit breaker with thermal adjustable FMC4S 3P 315A 85kA	315	1	2	5,150	5,150	10,700
	FMC4S350 Molded case circuit breaker with thermal adjustable FMC4S 3P 350A 85kA	350	1	2	5,150	5,150	10,700
	FMC4S400 Molded case circuit breaker with thermal adjustable FMC4S 3P 400A 85kA	400	1	2	5,150	5,150	10,700
<b>FMC5S/3U</b>	FMC5S400 Molded case circuit breaker with thermal adjustable FMC5S 3P 400A 85kA	400	1	2	7,200	7,200	14,800
	FMC5S500 Molded case circuit breaker with thermal adjustable FMC5S 3P 500A 85kA	500	1	2	7,200	7,200	14,800
	FMC5S600 Molded case circuit breaker with thermal adjustable FMC5S 3P 600A 85kA	600	1	2	7,200	7,200	14,800
	FMC5S630 Molded case circuit breaker with thermal adjustable FMC5S 3P 630A 85kA	630	1	2	7,200	7,200	14,800
<b>FMC6S/3U</b>	FMC6S600 Molded case circuit breaker with thermal adjustable FMC6S 3P 600A 85kA	600	1	1	8,950	8,950	8,950
	FMC6S630 Molded case circuit breaker with thermal adjustable FMC6S 3P 630A 85kA	630	1	1	8,950	8,950	8,950
	FMC6S700 Molded case circuit breaker with thermal adjustable FMC6S 3P 700A 85kA	700	1	1	8,950	8,950	8,950
	FMC6S800 Molded case circuit breaker with thermal adjustable FMC6S 3P 800A 85kA	800	1	1	8,950	8,950	8,950

## Moulded case circuit breakers with thermal and magnetic adjustable FMC\_Si

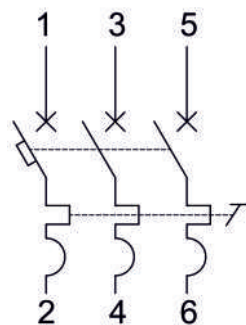
MAX  
800A



### Technical specifications

Series	FMC1Si/3U	FMC4Si/3U	FMC5Si/3U	FMC6Si/3U	
Maximum current size	125	400	630	800	
Rated current of the disconnecter I <sub>n</sub> , A	32, 40, 50, 63, 80, 100, 125	225, 250, 300, 315, 350, 400	400, 500, 600, 630	600, 630, 700, 800	
Standard	IEC60947-2				
Number of poles	3				
Magnetic setpoints I <sub>i</sub> (xI <sub>n</sub> )	8 / 10 / 12				
Thermomagnetic control of I <sub>r</sub> (xI <sub>n</sub> )	0.8/0.9/1				
Rated operating voltage U <sub>n</sub> , V	690				
Rated insulation voltage U <sub>i</sub> , V	800				
Rated pulse voltage U <sub>imp</sub> , V	8000				
Rated frequency f, Hz	50/60				
Rated breaking capacity I <sub>cs</sub> , kA (AC 380/415 V)	25	50	50	50	
Maximum breaking capacity I <sub>cu</sub> , kA (AC 380/415 V)	36	85	85	85	
Switching wear resistance (number of cycles on/off)	electric	7000	1500	1000	1000
	mechanical	10000	5000	4000	4000
Front connection with tires	yes	yes	yes	yes	
Rear tire connection	yes	yes	yes	yes	
Establishing a signal contact	yes	yes	yes	yes	
Establishing a shunt release	yes	yes	yes	yes	
Establishing a voltage control release	yes	yes	yes	yes	
Establishing additional contact	yes	yes	yes	yes	
Installing the manual drive	yes	yes	yes	yes	
Installing the dithering control unit	yes	yes	yes	yes	
Trip unit technology	electromagnetic/thermal				
Net weight, kg	0.95	5.15	7.20	8.95	

### Schematic diagrams



## Moulded case circuit breakers with thermal and magnetic adjustable FMC\_Si

Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FMC4Si</b>							
FMC4Si225	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 225A 85kA	225	1	2	5,150	5,150	10,700
FMC4Si250	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 250A 85kA	250	1	2	5,150	5,150	10,700
FMC4Si300	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 300A 85kA	300	1	2	5,150	5,150	10,700
FMC4Si315	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 315A 85kA	315	1	2	5,150	5,150	10,700
FMC4Si320	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 320A 85kA	320	1	2	5,150	5,150	10,700
FMC4Si350	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 350A 85kA	350	1	2	5,150	5,150	10,700
FMC4Si400	Moulded case circuit breakers with thermal and magnetic adjustable FMC4Si 3P 400A 85kA	400	1	2	5,150	5,150	10,700
<b>FMC5Si</b>							
FMC5Si400	Moulded case circuit breakers with thermal and magnetic adjustable FMC5Si 3P 400A 85kA	400	1	2	7,200	7,200	14,800
FMC5Si500	Moulded case circuit breakers with thermal and magnetic adjustable FMC5Si 3P 500A 85kA	500	1	2	7,200	7,200	14,800
FMC5Si550	Moulded case circuit breakers with thermal and magnetic adjustable FMC5Si 3P 550A 85kA	550	1	2	7,200	7,200	14,800
FMC5Si630	Moulded case circuit breakers with thermal and magnetic adjustable FMC5Si 3P 630A 85kA	630	1	2	7,200	7,200	14,800
<b>FMC6Si</b>							
FMC6Si500	Moulded case circuit breakers with thermal and magnetic adjustable FMC6Si 3P 500A 85kA	500	1	1	8,950	8,950	8,950
FMC6Si630	Moulded case circuit breakers with thermal and magnetic adjustable FMC6Si 3P 630A 85kA	630	1	1	8,950	8,950	8,950
FMC6Si700	Moulded case circuit breakers with thermal and magnetic adjustable FMC6Si 3P 700A 85kA	700	1	1	8,950	8,950	8,950
FMC6Si800	Moulded case circuit breakers with thermal and magnetic adjustable FMC6Si 3P 800A 85kA	800	1	1	8,950	8,950	8,950

FMCsi

## Additional devices for circuit breakers FMC\_S, FMC\_Si



Order code	Full name of	Type with installation option	Mass
F/AX1RS	Auxiliary contact F/AX1RS right	FMC1S/3U	0,050
F/AX1LS	Auxiliary contact F/AX1RS left	FMC1S/3U	0,050
F/AX2RS	Auxiliary contact F/AX2RS right	FMC2S/3U	0,050
F/AX2LS	Auxiliary contact F/AX2RS left	FMC2S/3U	0,050
F/AX3RS	Auxiliary contact F/AX3RS right	FMC3S/3U	0,050
F/AX3LS	Auxiliary contact F/AX3RS left	FMC3S/3U	0,050
F/AX4RS	Auxiliary contact F/AX4RS right	FMC4S/3U	0,070
F/AX4LS	Auxiliary contact F/AX4RS left	FMC4S/3U	0,070
F/AX5RS	Auxiliary contact F/AX5RS right	FMC5S/3U	0,070
F/AX5LS	Auxiliary contact F/AX5RS left	FMC5S/3U	0,070
F/AX6RS	Auxiliary contact F/AX6RS right	FMC6S/3U	0,070
F/AX6LS	Auxiliary contact F/AX6RS left	FMC6S/3U	0,070



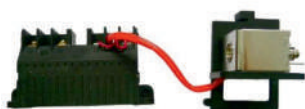
Order code	Full name of	Type with installation option	Mass
F/AL1RS	Signal contact F/AL1RS right	FMC1S/3U	0,050
F/AL1LS	Signal contact F/AL1RS left	FMC1S/3U	0,050
F/AL2RS	Signal contact F/AL2RS right	FMC2S/3U	0,050
F/AL2LS	Signal contact F/AL2RS left	FMC2S/3U	0,050
F/AL3RS	Signal contact F/AL3RS right	FMC3S/3U	0,050
F/AL3LS	Signal contact F/AL3RS left	FMC3S/3U	0,050
F/AL4RS	Signal contact F/AL4RS right	FMC4S/3U	0,070
F/AL4LS	Signal contact F/AL4RS left	FMC4S/3U	0,070
F/AL5RS	Signal contact F/AL5RS right	FMC5S/3U	0,070
F/AL5LS	Signal contact F/AL5RS left	FMC5S/3U	0,070
F/AL6RS	Signal contact F/AL6RS right	FMC6S/3U	0,070
F/AL6LS	Signal contact F/AL6RS left	FMC6S/3U	0,070

## Additional devices for circuit breakers FMC\_S, FMC\_Si

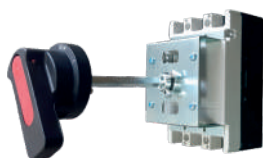
Additional devices



Order code	Full name of	Type with installation option	Mass
F/SH1230RS	Shunt release F/SH1230RS	FMC1S/3U	0,030
F/SH1230LS	Shunt release F/SH1230LS	FMC1S/3U	0,030
F/SH1400RS	Shunt release F/SH1400RS	FMC1S/3U	0,030
F/SH1400LS	Shunt release F/SH1400LS	FMC1S/3U	0,030
F/SH2230RS	Shunt release F/SH2230RS	FMC2S/3U	0,030
F/SH2230LS	Shunt release F/SH2230LS	FMC2S/3U	0,030
F/SH2400RS	Shunt release F/SH2400RS	FMC2S/3U	0,030
F/SH2400LS	Shunt release F/SH2400LS	FMC2S/3U	0,030
F/SH3230RS	Shunt release F/SH3230RS	FMC3S/3U	0,040
F/SH3230LS	Shunt release F/SH3230LS	FMC3S/3U	0,040
F/SH3400RS	Shunt release F/SH3400RS	FMC3S/3U	0,040
F/SH3400LS	Shunt release F/SH3400LS	FMC3S/3U	0,040
F/SH4230RS	Shunt release F/SH4230RS	FMC4S/3U	0,110
F/SH4230LS	Shunt release F/SH4230LS	FMC4S/3U	0,110
F/SH4400RS	Shunt release F/SH4400RS	FMC4S/3U	0,110
F/SH4400LS	Shunt release F/SH4400LS	FMC4S/3U	0,110
F/SH5230RS	Shunt release F/SH5230RS	FMC5S/3U	0,110
F/SH5230LS	Shunt release F/SH5230LS	FMC5S/3U	0,110
F/SH5400RS	Shunt release F/SH5400RS	FMC5S/3U	0,110
F/SH5400LS	Shunt release F/SH5400LS	FMC5S/3U	0,110
F/SH6230RS	Shunt release F/SH6230RS	FMC6S/3U	0,170
F/SH6230LS	Shunt release F/SH6230LS	FMC6S/3U	0,170
F/SH6400RS	Shunt release F/SH6400RS	FMC6S/3U	0,170
F/SH6400LS	Shunt release F/SH6400LS	FMC6S/3U	0,170



Order code	Full name of	Type with installation option	Mass
F/UV1230S	Voltage control release F/UV1230S	FMC1S/3U	0,200
F/UV2230S	Voltage control release F/UV2230S	FMC2S/3U	0,200
F/UV3230S	Voltage control release F/UV3230S	FMC3S/3U	0,120
F/UV4230S	Voltage control release F/UV4230S	FMC4S/3U	0,200
F/UV5230S	Voltage control release F/UV5230S	FMC5S/3U	0,160
F/UV6230S	Voltage control release F/UV6230S	FMC6S/3U	0,160



Order code	Full name of	Type with installation option	Mass
F/HB1S	Manual remote rotary drive F/HB1S	FMC1S/3U	0,470
F/HB2S	Manual remote rotary drive F/HB2S	FMC2S/3U	0,510
F/HB3S	Manual remote rotary drive F/HB3S	FMC3S/3U	0,600
F/HB4S	Manual remote rotary drive F/HB4S	FMC4S/3U	1,310
F/HB5S	Manual remote rotary drive F/HB5S	FMC5S/3U	1,470
F/HB6S	Manual remote rotary drive F/HB6S	FMC6S/3U	1,720



Order code	Full name of	Type with installation option	Mass
MROM31S	Remote control unit MROM3/1S	FMC1S/3U	0,860
MROM32S	Remote control unit MROM3/2S	FMC2S/3U	1,180
MROM33S	Remote control unit MROM3/3S	FMC3S/3U	1,200
MROM34S	Remote control unit MROM3/4S	FMC4S/3U	3,700
MROM35S	Remote control unit MROM3/5S	FMC5S/3U	3,800
MROM36S	Remote control unit MROM3/6S	FMC6S/3U	3,900

## Additional devices for circuit breakers FMC\_S, FMC\_Si



Order code	Full name of	Type with installation option	Mass
F/AX1RSi	Auxiliary contact F/AX1RSi right	FMC1Si/3U	0,05
F/AX1LSi	Auxiliary contact F/AX1RSi left	FMC1Si/3U	0,05
F/AX2RSi	Auxiliary contact F/AX2RSi right	FMC2Si/3U	0,05
F/AX2LSi	Auxiliary contact F/AX2RSi left	FMC2Si/3U	0,05
F/AX3RSi	Auxiliary contact F/AX3RSi right	FMC3Si/3U	0,05
F/AX3LSi	Auxiliary contact F/AX3RSi left	FMC3Si/3U	0,05
F/AX4RSi	Auxiliary contact F/AX4RSi right	FMC4Si/3U	0,07
F/AX4LSi	Auxiliary contact F/AX4RSi left	FMC4Si/3U	0,07
F/AX5RSi	Auxiliary contact F/AX5RSi right	FMC5Si/3U	0,07
F/AX5LSi	Auxiliary contact F/AX5RSi left	FMC5Si/3U	0,07
F/AX6RSi	Auxiliary contact F/AX6RSi right	FMC6Si/3U	0,07
F/AX6LSi	Auxiliary contact F/AX6RSi left	FMC6Si/3U	0,07



Order code	Full name of	Type with installation option	Mass
F/AL1RSi	Signal contact F/AL1RSi right	FMC1Si/3U	0,05
F/AL1LSi	Signal contact F/AL1RSi left	FMC1Si/3U	0,05
F/AL2RSi	Signal contact F/AL2RSi right	FMC2Si/3U	0,05
F/AL2LSi	Signal contact F/AL2RSi left	FMC2Si/3U	0,05
F/AL3RSi	Signal contact F/AL3RSi right	FMC3Si/3U	0,05
F/AL3LSi	Signal contact F/AL3RSi left	FMC3Si/3U	0,05
F/AL4RSi	Signal contact F/AL4RSi right	FMC4Si/3U	0,07
F/AL4LSi	Signal contact F/AL4RSi left	FMC4Si/3U	0,07
F/AL5RSi	Signal contact F/AL5RSi right	FMC5Si/3U	0,07
F/AL5LSi	Signal contact F/AL5RSi left	FMC5Si/3U	0,07
F/AL6RSi	Signal contact F/AL6RSi right	FMC6Si/3U	0,07
F/AL6LSi	Signal contact F/AL6RSi left	FMC6Si/3U	0,07

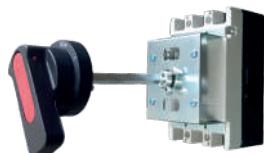


Order code	Full name of	Type with installation option	Mass
F/SH1230RSi	Shunt release F/SH1230RSi	FMC1Si/3U	0,03
F/SH1230LSi	Shunt release F/SH1230LSi	FMC1Si/3U	0,03
F/SH1400RSi	Shunt release F/SH1400RSi	FMC1Si/3U	0,03
F/SH1400LSi	Shunt release F/SH1400LSi	FMC1Si/3U	0,03
F/SH2230RSi	Shunt release F/SH2230RSi	FMC2Si/3U	0,03
F/SH2230LSi	Shunt release F/SH2230LSi	FMC2Si/3U	0,03
F/SH2400RSi	Shunt release F/SH2400RSi	FMC2Si/3U	0,03
F/SH2400LSi	Shunt release F/SH2400LSi	FMC2Si/3U	0,03
F/SH3230RSi	Shunt release F/SH3230RSi	FMC3Si/3U	0,04
F/SH3230LSi	Shunt release F/SH3230LSi	FMC3Si/3U	0,04
F/SH3400RSi	Shunt release F/SH3400RSi	FMC3Si/3U	0,04
F/SH3400LSi	Shunt release F/SH3400LSi	FMC3Si/3U	0,04
F/SH4230RSi	Shunt release F/SH4230RSi	FMC4Si/3U	0,11
F/SH4230LSi	Shunt release F/SH4230LSi	FMC4Si/3U	0,11
F/SH4400RSi	Shunt release F/SH4400RSi	FMC4Si/3U	0,11
F/SH4400LSi	Shunt release F/SH4400LSi	FMC4Si/3U	0,11
F/SH5230RSi	Shunt release F/SH5230RSi	FMC5Si/3U	0,11
F/SH5230LSi	Shunt release F/SH5230LSi	FMC5Si/3U	0,11
F/SH5400RSi	Shunt release F/SH5400RSi	FMC5Si/3U	0,11
F/SH5400LSi	Shunt release F/SH5400LSi	FMC5Si/3U	0,11
F/SH6230RSi	Shunt release F/SH6230RSi	FMC6Si/3U	0,17
F/SH6230LSi	Shunt release F/SH6230LSi	FMC6Si/3U	0,17
F/SH6400RSi	Shunt release F/SH6400RSi	FMC6Si/3U	0,17
F/SH6400LSi	Shunt release F/SH6400LSi	FMC6Si/3U	0,17

## Additional devices for circuit breakers FMC\_S, FMC\_Si



Order code	Full name of	Type with installation option	Mass
F/UV1230Si	Voltage control release F/UV1230Si	FMC1Si/3U	0.20
F/UV2230Si	Voltage control release F/UV2230Si	FMC2Si/3U	0.20
F/UV3230Si	Voltage control release F/UV3230Si	FMC3Si/3U	0.12
F/UV4230Si	Voltage control release F/UV4230Si	FMC4Si/3U	0.20
F/UV5230Si	Voltage control release F/UV5230Si	FMC5Si/3U	0.16
F/UV6230Si	Voltage control release F/UV6230Si	FMC6Si/3U	0.16



Order code	Full name of	Type with installation option	Mass
F/HB1Si	Manual remote rotary drive F/HB1Si	FMC1Si/3U	0.47
F/HB2Si	Manual remote rotary drive F/HB2Si	FMC2Si/3U	0.51
F/HB3Si	Manual remote rotary drive F/HB3Si	FMC3Si/3U	0.60
F/HB4Si	Manual remote rotary drive F/HB4Si	FMC4Si/3U	1.31
F/HB5Si	Manual remote rotary drive F/HB5Si	FMC5Si/3U	1.47
F/HB6Si	Manual remote rotary drive F/HB6Si	FMC6Si/3U	1.72



Order code	Full name of	Type with installation option	Mass
MROM31Si	Remote control unit MROM3/1Si	FMC1Si	0.86
MROM32Si	Remote control unit MROM3/2Si	FMC2Si	1.18
MROM33Si	Remote control unit MROM3/3Si	FMC3Si	1.20
MROM34Si	Remote control unit MROM3/4Si	FMC4Si	3.7
MROM35Si	Remote control unit MROM3/5Si	FMC5Si	3.8
MROM36Si	Remote control unit MROM3/6Si	FMC6Si	3.9

# Moulded case circuit breakers with electronic shunt release FMC\_E

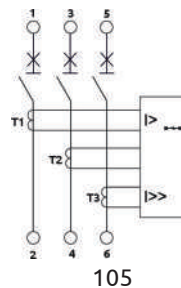


FMCE

## Technical specifications

Series	FMC2E/3U	FMC3E/3U	FMC4E/3U	FMC5E/3U	FMC6E/3U
Maximum current size	160	250	400	630	800
Rated current of the disconnecter I <sub>n</sub> , A	63, 100, 125, 160	100, 125, 160, 200, 250	250, 400	400, 500, 630	630, 800
Number of poles	3				
Standard	IEC60947-2				
Rated current settings I <sub>r1</sub> (A)	0.4-1xI <sub>n</sub>				
Overload trip time t <sub>1</sub> (S)	12, 60, 100, 150 +OFF				
Time-delayed trip current settings I <sub>r2</sub> (xI <sub>r1</sub> )	2, 3, 4, 5, 6, 7, 8, 10, 12 +OFF				
Time delay t <sub>2</sub> (s) by I <sub>r2</sub>	0.06, 0.1, 0.2, 0.3				
Setpoint of the triggering current without time delay I <sub>r3</sub> (xI <sub>r1</sub> )	4, 6, 7, 8, 10, 11, 12, 13, 14 +OFF				
Setting the overload indicator I <sub>ro</sub> (xI <sub>r1</sub> )	0.7, 0.75, 0.8, 0.85, 0.9, 0.95, 1				
Rated operating voltage U <sub>n</sub> , V	690				
Rated insulation voltage U <sub>i</sub> , V	800				
Rated pulse voltage U <sub>imp</sub> , V	8 000				
Rated frequency f, Hz	50/60				
Rated breaking capacity I <sub>cs</sub> , kA (AC 380/415 V)	35	35	50	50	60
Maximum breaking capacity I <sub>cu</sub> , kA (AC 380/415 V)	50	50	85	85	85
Switching wear resistance electric (number of cycles on/off)	7000	1500	1000	1000	1000
Switching wear resistance mechanical	10000	5000	4000	4000	4000
Front connection with tires	yes	yes	yes	yes	yes
Rear tire connection	yes	yes	yes	yes	yes
Establishing a shunt release	yes	yes	yes	yes	yes
Establishing a voltage control release	yes	yes	yes	yes	yes
Establishing additional contact	yes	yes	yes	yes	yes
Establishing a signal contact	yes	yes	yes	yes	yes
Installing the manual drive	yes	yes	yes	yes	yes
Installing the dithering control unit	yes	yes	yes	yes	yes
Trip unit technology	electronic				
Net weight, kg	1.25	1.90	5.15	7.20	8.95

## Schematic diagrams



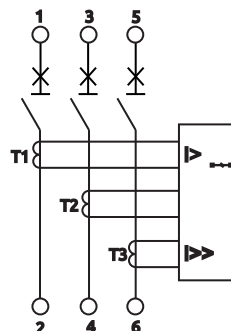


Technical specifications

FMCE

Series	FMC7E/3U
Standard	IEC/EN 60947-2
Number of poles	3
Rated frequency f, Hz	50/60
Rated voltage Un, V	~415/690
Rated current In, A	1000, 1250, 1600
Rated insulation voltage Ui, V	800
Rated pulse voltage Uimp, V	8000
Selective class	3
Release type	electronic
Network type	AC
Application category	B
Rated breaking capacity, Ics, kA (AC 380/415 V)	220/240 AC - 37 380/415 AC - 37 660/690 AC - 22
Nominal ultimate breaking capacity, Icu, A	220/240 AC - 80 380/415 AC - 50 660/690 AC - 30
Rated short-term current Icw, kA/1s	19, 2
Long-term protection control range, Ir	0.4...1 x In
Setting the long-term current, Ir	0.4, 0.5, 0.6, 0.8, 0.9, 0.95, 0.98, 1
Instantaneous protection control range, Tr	12.5...600s 1.5 x Ir 0.5...24s 6 x Ir 0.7...16.6s 7.2 x Ir
Adjustment range of instantaneous lsd protection	1.5...10 x Ir
Setting up the lsd instant protection adjustment	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10
Power loss per pole, W	74
Switching wear resistance (electrical/mechanical)	5000/10000
Mounting method	on the mounting panel
Connecting buses	frontal
Connecting the power supply	top/bottom
Degree of protection	IP40
Degree of impact protection	IK07
Degree of pollution	EN/IEC 60947
Operating position	any

Schematic diagrams



## Moulded case circuit breakers with electronic shunt release FMC\_E

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FMC2E/3U</b>	FMC2E063	Molded case circuit breaker FMC2E 3P 63A 50kA	1	16	1,240	1,240	20,140
	FMC2E100	Molded case circuit breaker FMC2E 3P 100A 50kA	1	16	1,240	1,240	20,140
	FMC2E125	Molded case circuit breaker FMC2E 3P 125A 50kA	1	16	1,240	1,240	20,140
	FMC2E160	Molded case circuit breaker FMC2E 3P 160A 50kA	1	16	1,240	1,240	20,140
<b>FMC3E/3U</b>	FMC3E100	Molded case circuit breaker FMC3E 3P 100A 50kA	1	12	1,900	1,900	23,100
	FMC3E125	Molded case circuit breaker FMC3E 3P 125A 50kA	1	12	1,900	1,900	23,100
	FMC3E160	Molded case circuit breaker FMC3E 3P 160A 50kA	1	12	1,900	1,900	23,100
	FMC3E200	Molded case circuit breaker FMC3E 3P 200A 50kA	1	12	1,900	1,900	23,100
	FMC3E250	Molded case circuit breaker FMC3E 3P 250A 50kA	1	12	1,900	1,900	23,100
				1	12	1,900	1,900
<b>FMC7E/3U</b>	FMC7E1000	Molded case circuit breaker FMC7E 3P 1000A 80kA	1	1	14,000	14,000	14,000
	FMC7E1250	Molded case circuit breaker FMC7E 3P 1250A 80kA	1	1	14,000	14,000	14,000
	FMC7E1600	Molded case circuit breaker FMC7E 3P 1600A 80kA	1	1	14,000	14,000	14,000

**FMCE**

MAX  
800A

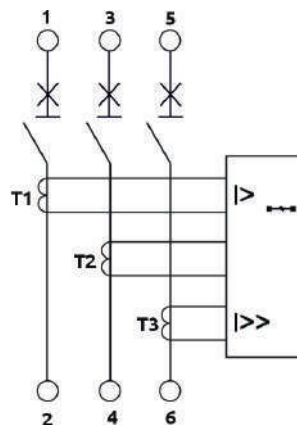


Technical specifications

FMCEi

Series	FMC4Ei	FMC5Ei	FMC6Ei
Rated current of the disconnecter I <sub>n</sub> , A	400	630	800
Control limits, A	0,4-1xI <sub>n</sub>	0,4-1xI <sub>n</sub>	0,4-1xI <sub>n</sub>
Rated current range, A	160-400A in steps 1A	252-630A in steps 1A	320-800A in steps 1A
Delay time, s	12-150s in steps 1s+OFF	12-150s in steps 1s+OFF	12-150s in steps 1s+OFF
Lower short-circuit protection limit, A	320-4800A in steps 1A+OFF	500-7560A in steps 1A+OFF	640-9600A in steps 1A+OFF
Short circuit time, s	0.06-1s in steps 0.01s+OFF	0.06-1s in steps 0.01s+OFF	0.06-1s in steps 0.01s+OFF
Upper limit of short-circuit protection, A	640-5600A in steps 1A+OFF	1000-8820A in steps 1A+OFF	1280-9600A in steps 1A+OFF
Preliminary alarm, A	112-400A in steps 1A	175-630A in steps 1A	224-800A in steps 1A
Rated operating voltage U <sub>n</sub> , V	~415/~690		
Rated insulation voltage U <sub>i</sub> , V	800		
Rated pulse voltage U <sub>imp</sub> , V	8000		
Number of poles	3		
Rated frequency f, Hz	50/60		
Rated operating breaking capacity I <sub>cs</sub> , kA (AC 380/415V)	60		
Maximum operating breaking capacity I <sub>cu</sub> , kA (AC 380/415V)	85		
Rated operating breaking capacity I <sub>cs</sub> , kA (AC 690V)	12		
Maximum operating breaking capacity I <sub>cu</sub> , kA (AC 690V)	17		
Switching wear resistance (electrical/mechanical)	1 000/4 000		
Electronic LCD screen	yes		
Front connection with tires	yes		
Rear tire connection	yes		
Connecting additional devices	yes		
Release type	electronic		
Degree of protection	IP20		

Schematic diagrams



## Moulded case circuit breakers with electronic shunt release FMC\_Ei

	Order code	Full name of	Packaging, pcs			Gross weight, kg		
			Rated current In, A	Packaging	Box	Unit	Packaging	Box
<b>FMC4Ei/3U</b>	FMC4Ei250	Moulded case circuit breakers with electronic block FMC4Ei 3P 250A 85kA	250	1	4	6,050	6,050	24,200
	FMC4Ei320	Moulded case circuit breakers with electronic block FMC4Ei 3P 320A 85kA	320	1	4	6,050	6,050	24,200
	FMC4Ei400	Moulded case circuit breakers with electronic block FMC4Ei 3P 400A 85kA	400	1	4	6,050	6,050	24,200
<b>FMC5Ei/3U</b>	FMC5Ei320	Moulded case circuit breakers with electronic block FMC5Ei 3P 320A 85kA	320	1	4	6,050	6,050	24,200
	FMC5Ei500	Moulded case circuit breakers with electronic block FMC5Ei 3P 500A 85kA	500	1	4	6,300	6,300	25,200
	FMC5Ei630	Moulded case circuit breakers with electronic block FMC5Ei 3P 630A 85kA	630	1	4	6,300	6,300	25,200
<b>FMC6Ei/3U</b>	FMC6Ei800	Moulded case circuit breakers with electronic block FMC6Ei 3P 800A 85kA	800	1	2	10,000	10,000	20,000

FMCEi

## Additional devices for circuit breakers FMC\_E, FMC\_Ei



Order code	Full name of	Type with installation option	Mass
F/AX2RE	Auxiliary contact F/AX2RE right	FMC2E/3U	0,05
F/AX2LE	Auxiliary contact F/AX2RE left	FMC2E/3U	0,05
F/AX3RE	Auxiliary contact F/AX3RE right	FMC3E/3U	0,05
F/AX3LE	Auxiliary contact F/AX3RE left	FMC3E/3U	0,05
F/AX4RE	Auxiliary contact F/AX4RE right	FMC4E/3U	0,07
F/AX4LE	Auxiliary contact F/AX4RE left	FMC4E/3U	0,07
F/AX5RE	Auxiliary contact F/AX5RE right	FMC5E/3U	0,07
F/AX5LE	Auxiliary contact F/AX5RE left	FMC5E/3U	0,07
F/AX6RE	Auxiliary contact F/AX6RE right	FMC6E/3U	0,07
F/AX6LE	Auxiliary contact F/AX6RE left	FMC6E/3U	0,07



Order code	Full name of	Type with installation option	Mass
F/AL2RE	Signal contact F/AL2RE right	FMC2E/3U	0,05
F/AL2LE	Signal contact F/AL2RE left	FMC2E/3U	0,05
F/AL3RE	Signal contact F/AL3RE right	FMC3E/3U	0,05
F/AL3LE	Signal contact F/AL3RE left	FMC3E/3U	0,05
F/AL4RE	Signal contact F/AL4RE right	FMC4E/3U	0,07
F/AL4LE	Signal contact F/AL4RE left	FMC4E/3U	0,07
F/AL5RE	Signal contact F/AL5RE right	FMC5E/3U	0,07
F/AL5LE	Signal contact F/AL5RE left	FMC5E/3U	0,07
F/AL6RE	Signal contact F/AL6RE right	FMC6E/3U	0,07
F/AL6LE	Signal contact F/AL6RE left	FMC6E/3U	0,07

## Additional devices for circuit breakers FMC\_E, FMC\_Ei

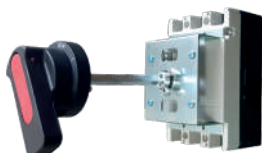
Additional devices



Order code	Full name of	Type with installation option	Mass
F/SH2230RE	Shunt release F/SH2230RE	FMC2E/3U	0,03
F/SH2230LE	Shunt release F/SH2230LE	FMC2E/3U	0,03
F/SH2400RE	Shunt release F/SH2400RE	FMC2E/3U	0,03
F/SH2400LE	Shunt release F/SH2400LE	FMC2E/3U	0,03
F/SH3230RE	Shunt release F/SH3230RE	FMC3E/3U	0,04
F/SH3230LE	Shunt release F/SH3230LE	FMC3E/3U	0,04
F/SH3400RE	Shunt release F/SH3400RE	FMC3E/3U	0,04
F/SH3400LE	Shunt release F/SH3400LE	FMC3E/3U	0,04
F/SH4230RE	Shunt release F/SH4230RE	FMC4E/3U	0,11
F/SH4230LE	Shunt release F/SH4230LE	FMC4E/3U	0,11
F/SH4400RE	Shunt release F/SH4400RE	FMC4E/3U	0,11
F/SH4400LE	Shunt release F/SH4400LE	FMC4E/3U	0,11
F/SH5230RE	Shunt release F/SH5230RE	FMC5E/3U	0,11
F/SH5230LE	Shunt release F/SH5230LE	FMC5E/3U	0,11
F/SH5400RE	Shunt release F/SH5400RE	FMC5E/3U	0,11
F/SH5400LE	Shunt release F/SH5400LE	FMC5E/3U	0,11
F/SH6230RE	Shunt release F/SH6230RE	FMC6E/3U	0,17
F/SH6230LE	Shunt release F/SH6230LE	FMC6E/3U	0,17
F/SH6400RE	Shunt release F/SH6400RE	FMC6E/3U	0,17
F/SH6400LE	Shunt release F/SH6400LE	FMC6E/3U	0,17



Order code	Full name of	Type with installation option	Mass
F/UV2230E	Voltage control release F/UV2230E	FMC2E/3U	0.20
F/UV3230E	Voltage control release F/UV3230E	FMC3E/3U	0.12
F/UV4230E	Voltage control release F/UV4230E	FMC4E/3U	0.20
F/UV5230E	Voltage control release F/UV5230E	FMC5E/3U	0.16
F/UV6230E	Voltage control release F/UV6230E	FMC6E/3U	0.16



Order code	Full name of	Type with installation option	Mass
F/HB2E	Manual remote rotary drive F/HB2E	FMC2E/3U	0.51
F/HB3E	Manual remote rotary drive F/HB3E	FMC3E/3U	0.60
F/HB4E	Manual remote rotary drive F/HB4E	FMC4E/3U	1.31
F/HB5E	Manual remote rotary drive F/HB5E	FMC5E/3U	1.47
F/HB6E	Manual remote rotary drive F/HB6E	FMC6E/3U	1.72



Order code	Full name of	Type with installation option	Mass
MROM32E	Remote control unit MROM3/2E	FMC2E/3U	1.18
MROM33E	Remote control unit MROM3/3E	FMC3E/3U	1.20
MROM34E	Remote control unit MROM3/4E	FMC4E/3U	3.7
MROM35E	Remote control unit MROM3/5E	FMC5E/3U	3.8
MROM36E	Remote control unit MROM3/6E	FMC6E/3U	3.9



Order code	Full name of	Type with installation option	Mass
F/AX4REi	Auxiliary contact F/AX4REi right	FMC4Ei/3U	0,07
F/AX4LEi	Auxiliary contact F/AX4LEi left	FMC4Ei/3U	0,07
F/AX5REi	Auxiliary contact F/AX5REi right	FMC5Ei/3U	0,07
F/AX5LEi	Auxiliary contact F/AX5LEi left	FMC5Ei/3U	0,07
F/AX6REi	Auxiliary contact F/AX6REi right	FMC6Ei/3U	0,07
F/AX6LEi	Auxiliary contact F/AX6LEi left	FMC6Ei/3U	0,07

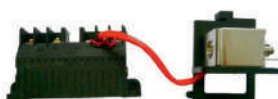
## Additional devices for circuit breakers FMC\_E, FMC\_Ei



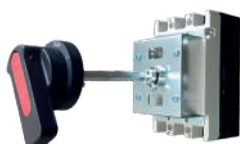
Order code	Full name of	Type with installation option	Mass
F/AL4REi	Signal contact F/AL4REi right	FMC4Ei/3U	0,07
F/AL4LEi	Signal contact F/AL4REi left	FMC4Ei/3U	0,07
F/AL5REi	Signal contact F/AL5REi right	FMC5Ei/3U	0,07
F/AL5LEi	Signal contact F/AL5REi left	FMC5Ei/3U	0,07
F/AL6REi	Signal contact F/AL6REi right	FMC6Ei/3U	0,07
F/AL6LEi	Signal contact F/AL6REi left	FMC6Ei/3U	0,07



Order code	Full name of	Type with installation option	Mass
F/SH4230REi	Shunt release F/SH4230REi	FMC4Ei/3U	0,11
F/SH4230LEi	Shunt release F/SH4230LEi	FMC4Ei/3U	0,11
F/SH4400REi	Shunt release F/SH4400REi	FMC4Ei/3U	0,11
F/SH4400LEi	Shunt release F/SH4400LEi	FMC4Ei/3U	0,11
F/SH5230REi	Shunt release F/SH5230REi	FMC5Ei/3U	0,11
F/SH5230LEi	Shunt release F/SH5230LEi	FMC5Ei/3U	0,11
F/SH5400REi	Shunt release F/SH5400REi	FMC5Ei/3U	0,11
F/SH5400LEi	Shunt release F/SH5400LEi	FMC5Ei/3U	0,11
F/SH6230REi	Shunt release F/SH6230REi	FMC6Ei/3U	0,17
F/SH6230LEi	Shunt release F/SH6230LEi	FMC6Ei/3U	0,17
F/SH6400REi	Shunt release F/SH6400REi	FMC6Ei/3U	0,17
F/SH6400LEi	Shunt release F/SH6400LEi	FMC6Ei/3U	0,17



Order code	Full name of	Type with installation option	Mass
F/UV4230Ei	Voltage control release F/UV4230Ei	FMC4Ei/3U	0,20
F/UV5230Ei	Voltage control release F/UV5230Ei	FMC5Ei/3U	0,16
F/UV6230Ei	Voltage control release F/UV6230Ei	FMC6Ei/3U	0,16



Order code	Full name of	Type with installation option	Mass
F/HB4Ei	Manual remote rotary drive F/HB4Ei	FMC4Ei/3U	1.31
F/HB5Ei	Manual remote rotary drive F/HB5Ei	FMC5Ei/3U	1.47
F/HB6Ei	Manual remote rotary drive F/HB6Ei	FMC6Ei/3U	1.72



Order code	Full name of	Type with installation option	Mass
MROM34Ei	Remote control unit MROM3/4Ei	FMC4Ei/3U	3.7
MROM35Ei	Remote control unit MROM3/5Ei	FMC5Ei/3U	3.8
MROM36Ei	Remote control unit MROM3/6Ei	FMC6Ei/3U	3.9



**Air circuit breakers of the FMCxA series** are used in low-voltage switchboard equipment for distribution and protection against overcurrents, short circuits, and single-phase earth faults.



**Technical specifications**

Series	FMC8A						
Standard	IEC 60947-2						
Compliance with insulation requirements	IEC 60947-2						
Construction of the actuator	power button/coil						
Type of drive mechanism	manual / motorized drive with charged spring						
Number of poles	3P						
Rated current $I_n$ , A	630	800	1 000	1 250	1 600	2 000	
Current control limits	0.2 - 1 $I_n$						
Network type	variable						
Rated frequency $f$ , Hz	50/60						
Rated operating voltage $U_n$ , V	690						
Rated insulation voltage $U_i$ , V	1 000						
Pulse voltage $U_{imp}$ , V	8 000						
Rated operating breaking capacity, $I_{cs}$							
- at 400V / rated value, kA	50						
- at 690V / rated value, kA	40						
Rated ultimate breaking capacity, $I_{cu}$							
- at 400V / rated value, kA	80						
- at 690V / rated value, kA	50						
Switch-on time $t$ , ms	30-40						
Shutdown time $t$ , ms	23-32						
Power loss per pole, W	16.7	23.3	57.3	89.3	146.6	176.6	
Short-term current $I_{cw}$ :							
- limited to 1s (400V) / rated value, kA	50						
- limited to 1s (690V) / rated value, kA	40						
The value of the operating current:							
- at 40 °C / rated value, A	630	800	1 000	1 250	1 600	2 000	
- at 50 °C / rated value, A	630	800	1 000	1 250	1 500	1 900	
- at 55 °C / rated value, A	630	800	1 000	1 250	1 500	1 800	
- at 60 °C / rated value, A	610	800	1 000	1 150	1 300	1 700	
- at 65 °C / rated value, A	610	800	1 000	1 150	1 300	1 650	
- at 70 °C / rated value, A	473	640	750	938	1 200	1 400	
Adjustable triggering current:							
- of the short-term delayed short-circuit recloser / initial value, A	630	800	1 000	1 250	1 600	2 000	
- of the short-term delayed short-circuit recloser / final value, A	5 040	6 400	8 000	10 000	12 800	16 000	
Release type	electronic						
Display type	monochrome						
Type of electrical connection for the main current circuit	busbar connection						
Tire arrangement	horizontal						
Type of execution	retractable, fixed						
Method of mounting tires	horizontal						
The presence of a voltage indicator	yes, on/off indication						
Mechanical wear resistance (number of on/off cycles)	15 000 without maintenance 30 000 with maintenance						
Electrical wear resistance (number of on/off cycles)	6 500						
Possibility of sealing adjustments	yes						
Degree of protection	IP20 according to IEC 60529						
Degree of pollution	3 according to EN/IEC 60947-2						
Net weight, kg	retractable	66	66	70	70	70	79
	fixed	40	40	41	41	41	42

FMCA



**Air circuit breakers of the FMCxA series** are used in low-voltage switchboard equipment for distribution and protection against overcurrents, short circuits, and single-phase earth faults.



FMCA

## Technical specifications

Series	FMC9A			
Standard	IEC 60947-2			
Compliance with insulation requirements	IEC 60947-2			
Construction of the actuator	power button/coil			
Type of drive mechanism	manual / motorized drive with charged spring			
Number of poles	3P			
Rated current I <sub>n</sub> , A	2 000	2 500	3 200	
Current control limits	0.2 - 1I <sub>n</sub>			
Network type	variable			
Rated frequency f, Hz	50/60			
Rated operating voltage U <sub>n</sub> , V	690			
Rated insulation voltage U <sub>i</sub> , V	1 000			
Pulse voltage U <sub>imp</sub> , V	8 000			
Rated operating breaking capacity, I <sub>cs</sub>				
- at 400V / rated value, kA	65			
- at 690V / rated value, kA	55			
Rated ultimate breaking capacity, I <sub>cu</sub>				
- at 400V / rated value, kA	80			
- at 690V / rated value, kA	65			
Switch-on time t, ms	30-40			
Shutdown time t, ms	23-32			
Power loss per pole, W (fixed/retractable)	186 / 320	270 / 520	410 / 710	
Short-term current I <sub>cw</sub> :				
- limited to 1s (400V) / rated value, kA	65			
- limited to 1s (690V) / rated value, kA	55			
The value of the operating current:				
- at 40 °C / rated value, A	2 000	2 500	3 200	
- at 50 °C / rated value, A	2 000	2 500	3 200	
- at 55 °C / rated value, A	1 900	2 500	3 200	
- at 60 °C / rated value, A	1 800	2 440	3 120	
- at 65 °C / rated value, A	1 700	2 330	3 020	
- at 70 °C / rated value, A	1 550	2 280	2 870	
Adjustable triggering current:				
- of the short-term delayed short-circuit recloser / initial value, A	2 000	2 500	3 200	
- of the short-term delayed short-circuit recloser / final value, A	16 000	20 000	25 600	
Release type	electronic			
Display type	monochrome			
Type of electrical connection for the main current circuit	busbar connection			
Tire arrangement	horizontal			
Type of execution	retractable, fixed			
Method of mounting tires	horizontal			
The presence of a voltage indicator	yes, on/off indication			
Mechanical wear resistance (number of on/off cycles)	10 000 without maintenance 20 000 with maintenance			
Electrical wear resistance (number of on/off cycles)	3 000			
Possibility of sealing adjustments	yes			
Degree of protection	IP20 according to IEC 60529			
Degree of pollution	3 according to EN/IEC 60947-2			
Net weight, kg	retractable	86	86	89
	fixed	52	52	54



**Air circuit breakers of the FMCxA series** are used in low-voltage switchboard equipment for distribution and protection against overcurrents, short circuits, and single-phase earth faults.

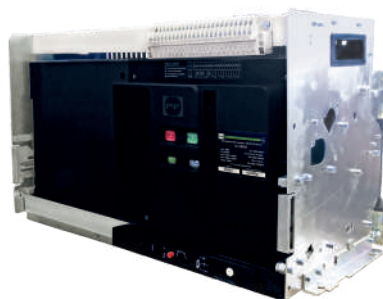


**Technical specifications**

Series	FMC10A
Standard	IEC 60947-2
Compliance with insulation requirements	IEC 60947-2
Construction of the actuator	power button/coil
Type of drive mechanism	manual / motorized drive with charged spring
Number of poles	3P
Rated current I <sub>n</sub> , A	4 000
Current control limits	0.2 - 1I <sub>n</sub>
Network type	variable
Rated frequency f, Hz	50/60
Rated operating voltage U <sub>n</sub> , V	690
Rated insulation voltage U <sub>i</sub> , V	1 000
Pulse voltage U <sub>imp</sub> , V	8 000
Rated operating breaking capacity, I <sub>cs</sub>	
- at 400V / rated value, kA	80
- at 690V / rated value, kA	65
Rated ultimate breaking capacity, I <sub>cu</sub>	
- at 400V / rated value, kA	100
- at 690V / rated value, kA	80
Switch-on time t, ms	30-40
Shutdown time t, ms	23-32
Power loss per pole, W (fixed/retractable)	520 / 810
Short-term current I <sub>cw</sub> :	
- limited to 1s (400V) / rated value, kA	80
- limited to 1s (690V) / rated value, kA	65
The value of the operating current:	
- at 40 °C / rated value, A	4 000
- at 50 °C / rated value, A	4 000
- at 55 °C / rated value, A	4 000
- at 60 °C / rated value, A	3 950
- at 65 °C / rated value, A	3 900
- at 70 °C / rated value, A	2 850
Adjustable triggering current:	
- of the short-term delayed short-circuit recloser / initial value, A	4 000
- of the short-term delayed short-circuit recloser / final value, A	32 000
Release type	electronic
Display type	monochrome
Type of electrical connection for the main current circuit	busbar connection
Tire arrangement	horizontal
Type of execution	retractable, fixed
Method of mounting tires	horizontal
The presence of a voltage indicator	yes, on/off indication
Mechanical wear resistance (number of on/off cycles)	10 000 without maintenance 20 000 with maintenance
Electrical wear resistance (number of on/off cycles)	1 500
Possibility of sealing adjustments	yes
Degree of protection	IP20 according to IEC 60529
Degree of pollution	3 according to EN/IEC 60947-2
Net weight, kg	retractable 133 fixed 85



**Air circuit breakers of the FMCxA series** are used in low-voltage switchboard equipment for distribution and protection against overcurrents, short circuits, and single-phase earth faults.



**Technical specifications**

Series	FMC11A	
Standard	IEC 60947-2	
Compliance with insulation requirements	IEC 60947-2	
Construction of the actuator	power button/coil	
Type of drive mechanism	manual / motorized drive with charged spring	
Number of poles	3P	
Rated current I <sub>n</sub> , A	4 000	5 000
Current control limits	0.2 - 1I <sub>n</sub>	
Network type	variable	
Rated frequency f, Hz	50/60	
Rated operating voltage U <sub>n</sub> , V	690	
Rated insulation voltage U <sub>i</sub> , V	1 000	
Pulse voltage U <sub>imp</sub> , V	8 000	
Rated operating breaking capacity, I <sub>cs</sub>		
- at 400V / rated value, kA	100	
- at 690V / rated value, kA	80	
Rated ultimate breaking capacity, I <sub>cu</sub>		
- at 400V / rated value, kA	120	
- at 690V / rated value, kA	100	
Switch-on time t, ms	30-40	
Shutdown time t, ms	23-32	
Power loss per pole, W	1050	
Short-term current I <sub>cw</sub> :		
- limited to 1s (400V) / rated value, kA	100	
- limited to 1s (690V) / rated value, kA	80	
The value of the operating current:		
- at 40 °C / rated value, A	4 000	5 000
- at 50 °C / rated value, A	4 000	5 000
- at 55 °C / rated value, A	4 000	5 000
- at 60 °C / rated value, A	3 950	4 900
- at 65 °C / rated value, A	3 900	4 800
- at 70 °C / rated value, A	2 850	4 750
Adjustable triggering current:		
- of the short-term delayed short-circuit recloser / initial value, A	4 000	4 000
- of the short-term delayed short-circuit recloser / final value, A	32 000	32 000
Release type	electronic	
Display type	monochrome	
Type of electrical connection for the main current circuit	busbar connection	
Tire arrangement	horizontal	
Type of execution	retractable	
Method of mounting tires	horizontal	
The presence of a voltage indicator	yes, on/off indication	
Mechanical wear resistance (number of on/off cycles)	10 000 without maintenance 20 000 with maintenance	
Electrical wear resistance (number of on/off cycles)	1 500	
Possibility of sealing adjustments	yes	
Degree of protection	IP20 according to IEC 60529	
Degree of pollution	3 according to EN/IEC 60947-2	
Net weight, kg	retractable	203

## Air circuit breakers FMCA

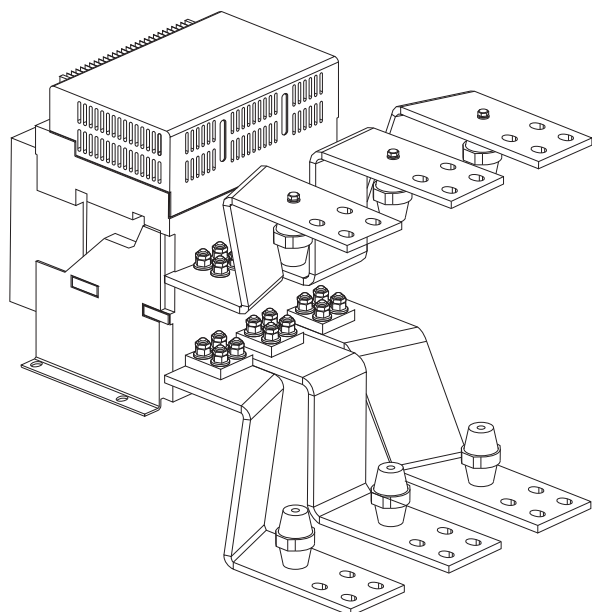
Order code	Full name of	Rated current In, A	Packaging, pcs		Gross weight, kg			
			Packaging	Box	Unit	Packaging	Box	
<b>FMC8A</b>	FMC80630AD	Air circuit breaker FMC8A (drawable) 3P 630A	630	1	1	78,000	78,000	78,000
	FMC80630AF	Air circuit breaker FMC8A (fixed) 3P 630A	630	1	1	49,000	49,000	49,000
	FMC80800AD	Air circuit breaker FMC8A (drawable) 3P 800A	800	1	1	78,000	78,000	78,000
	FMC80800AF	Air circuit breaker FMC8A (fixed) 3P 800A	800	1	1	49,000	49,000	49,000
	FMC81000AD	Air circuit breaker FMC8A (drawable) 3P 1000A	1000	1	1	78,000	78,000	78,000
	FMC81000AF	Air circuit breaker FMC8A (fixed) 3P 1000A	1000	1	1	49,000	49,000	49,000
	FMC81250AD	Air circuit breaker FMC8A (drawable) 3P 1250A	1250	1	1	78,000	78,000	78,000
	FMC81250AF	Air circuit breaker FMC8A (fixed) 3P 1250A	1250	1	1	49,000	49,000	49,000
	FMC81600AD	Air circuit breaker FMC8A (drawable) 3P 1600A	1600	1	1	78,000	78,000	78,000
	FMC81600AF	Air circuit breaker FMC8A (fixed) 3P 1600A	1600	1	1	49,000	49,000	49,000
	FMC82000AD	Air circuit breaker FMC8A (drawable) 3P 2000A	2000	1	1	87,000	87,000	87,000
	FMC82000AF	Air circuit breaker FMC8A (fixed) 3P 2000A	2000	1	1	50,000	50,000	50,000

<b>FMC9A</b>	FMC92000AD	Air circuit breaker FMC9A (drawable) 3P 2000A	2000	1	1	96,000	96,000	96,000
	FMC92000AF	Air circuit breaker FMC9A (fixed) 3P 2000A	2000	1	1	60,000	60,000	60,000
	FMC92500AD	Air circuit breaker FMC9A (drawable) 3P 2500A	2500	1	1	96,000	96,000	96,000
	FMC92500AF	Air circuit breaker FMC9A (fixed) 3P 2500A	2500	1	1	60,000	60,000	60,000
	FMC93200AD	Air circuit breaker FMC9A (drawable) 3P 3200A	3200	1	1	99,000	99,000	99,000
	FMC93200AF	Air circuit breaker FMC9A (fixed) 3P 3200A	3200	1	1	64,000	64,000	64,000

<b>FMC10A</b>	FMC104000AD	Air circuit breaker FMC10A (drawable) 3P 4000A	4000	1	1	145,000	145,000	145,000
	FMC104000AF	Air circuit breaker FMC10A (fixed) 3P 4000A	4000	1	1	95,000	95,000	95,000

<b>FMC11A</b>	FMC114000AD	Air circuit breaker FMC11A (drawable) 3P 4000A	4000	1	1	216,000	216,000	216,000
	FMC115000AD	Air circuit breaker FMC11A (drawable) 3P 5000A	5000	1	1	216,000	216,000	216,000
	FMC116300AD	Air circuit breaker FMC11A (drawable) 3P 6300A	6300	1	1	216,000	216,000	216,000

## Set of adapter busbars



To replace the old type of circuit breakers (AVM, AV2M, Electron and similar series), our company manufactures a set of adaptation busbars for a specific electrical installation, which makes it possible to carry out the reconstruction without changing the approach busbars in the shortest possible time and at minimal cost.

The technical parameters of the adaptation kit are agreed with the customer individually.



**Technical specifications**

Compliance with IEC 60947-4-1 standard

Type of starter	Rated voltage of power contacts $U_n$ , V	Insulation voltage $U_i$ , V	Conditional thermal current (AC-1) $I_{th}$ , A	Rated current (AC-3) $I_n$ , A	Rated power of main contacts according to AC-3 P, kW			Rated voltage of the control coil $U_c$ , V	Operating voltage range of the control coil	Coil actuation power at $U_n$ , P, W		Number and type of additional contacts	Allowable frequency of operations, cycles per hour	AC-3 electrical wear resistance, million on/off cycles	Mechanical wear resistance of AC-3, million on/off cycles	Weight, kg
					230V	400V	690V			Triggering	Keeping					
FC 1/6	~230/400/690	690	20	6	1.5	3	4	~24, 36, 42, 110, 230, 400	85-110% $U_n$	40	7	1NO/1NC	1200	1	10	0.31
FC 1/9			22	9	2.2	4	5.5			60	9	1NO/1NC	1200	1	10	0.31
FC 1/10			23	10	2.5	4.5	6			60	9	1NO/1NC	1200	1	10	0.31
FC 1/12			24	12	3	5.5	7.5			60	9	1NO/1NC	1200	1	10	0.31
FC 1/16			28	16	4	7.5	11			60	9	1NO/1NC	1200	1	10	0.31
FC 1/18			30	18	5	8.5	13			60	9	1NO/1NC	1200	1	10	0.31
FC 2/25			45	25	6	11	15			122	12	1NO/1NC	1200	1	10	0.54
FC 3/32			55	32	8	15	18.5			122	12	1NO/1NC	1200	0.8	8	0.65
FC 3/40			70	40	11	18.6	22			175	20	1NO+1NC	1200	0.6	8	1.1
FC 4/40			70	40	11	18.6	22			175	20	1NO+1NC	1200	0.6	8	1.1
FC 4/50			100	50	15	22	30			175	20	1NO+1NC	1200	0.6	8	1.1
FC 4/63			115	63	18.5	30	37			175	20	1NO+1NC	1200	0.6	8	1.1
FC 4/65			115	65	18.5	30	37			175	20	1NO+1NC	1200	0.6	8	1.1
FC 4/75			125	75	22	37	45			175	20	1NO+1NC	1200	0.6	8	1.1
FC 4/80			80	80	22	37	55			175	20	1NO+1NC	1200	0.6	8	1.1
FC 5/63			80	63	18.5	30	55			450	55	4NO+2NC	1200	1.2	10	2.65
FC 5/80			80	80	22	37	55			450	55	4NO+2NC	1200	1.2	10	2.65
FC 5/100			125	100	30	45	75			450	55	4NO+2NC	1200	1.2	10	2.65
FC 5/125			125	125	37	55	75			450	55	4NO+2NC	1200	1.2	10	2.65
FC 6/160			265	160	45	75	110			880	88	4NO+2NC	1200	1.2	10	5.2
FC 6/200			265	200	55	90	110			880	88	4NO+2NC	1200	1.2	10	5.2
FC 6/250			265	250	75	132	110			880	88	4NO+2NC	1200	1.2	10	5.2
FC 6/265			265	265	85	147	110			880	88	4NO+2NC	600	0.6	6	10.05
FC 7/315			500	315	90	160	300			1170	152	4NO+2NC	600	0.6	6	10.05
FC 7/400			500	400	110	220	300			1170	152	4NO+2NC	600	0.6	6	10.05
FC 7/500			500	500	150	280	300			1170	170	4NO+2NC	600	0.3	3	10.05

Cross-section of the connected conductors, mm	FC1	FC2	FC3	FC4	FC5	FC6	FC7
Main contacts	1-4	1-4	2.5-16	2.5-16	-	-	-
Auxiliary contacts	1-4	1-4	1-2.5	1-2.5	1-2.5	1-2.5	1-2.5

## Contactors FC

### FC1 1NC



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FC11012110	Contactora FC-1/12A coil AC110V 1NC	1	50	0,340	0,340	17
FC11012230	Contactora FC-1/12A coil AC230V 1NC	1	50	0,340	0,340	17
FC11012024	Contactora FC-1/12A coil AC24V 1NC	1	50	0,340	0,340	17
FC11012036	Contactora FC-1/12A coil AC36V 1NC	1	50	0,340	0,340	17
FC11012400	Contactora FC-1/12A coil AC400V 1NC	1	50	0,340	0,340	17
FC11012042	Contactora FC-1/12A coil AC42V 1NC	1	50	0,340	0,340	17
FC11016110	Contactora FC-1/16A coil AC110V 1NC	1	50	0,340	0,340	17
FC11016230	Contactora FC-1/16A coil AC230V 1NC	1	50	0,340	0,340	17
FC11016024	Contactora FC-1/16A coil AC24V 1NC	1	50	0,340	0,340	17
FC11016036	Contactora FC-1/16A coil AC36V 1NC	1	50	0,340	0,340	17
FC11016400	Contactora FC-1/16A coil AC400V 1NC	1	50	0,340	0,340	17
FC11016042	Contactora FC-1/16A coil AC42V 1NC	1	50	0,340	0,340	17
FC11018110	Contactora FC-1/18A coil AC110V 1NC	1	50	0,340	0,340	17
FC11018230	Contactora FC-1/18A coil AC230V 1NC	1	50	0,340	0,340	17
FC11018024	Contactora FC-1/18A coil AC24V 1NC	1	50	0,340	0,340	17
FC11018036	Contactora FC-1/18A coil AC36V 1NC	1	50	0,340	0,340	17
FC11018400	Contactora FC-1/18A coil AC400V 1NC	1	50	0,340	0,340	17
FC11018042	Contactora FC-1/18A coil AC42V 1NC	1	50	0,340	0,340	17
FC11006110	Contactora FC-1/6A coil AC110V 1NC	1	50	0,340	0,340	17
FC11006230	Contactora FC-1/6A coil AC230V 1NC	1	50	0,340	0,340	17
FC11006024	Contactora FC-1/6A coil AC24V 1NC	1	50	0,340	0,340	17
FC11006036	Contactora FC-1/6A coil AC36V 1NC	1	50	0,340	0,340	17
FC11006400	Contactora FC-1/6A coil AC400V 1NC	1	50	0,340	0,340	17
FC11006042	Contactora FC-1/6A coil AC42V 1NC	1	50	0,340	0,340	17
FC11009110	Contactora FC-1/9A coil AC110V 1NC	1	50	0,340	0,340	17
FC11009230	Contactora FC-1/9A coil AC230V 1NC	1	50	0,340	0,340	17
FC11009024	Contactora FC-1/9A coil AC24V 1NC	1	50	0,340	0,340	17
FC11009036	Contactora FC-1/9A coil AC36V 1NC	1	50	0,340	0,340	17
FC11009400	Contactora FC-1/9A coil AC400V 1NC	1	50	0,340	0,340	17
FC11009042	Contactora FC-1/9A coil AC42V 1NC	1	50	0,340	0,340	17

### FC1 1NO



FC10012110	Contactora FC-1/12A coil AC110V 1NO	1	50	0,340	0,340	17
FC10012230	Contactora FC-1/12A coil AC230V 1NO	1	50	0,340	0,340	17
FC10012024	Contactora FC-1/12A coil AC24V 1NO	1	50	0,340	0,340	17
FC10012036	Contactora FC-1/12A coil AC36V 1NO	1	50	0,340	0,340	17
FC10012400	Contactora FC-1/12A coil AC400V 1NO	1	50	0,340	0,340	17
FC10012042	Contactora FC-1/12A coil AC42V 1NO	1	50	0,340	0,340	17
FC10016110	Contactora FC-1/16A coil AC110V 1NO	1	50	0,340	0,340	17
FC10016230	Contactora FC-1/16A coil AC230V 1NO	1	50	0,340	0,340	17
FC10016024	Contactora FC-1/16A coil AC24V 1NO	1	50	0,340	0,340	17
FC10016036	Contactora FC-1/16A coil AC36V 1NO	1	50	0,340	0,340	17
FC10016400	Contactora FC-1/16A coil AC400V 1NO	1	50	0,340	0,340	17
FC10016042	Contactora FC-1/16A coil AC42V 1NO	1	50	0,340	0,340	17
FC10018110	Contactora FC-1/18A coil AC110V 1NO	1	50	0,340	0,340	17
FC10018230	Contactora FC-1/18A coil AC230V 1NO	1	50	0,340	0,340	17
FC10018024	Contactora FC-1/18A coil AC24V 1NO	1	50	0,340	0,340	17
FC10018036	Contactora FC-1/18A coil AC36V 1NO	1	50	0,340	0,340	17
FC10018400	Contactora FC-1/18A coil AC400V 1NO	1	50	0,340	0,340	17
FC10018042	Contactora FC-1/18A coil AC42V 1NO	1	50	0,340	0,340	17
FC10006110	Contactora FC-1/6A coil AC110V 1NO	1	50	0,340	0,340	17
FC10006230	Contactora FC-1/6A coil AC230V 1NO	1	50	0,340	0,340	17
FC10006024	Contactora FC-1/6A coil AC24V 1NO	1	50	0,340	0,340	17
FC10006036	Contactora FC-1/6A coil AC36V 1NO	1	50	0,340	0,340	17
FC10006400	Contactora FC-1/6A coil AC400V 1NO	1	50	0,340	0,340	17
FC10006042	Contactora FC-1/6A coil AC42V 1NO	1	50	0,340	0,340	17
FC10009110	Contactora FC-1/9A coil AC110V 1NO	1	50	0,340	0,340	17
FC10009230	Contactora FC-1/9A coil AC230V 1NO	1	50	0,340	0,340	17
FC10009024	Contactora FC-1/9A coil AC24V 1NO	1	50	0,340	0,340	17
FC10009036	Contactora FC-1/9A coil AC36V 1NO	1	50	0,340	0,340	17
FC10009400	Contactora FC-1/9A coil AC400V 1NO	1	50	0,340	0,340	17
FC10009042	Contactora FC-1/9A coil AC42V 1NO	1	50	0,340	0,340	17

## Contactors FC

### FC2 1NC



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FC21025110	Contactora FC-2/25A coil AC110V 1NC	1	40	0,560	0,560	22,400
FC21025230	Contactora FC-2/25A coil AC230V 1NC	1	40	0,560	0,560	22,400
FC21025024	Contactora FC-2/25A coil AC24V 1NC	1	40	0,560	0,560	22,400
FC21025036	Contactora FC-2/25A coil AC36V 1NC	1	40	0,560	0,560	22,400
FC21025400	Contactora FC-2/25A coil AC400V 1NC	1	40	0,560	0,560	22,400
FC21025042	Contactora FC-2/25A coil AC42V 1NC	1	40	0,560	0,560	22,400
FC21025048	Contactora FC-2/25A coil AC48V 1NC	1	40	0,560	0,560	22,400

### FC2 1NO



FC20025110	Contactora FC-2/25A coil AC110V 1NO	1	40	0,560	0,560	22,400
FC20025230	Contactora FC-2/25A coil AC230V 1NO	1	40	0,560	0,560	22,400
FC20025024	Contactora FC-2/25A coil AC24V 1NO	1	40	0,560	0,560	22,400
FC20025036	Contactora FC-2/25A coil AC36V 1NO	1	40	0,560	0,560	22,400
FC20025400	Contactora FC-2/25A coil AC400V 1NO	1	40	0,560	0,560	22,400
FC20025042	Contactora FC-2/25A coil AC42V 1NO	1	40	0,560	0,560	22,400
FC20025048	Contactora FC-2/25A coil AC48V 1NO	1	40	0,560	0,560	22,400

### FC3 1NC



FC31032110	Contactora FC-3/32A coil AC110V 1NC	1	40	0,660	0,660	26,400
FC31032230	Contactora FC-3/32A coil AC230V 1NC	1	40	0,660	0,660	26,400
FC31032024	Contactora FC-3/32A coil AC24V 1NC	1	40	0,660	0,660	26,400
FC31032036	Contactora FC-3/32A coil AC36V 1NC	1	40	0,660	0,660	26,400
FC31032400	Contactora FC-3/32A coil AC400V 1NC	1	40	0,660	0,660	26,400
FC31032042	Contactora FC-3/32A coil AC42V 1NC	1	40	0,660	0,660	26,400
FC31040110	Contactora FC-3/40A coil AC110V 1NC	1	40	0,660	0,660	26,400
FC31040230	Contactora FC-3/40A coil AC230V 1NC	1	40	0,660	0,660	26,400
FC31040024	Contactora FC-3/40A coil AC24V 1NC	1	40	0,660	0,660	26,400
FC31040036	Contactora FC-3/40A coil AC36V 1NC	1	40	0,660	0,660	26,400
FC31040400	Contactora FC-3/40A coil AC400V 1NC	1	40	0,660	0,660	26,400
FC31040042	Contactora FC-3/40A coil AC42V 1NC	1	40	0,660	0,660	26,400
FC31040048	Contactora FC-3/40A coil AC48V 1NC	1	40	0,660	0,660	26,400

### FC3 1NO



FC30032110	Contactora FC-3/32A coil AC110V 1NO	1	40	0,660	0,660	26,400
FC30032230	Contactora FC-3/32A coil AC230V 1NO	1	40	0,660	0,660	26,400
FC30032024	Contactora FC-3/32A coil AC24V 1NO	1	40	0,660	0,660	26,400
FC30032036	Contactora FC-3/32A coil AC36V 1NO	1	40	0,660	0,660	26,400
FC30032400	Contactora FC-3/32A coil AC400V 1NO	1	40	0,660	0,660	26,400
FC30032042	Contactora FC-3/32A coil AC42V 1NO	1	40	0,660	0,660	26,400
FC30040110	Contactora FC-3/40A coil AC110V 1NO	1	40	0,660	0,660	26,400
FC30040024	Contactora FC-3/40A coil AC24V 1NO	1	40	0,660	0,660	26,400
FC30040230	Contactora FC-3/40A coil AC230V 1NO	1	40	0,660	0,660	26,400
FC30040036	Contactora FC-3/40A coil AC36V 1NO	1	40	0,660	0,660	26,400
FC30040400	Contactora FC-3/40A coil AC400V 1NO	1	40	0,660	0,660	26,400
FC30040042	Contactora FC-3/40A coil AC42V 1NO	1	40	0,660	0,660	26,400
FC30040048	Contactora FC-3/40A coil AC48V 1NO	1	40	0,660	0,660	26,400

## Contactors FC

### FC4 1NO+1NC



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FC40040110	Contactora FC-4/40A coil AC110V 1NO+1NC	1	20	1,150	1,150	23,000
FC40040230	Contactora FC-4/40A coil AC230V 1NO+1NC	1	20	1,150	1,150	23,000
FC40040024	Contactora FC-4/40A coil AC24V 1NO+1NC	1	20	1,150	1,150	23,000
FC40040036	Contactora FC-4/40A coil AC36V 1NO+1NC	1	20	1,150	1,150	23,000
FC40040400	Contactora FC-4/40A coil AC400V 1NO+1NC	1	20	1,150	1,150	23,000
FC40040042	Contactora FC-4/40A coil AC42V 1NO+1NC	1	20	1,150	1,150	23,000
FC40040048	Contactora FC-4/40A coil AC48V 1NO+1NC	1	20	1,150	1,150	23,000
FC40050110	Contactora FC-4/50A coil AC110V 1NO+1NC	1	20	1,150	1,150	23,000
FC40050230	Contactora FC-4/50A coil AC230V 1NO+1NC	1	20	1,150	1,150	23,000
FC40050024	Contactora FC-4/50A coil AC24V 1NO+1NC	1	20	1,150	1,150	23,000
FC40050036	Contactora FC-4/50A coil AC36V 1NO+1NC	1	20	1,150	1,150	23,000
FC40050400	Contactora FC-4/50A coil AC400V 1NO+1NC	1	20	1,150	1,150	23,000
FC40050042	Contactora FC-4/50A coil AC42V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063110	Contactora FC-4/63A coil AC110V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063230	Contactora FC-4/63A coil AC230V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063024	Contactora FC-4/63A coil AC24V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063036	Contactora FC-4/63A coil AC36V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063400	Contactora FC-4/63A coil AC400V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063042	Contactora FC-4/63A coil AC42V 1NO+1NC	1	20	1,150	1,150	23,000
FC40063048	Contactora FC-4/63A coil AC48V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065110	Contactora FC-4/65A coil AC110V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065230	Contactora FC-4/65A coil AC230V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065024	Contactora FC-4/65A coil AC24V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065036	Contactora FC-4/65A coil AC36V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065400	Contactora FC-4/65A coil AC400V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065042	Contactora FC-4/65A coil AC42V 1NO+1NC	1	20	1,150	1,150	23,000
FC40065048	Contactora FC-4/65A coil AC48V 1NO+1NC	1	20	1,150	1,150	23,000
FC40075110	Contactora FC-4/75A coil AC110V 1NO+1NC	1	20	1,150	1,150	23,000
FC40075230	Contactora FC-4/75A coil AC230V 1NO+1NC	1	20	1,150	1,150	23,000
FC40075024	Contactora FC-4/75A coil AC24V 1NO+1NC	1	20	1,150	1,150	23,000
FC40075036	Contactora FC-4/75A coil AC36V 1NO+1NC	1	20	1,150	1,150	23,000
FC40075400	Contactora FC-4/75A coil AC400V 1NO+1NC	1	20	1,150	1,150	23,000
FC40075042	Contactora FC-4/75A coil AC42V 1NO+1NC	1	20	1,150	1,150	23,000
FC40080230	Contactora FC-4/80A coil AC230V 1NO+1NC	1	20	1,150	1,150	23,000
FC40080400	Contactora FC-4/80A coil AC400V 1NO+1NC	1	20	1,150	1,150	23,000

### FC5 4NO+2NC



FC50100110	Contactora FC-5/100A coil AC110V 4NO+2NC	1	6	2,850	2,850	17,100
FC50100230	Contactora FC-5/100A coil AC230V 4NO+2NC	1	6	2,850	2,850	17,100
FC50100024	Contactora FC-5/100A coil AC24V 4NO+2NC	1	6	2,850	2,850	17,100
FC50100036	Contactora FC-5/100A coil AC36V 4NO+2NC	1	6	2,850	2,850	17,100
FC50100400	Contactora FC-5/100A coil AC400V 4NO+2NC	1	6	2,850	2,850	17,100
FC50125110	Contactora FC-5/125A coil AC110V 4NO+2NC	1	6	2,850	2,850	17,100
FC50125230	Contactora FC-5/125A coil AC230V 4NO+2NC	1	6	2,850	2,850	17,100
FC50125036	Contactora FC-5/125A coil AC36V 4NO+2NC	1	6	2,850	2,850	17,100
FC50125400	Contactora FC-5/125A coil AC400V 4NO+2NC	1	6	2,850	2,850	17,100
FC50063110	Contactora FC-5/63A coil AC110V 4NO+2NC	1	6	2,850	2,850	17,100
FC50063230	Contactora FC-5/63A coil AC230V 4NO+2NC	1	6	2,850	2,850	17,100
FC50063400	Contactora FC-5/63A coil AC400V 4NO+2NC	1	6	2,850	2,850	17,100
FC50080110	Contactora FC-5/80A coil AC110V 4NO+2NC	1	6	2,850	2,850	17,100
FC50080230	Contactora FC-5/80A coil AC230V 4NO+2NC	1	6	2,850	2,850	17,100
FC50080024	Contactora FC-5/80A coil AC24V 4NO+2NC	1	6	2,850	2,850	17,100
FC50080036	Contactora FC-5/80A coil AC36V 4NO+2NC	1	6	2,850	2,850	17,100
FC50080400	Contactora FC-5/80A coil AC400V 4NO+2NC	1	6	2,850	2,850	17,100

## Contactors FC

### FC6 4NO+2NC



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FC60160110	Contactora FC-6/160A coil AC110V 4NO+2NC	1	4	5,650	5,650	22,600
FC60160230	Contactora FC-6/160A coil AC230V 4NO+2NC	1	4	5,650	5,650	22,600
FC60160036	Contactora FC-6/160A coil AC36V 4NO+2NC	1	4	5,650	5,650	22,600
FC60160400	Contactora FC-6/160A coil AC400V 4NO+2NC	1	4	5,650	5,650	22,600
FC60185230	Contactora FC-6/185A coil AC230V 4NO+2NC	1	4	5,650	5,650	22,600
FC60200110	Contactora FC-6/200A coil AC110V 4NO+2NC	1	4	5,650	5,650	22,600
FC60200230	Contactora FC-6/200A coil AC230V 4NO+2NC	1	4	5,650	5,650	22,600
FC60200400	Contactora FC-6/200A coil AC400V 4NO+2NC	1	4	5,650	5,650	22,600
FC60225230	Contactora FC-6/225A coil AC230V 4NO+2NC	1	4	5,650	5,650	22,600
FC60250110	Contactora FC-6/250A coil AC110V 4NO+2NC	1	4	5,650	5,650	22,600
FC60250230	Contactora FC-6/250A coil AC230V 4NO+2NC	1	4	5,650	5,650	22,600
FC60250400	Contactora FC-6/250A coil AC400V 4NO+2NC	1	4	5,650	5,650	22,600
FC60265110	Contactora FC-6/265A coil AC110V 4NO+2NC	1	4	5,650	5,650	22,600
FC60265230	Contactora FC-6/265A coil AC230V 4NO+2NC	1	4	5,650	5,650	22,600
FC60265400	Contactora FC-6/265A coil AC400V 4NO+2NC	1	4	5,650	5,650	22,600

### FC7 4NO+2NC

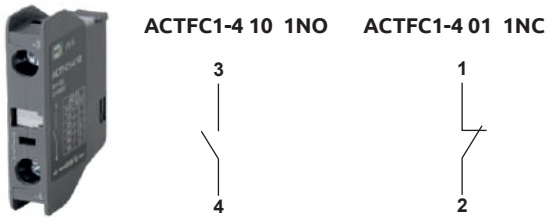


FC70315110	Contactora FC-7/315A coil AC110V 4NO+2NC	1	2	10,970	10,970	21,940
FC70315230	Contactora FC-7/315A coil AC230V 4NO+2NC	1	2	10,970	10,970	21,940
FC70315400	Contactora FC-7/315A coil AC400V 4NO+2NC	1	2	10,970	10,970	21,940
FC70400230	Contactora FC-7/400A coil AC230V 4NO+2NC	1	2	10,970	10,970	21,940
FC70400400	Contactora FC-7/400A coil AC400V 4NO+2NC	1	2	10,970	10,970	21,940
FC70500110	Contactora FC-7/500A coil AC110V 4NO+2NC	1	2	10,970	10,970	21,940
FC70500230	Contactora FC-7/500A coil AC230V 4NO+2NC	1	2	10,970	10,970	21,940
FC70500400	Contactora FC-7/500A coil AC400V 4NO+2NC	1	2	10,970	10,970	21,940

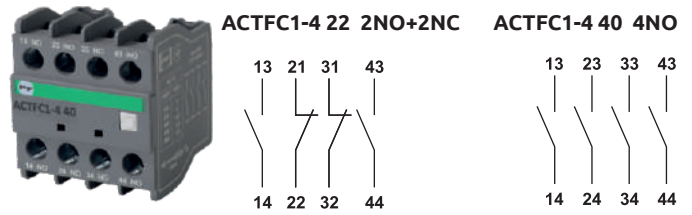
FC

## Additional devices for magnetic starters Additional contacts for FC magnetic starters

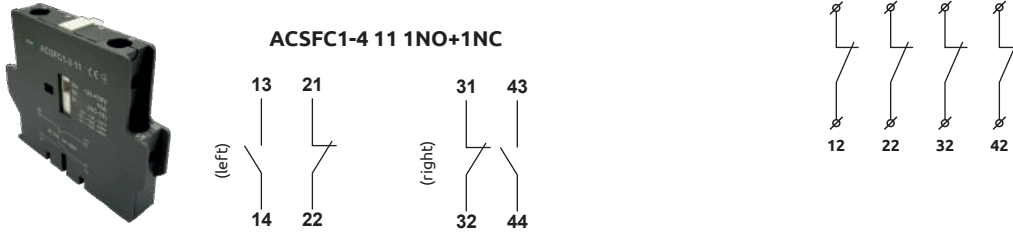
### Auxiliary contact front-end FC1-4



### Auxiliary contact front-end FC1-4



### Auxiliary contact side FC1-4



#### Order code

#### Full name of

#### Installation method

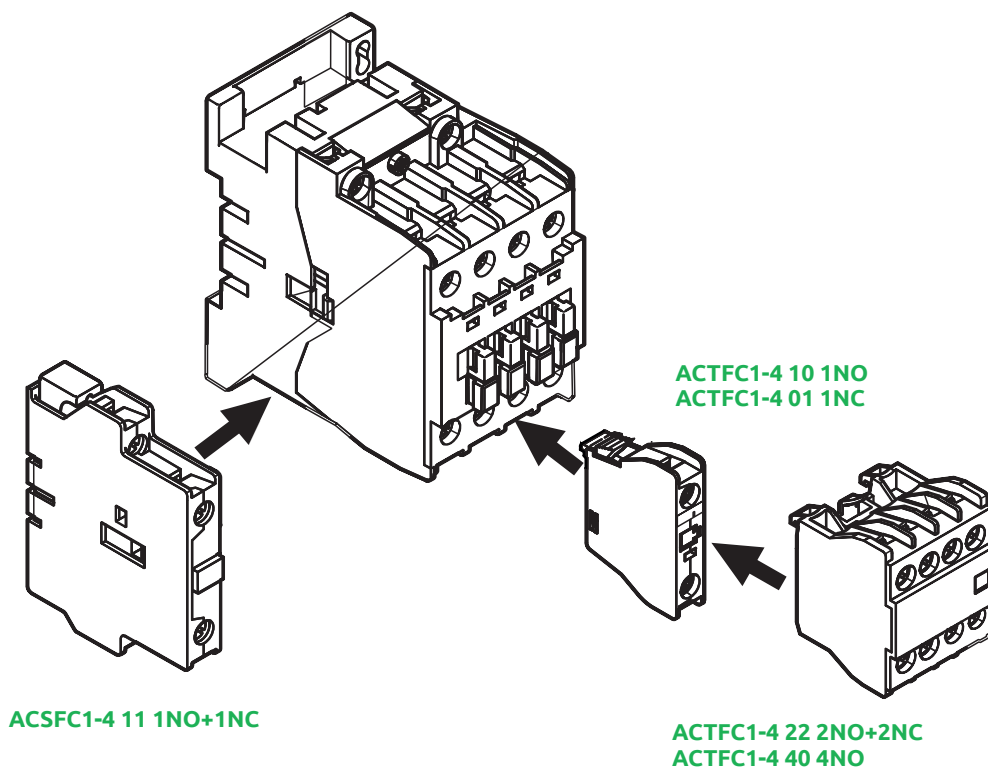
ACTFC1401	Auxiliary contact front-end FC1-4 ACTFC1-4 01 NC	Top (front)
ACTFC1410	Auxiliary contact front-end FC1-4 ACTFC1-4 10 NO	Top (front)
ACTFC1422	Auxiliary contact front-end FC1-4 ACTFC1-4 22 2NO+2NC	Top (front)
ACTFC1440	Auxiliary contact front-end FC1-4 ACTFC1-4 40 4NO	Top (front)
ACTFC1404	Auxiliary contact front-end FC1-4 ACTFC1-4 04 4NC	Top (front)
ACSFC1411	Auxiliary contact side FC1-4 ACSFC1-4 11 NC+NO	Side

#### Order code

#### Full name of

MIFC1-3	Electromechanical interlock MIFC1-3 for FC1-3
MIFC4	Lock mechanical MIFC4 for FC4
MIFC5	Lock mechanical MIFC5 for FC5
MIFC6	Lock mechanical MIFC6 for FC6
MIFC7	Lock mechanical MIFC7 for FC7

## Installation and connection of additional equipment to FC magnetic starters



## Additional devices for magnetic starters Control coils Rit

The contactor is controlled by an AC control coil with voltages of 24, 36, 42, 110, 230, 400V.



### RitFC1

Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
RitFC1110	Control coil Rit for FC1 110V	1	1	0,080	0,080	0,080
RitFC1230	Control coil Rit for FC1 230V	1	1	0,080	0,080	0,080
RitFC1024	Control coil Rit for FC1 24V	1	1	0,080	0,080	0,080
RitFC1036	Control coil Rit for FC1 36V	1	1	0,080	0,080	0,080
RitFC1400	Control coil Rit for FC1 400V	1	1	0,080	0,080	0,080
RitFC1042	Control coil Rit for FC1 42V	1	1	0,080	0,080	0,080

### RitFC2

RitFC2110	Control coil Rit for FC2 110V	1	1	0,110	0,110	0,110
RitFC2230	Control coil Rit for FC2 230V	1	1	0,110	0,110	0,110
RitFC2024	Control coil Rit for FC2 24V	1	1	0,110	0,110	0,110
RitFC2036	Control coil Rit for FC2 36V	1	1	0,110	0,110	0,110
RitFC2400	Control coil Rit for FC2 400V	1	1	0,110	0,110	0,110
RitFC2042	Control coil Rit for FC2 42V	1	1	0,110	0,110	0,110

### RitFC3

RitFC3110	Control coil Rit for FC3 110V	1	1	0,120	0,120	0,120
RitFC3230	Control coil Rit for FC3 230V	1	1	0,120	0,120	0,120
RitFC3024	Control coil Rit for FC3 24V	1	1	0,120	0,120	0,120
RitFC3036	Control coil Rit for FC3 36V	1	1	0,120	0,120	0,120
RitFC3400	Control coil Rit for FC3 400V	1	1	0,120	0,120	0,120
RitFC3042	Control coil Rit for FC3 42V	1	1	0,120	0,120	0,120

### RitFC4

RitFC4110	Control coil Rit for FC4 110V	1	1	0,120	0,120	0,120
RitFC4230	Control coil Rit for FC4 230V	1	1	0,120	0,120	0,120
RitFC4024	Control coil Rit for FC4 24V	1	1	0,120	0,120	0,120
RitFC4036	Control coil Rit for FC4 36V	1	1	0,120	0,120	0,120
RitFC4400	Control coil Rit for FC4 400V	1	1	0,120	0,120	0,120
RitFC4042	Control coil Rit for FC4 42V	1	1	0,120	0,120	0,120
RitFC4048	Control coil Rit for FC4 48V	1	1	0,120	0,120	0,120

### RitFC5

RitFC5110	Control coil Rit for FC5 110V	1	1	0,290	0,290	0,290
RitFC5230	Control coil Rit for FC5 230V	1	1	0,290	0,290	0,290
RitFC5024	Control coil Rit for FC5 24V	1	1	0,290	0,290	0,290
RitFC5036	Control coil Rit for FC5 36V			0,290	0,000	0,000
RitFC5400	Control coil Rit for FC5 400V	1	1	0,290	0,290	0,290

### RitFC6

RitFC6110	Control coil Rit for FC6 110V	1	1	0,430	0,430	0,430
RitFC6230	Control coil Rit for FC6 230V	1	1	0,430	0,430	0,430
RitFC6400	Control coil Rit for FC6 400V	1	1	0,430	0,430	0,430

### RitFC7

RitFC7110	Control coil Rit for FC7 110V	1	1	0,850	0,850	0,850
RitFC7230	Control coil Rit for FC7 230V	1	1	0,850	0,850	0,850
RitFC7400	Control coil Rit for FC7 400V	1	1	0,850	0,850	0,850



**Technical specifications**

Series	FTR 32B	FTR 80B	FTR-220	FTR-630
Standards	IEC 60947-4-1, IEC 60947-5-1			
Rated operating voltage of insulation $U_i$ , V	690			
Rated pulse voltage $U_{imp}$ , kV	6			
Rated voltage $U_n$ , V	230/400			
Rated frequency $f$ , Hz	50/60			
Installation method	embedded	yes	yes	no
	autonomous	yes	yes	yes
Auxiliary contacts	Number of contacts	1NO+1NC		
	rated current $I_n$ , A (~400V)	1.58		
	rated current $I_n$ , A (~230V)	2.73		
	rated current $I_n$ , A ( $\approx$ 220V)	0.2		
Rated operating current $I_n$ , A (fault current)	0.1-0.16			
	0.16-0.25			
	0.25-0.4			
	0.63-1			
	1-1.4			
	1.3-1.8			
	1.7-2.4			
	2.2-3.1	29-42	30-50	
	2.8-4	36-52	48-80	200-300
	3.5-5	45-63	60-100	300-500
	4.5-6.5	60-80	90-150	380-630
	6-8.5		132-220	
	7.5-11			
	10-14			
13-19				
18-25				
24-32				
Cross-section of the connected conductor, mm <sup>2</sup>	up to 6	up to 25	-	-
Release type	thermal		electronic	
Degree of protection	IP20			

FTR

## Thermal relays FTR

### FTR 32B inbuilt

Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FTR32B00016	Thermal relay FTR32B 0,1-0,16A	1	50	0,170	0,170	8,950
FTR32B00025	Thermal relay FTR32B 0,16-0,25A	1	50	0,170	0,170	8,950
FTR32B00040	Thermal relay FTR32B 0,25-0,40A	1	50	0,170	0,170	8,950
FTR32B00100	Thermal relay FTR32B 0,63-1A	1	50	0,170	0,170	8,950
FTR32B00140	Thermal relay FTR32B 1-1,4A	1	50	0,170	0,170	8,950
FTR32B00180	Thermal relay FTR32B 1,3-1,8A	1	50	0,170	0,170	8,950
FTR32B00250	Thermal relay FTR32B 1,6-2,5A	1	50	0,170	0,170	8,950
FTR32B00240	Thermal relay FTR32B 1,7-2,4A	1	50	0,170	0,170	8,950
FTR32B01400	Thermal relay FTR32B 10-14A	1	50	0,170	0,170	8,950
FTR32B01900	Thermal relay FTR32B 13-19A	1	50	0,170	0,170	8,950
FTR32B02500	Thermal relay FTR32B 18-25A	1	50	0,170	0,170	8,950
FTR32B00310	Thermal relay FTR32B 2,2-3,1A	1	50	0,170	0,170	8,950
FTR32B00400	Thermal relay FTR32B 2,8-4A	1	50	0,170	0,170	8,950
FTR32B03200	Thermal relay FTR32B 24-32A	1	50	0,170	0,170	8,950
FTR32B00500	Thermal relay FTR32B 3,5-5A	1	50	0,170	0,170	8,950
FTR32B00650	Thermal relay FTR32B 4,5-6,5A	1	50	0,170	0,170	8,950
FTR32B00850	Thermal relay FTR32B 6-8,5A	1	50	0,170	0,170	8,950
FTR32B01100	Thermal relay FTR32B 7,5-11A	1	50	0,170	0,170	8,950

### FTR 80B inbuilt

FTR80B04200	Thermal relay FTR80B 29-42A	1	50	0,360	0,360	18,450
FTR80B05200	Thermal relay FTR80B 36-52A	1	50	0,360	0,360	18,450
FTR80B06300	Thermal relay FTR80B 45-63A	1	50	0,360	0,360	18,450
FTR80B08000	Thermal relay FTR80B 60-80A	1	50	0,360	0,360	18,450

### FTR 220 autonomous

FTR220050	Thermal relay FTR 220 30-50A	1	1	0,700	0,700	0,700
FTR220080	Thermal relay FTR 220 48-80A	1	1	0,700	0,700	0,700
FTR220100	Thermal relay FTR 220 60-100A	1	1	0,700	0,700	0,700
FTR220150	Thermal relay FTR 220 90-150A	1	1	0,700	0,700	0,700
FTR220220	Thermal relay FTR 220 132-220A	1	1	0,700	0,700	0,700

### FTR 630 autonomous

FTR630330	Thermal relay FTR 630 200-330A	1	1	1,700	1,700	1,700
FTR630500	Thermal relay FTR 630 300-500A	1	1	1,700	1,700	1,700
FTR630630	Thermal relay FTR 630 380-630A	1	1	1,700	1,700	1,700

FTR

## Adapters RFTR



### RFTR

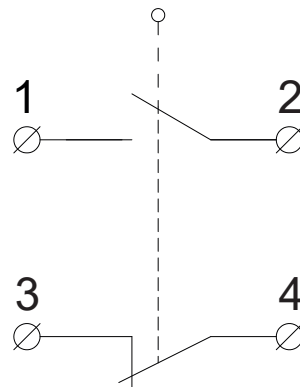
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
RFTR2M32B	Adapter frames for thermal relays FTR32B	1	1	0,050	0,050	0,050
RFTR2M80B	Adapter frames for thermal relays FTR80B	1	1	0,120	0,120	0,120



**Technical specifications**

Series	FLS			
Standard	IEC/EN 60947-5-1			
Degree of protection	IP65	IP66	IP66	IP67
Type of execution (type)	plastic	plastic	metal	metal
Rated current at:	- AC-11 400V	6		
	- AC-15 250V	6		
	- DC-13 230V	0.3		
Rated voltage $U_n$ , V (AC/DC)	400/230			
Contacts	1NO+1NC			
Switching wear resistance (electrical/mechanical)	500 000/15 000 000			
Rated frequency $f$ , Hz	50/60			
Rated insulation voltage $U_i$ , V	500			
Rated pulse voltage $U_{imp}$ , V	4000			
Moisture	≤95%			
Speed of work	1mm-2m/s			
Switching frequency, cycles/min	up to 30			

**Schematic diagrams**



## Limit switches FLS

### IP65 plastic



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FLS15M11P65	Limit switch FLS15M11P65	1	100	0,120	0,120	12,300
FLS15M21P65	Limit switch FLS15M21P65	1	100	0,120	0,120	12,300
FLS15M31P65	Limit switch FLS15M31P65	1	100	0,125	0,125	12,700
FLS15M322P65	Limit switch FLS15M322P65	1	100	0,130	0,130	13,300
FLS15M33P65	Limit switch FLS15M33P65	1	100	0,125	0,125	12,700
FLS15M35P65	Limit switch FLS15M35P65	1	100	0,120	0,120	12,300
FLS15M36P65	Limit switch FLS15M36P65	1	100	0,120	0,120	12,300
FLS15M412P65	Limit switch FLS15M412P65	1	100	0,122	0,122	12,500
FLS15M414P65	Limit switch FLS15M414P65	1	100	0,122	0,122	12,500
FLS15M41P65	Limit switch FLS15M41P65	1	100	0,122	0,122	12,500

### IP66 plastic



FLS15M11P66	Limit switch FLS15M11P66	1	100	0,140	0,140	14,300
FLS15M21P66	Limit switch FLS15M21P66	1	100	0,140	0,140	14,300
FLS15M31P66	Limit switch FLS15M31P66	1	100	0,150	0,150	15,300
FLS15M322P66	Limit switch FLS15M322P66	1	100	0,180	0,180	18,300
FLS15M33P66	Limit switch FLS15M33P66	1	100	0,150	0,150	15,000
FLS15M35P66	Limit switch FLS15M35P66	1	100	0,140	0,140	14,300
FLS15M36P66	Limit switch FLS15M36P66	1	100	0,140	0,140	14,300
FLS15M412P66	Limit switch FLS15M412P66	1	100	0,155	0,155	15,700
FLS15M413P66	Limit switch FLS15M413P66	1	100	0,155	0,155	15,700
FLS15M41P66	Limit switch FLS15M41P66	1	100	0,155	0,155	15,700

### IP66 metal



FLS15M1166	Limit switch FLS15M1166	1	100	0,119	0,119	12,300
FLS15M2166	Limit switch FLS15M2166	1	100	0,119	0,119	12,300
FLS15M3166	Limit switch FLS15M3166	1	100	0,250	0,250	25,300
FLS15M32266	Limit switch FLS15M32266	1	100	0,260	0,260	26,300
FLS15M3366	Limit switch FLS15M3366	1	100	0,250	0,250	25,300
FLS15M3566	Limit switch FLS15M3566	1	100	0,220	0,220	22,300
FLS15M3666	Limit switch FLS15M3666	1	100	0,220	0,220	22,300
FLS15M41266	Limit switch FLS15M41266	1	100	0,240	0,240	24,300
FLS15M41366	Limit switch FLS15M41366	1	100	0,240	0,240	24,300
FLS15M4166	Limit switch FLS15M4166	1	100	0,240	0,240	24,300
FLS15M4266	Limit switch FLS15M4266	1	100	0,240	0,240	24,300

### IP67 metal



FLS15M1167	Limit switch FLS15M1167	1	50	0,260	0,260	13,200
FLS15M21267	Limit switch FLS15M21267	1	50	0,285	0,285	14,450
FLS15M2167	Limit switch FLS15M2167	1	50	0,260	0,260	13,200
FLS15M3167	Limit switch FLS15M3167	1	50	0,285	0,285	14,450
FLS15M32267	Limit switch FLS15M32267	1	50	0,320	0,320	16,200
FLS15M3367	Limit switch FLS15M3367	1	50	0,295	0,295	14,950
FLS15M3467	Limit switch FLS15M3467	1	50	0,320	0,320	16,200
FLS15M41267	Limit switch FLS15M41267	1	50	0,270	0,270	13,700
FLS15M41367	Limit switch FLS15M41367	1	50	0,270	0,270	13,700
FLS15M41467	Limit switch FLS15M41467	1	50	0,270	0,270	13,700
FLS15M4167	Limit switch FLS15M4167	1	50	0,270	0,270	13,700
FLS15M4267	Limit switch FLS15M4267	1	50	0,270	0,270	13,700



**Technical specifications**

Series	FP							
Standard	IEC/EN 60947-5							
Category of application	AC, DC							
Rated voltage $U_n$ , V	400	230	110	48	220	110	48	24
Rated current $I_n$ , A	2.5	4	6	8	0.3	0.6	1.3	2.5
AC/DC supply voltage of the backlight module, V	24, 110, 230							
Rated insulation voltage $U_i$ , V	660							
Wear resistance, number of cycles	1 000 000/100 000 mechanical/electrical							
Degree of protection	on the installation side			IP20				
	from the management side			IP40 (IP67*)				
Setting diameter, mm	22							
Clamping torque of contact group bolts, Nm	0.8							
Rated frequency $f$ , Hz	50/60							

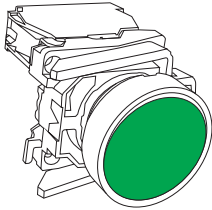
\* IP67 - when using a silicone cap

# FP push-button switches, metal and plastic

## Metal push-button switches

### Metal button switch FP4

concealed  
without fixing



Color

- green
- yellow
- blue
- black
- white
- red

Order code

Contact group

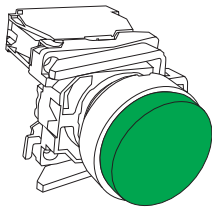
Gross weight, kg

Packaging, pcs

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP4-BA31	1NO	20	1/20
FP4-BA51	1NO	20	1/20
FP4-BA61	1NO	20	1/20
FP4-BA21	1NO	20	1/20
FP4-BA11	1NO	20	1/20
FP4-BA42	1NC	20	1/20

### Metal button switch FP4

convex  
without fixing

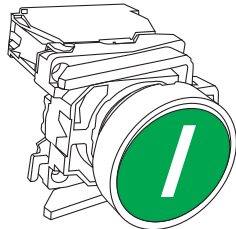




- green
- yellow
- blue
- black
- white
- red

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP4-BL31	1NO	20	1/20
FP4-BL51	1NO	20	1/20
FP4-BL61	1NO	20	1/20
FP4-BL21	1NO	20	1/20
FP4-BL11	1NO	20	1/20
FP4-BL42	1NC	20	1/20

### Metal button switch FP4 with marking

concealed  
without fixing

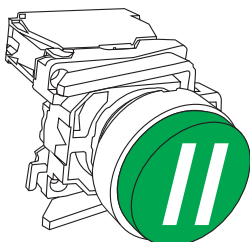





-  red button with marking ○
-  red button with marking **STOP**
-  green button with marking I
-  green button with marking II
-  white button marked with a black arrow ↑
-  black button marked with a white arrow ↑
-  green button with marking **START**

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP4-BA4322	1NC	20	1/20
FP4-BA4342	1NC	20	1/20
FP4-BA3311	1NC	20	1/20
FP4-BA3361	1NO	20	1/20
FP4-BA3341	1NO	20	1/20
FP4-BA3351	1NO	20	1/20
FP4-BA4331	1NO	20	1/20

### Metal button switch FP4 with marking

convex  
without fixing



-  red button with marking ○
-  red button with marking **STOP**
-  green button with marking I
-  green button with marking II
-  white button marked with a black arrow ↑
-  black button marked with a white arrow ↑
-  green button with marking **START**

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP4-BL4322	1NC	20	1/20
FP4-BL4342	1NC	20	1/20
FP4-BL3311	1NO	20	1/20
FP4-BL3361	1NO	20	1/20
FP4-BL3341	1NO	20	1/20
FP4-BL3351	1NO	20	1/20

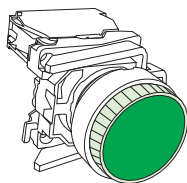
FP

## FP push-button switches, metal and plastic

### Metal push-button switches

#### Metal button switch FP4

convex  
without fixing  
with LED indication



Color

- green
- yellow
- blue
- black
- white
- red

Order code

Contact group

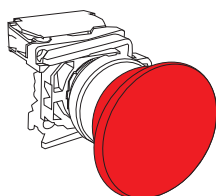
Gross weight, kg

Packaging, pcs

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP4-BW3361230	1NO	79	1/20
FP4-BW3561230	1NO	79	1/20
FP4-BW3661230	1NO	79	1/20
FP4-BW3161230	1NO	79	1/20
FP4-BW3461230	1NC	79	1/20

#### Metal button switch FP4

«mushroom»  
without fixing

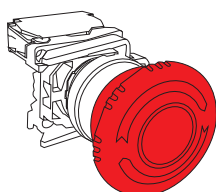


- green
- black
- red

FP4-BC31	1NO	109	1/20
FP4-BC21	1NO	109	1/20
FP4-BC42	1NC	109	1/20

#### Metal button switch FP4

«mushroom»  
with fixing  
return by turning

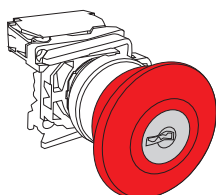


- red

FP4-BS542	1NC	109	1/20
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#### Metal button switch FP4

«mushroom» with key mechanism  
with fixing  
return by turning



- red

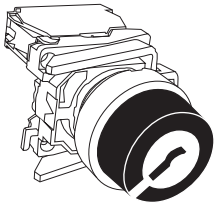
FP4-BS142	1NC	143	1/20
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# FP push-button switches, metal and plastic

## Metal push-button switches

### Metal button switch FP4

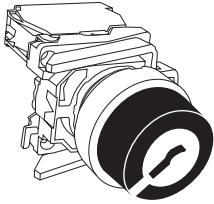
key set  
2 position



Color	Scheme	Order code	Contact group	Gross weight, kg	Packaging, pcs
● black		FP4-BG21	1NO	104	1/20
		FP4-BG41	1NO	104	1/20

### Metal button switch FP4

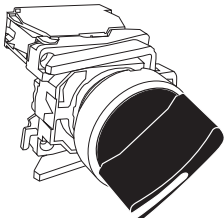
key set  
3 position



Color	Scheme	Order code	Contact group	Gross weight, kg	Packaging, pcs
● black		FP4-BG33	2NO	113	1/20
		FP4-BG03	2NO	113	1/20

### Metal button switch FP4

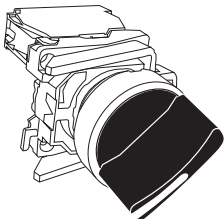
2 position



Color	Scheme	Order code	Contact group	Gross weight, kg	Packaging, pcs
● black		FP4-BD21	1NO	73	1/20
		FP4-BD41	1NO	73	1/20

### Metal button switch FP4

3 position



Color	Scheme	Order code	Contact group	Gross weight, kg	Packaging, pcs
● black		FP4-BD33	2NO	78	1/20
		FP4-BD53	2NO	78	1/20

#### Conventional notation:

- with fixation

- with self-return

- removing the key from position

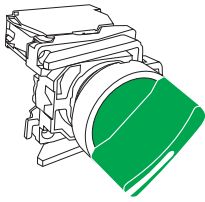
# FP push-button switches, metal and plastic

## Metal push-button switches

Color      Scheme      Order code      Contact group      Gross weight, kg      Packaging, pcs

### Metal button switch FP4

2 position  
with LED indication



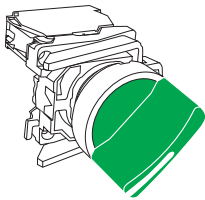
- green
- yellow
- blue
- white
- red



FP4-BK2365230	1NO	83	1/20
FP4-BK2565230	1NO	83	1/20
FP4-BK2665230	1NO	83	1/20
FP4-BK2165230	1NO	83	1/20
FP4-BK2465230	1NO	83	1/20

### Metal button switch FP4

3 position  
with LED indication



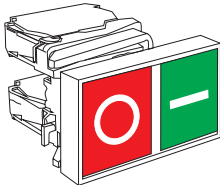
- green
- yellow
- blue
- white
- red



FP4-BK3365230	2NO	88	1/20
FP4-BK3565230	2NO	88	1/20
FP4-BK3665230	2NO	88	1/20
FP4-BK3165230	2NO	88	1/20
FP4-BK3465230	2NO	88	1/20

### Metal button switch FP4 Metal button switch FP4 LED

Start-Stop



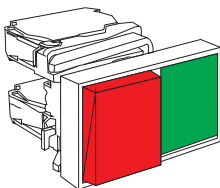
**LED**

FP4-BL8325	1NO 1NC	96	1/20
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FP4-BW8325230	1NO 1NC	96	1/20
---------------	---------	----	------

### Metal button switch FP4 Metal button switch FP4 LED

Start-Stop



**LED**

FP4-BL8425	1NO 1NC	96	1/20
------------	---------	----	------

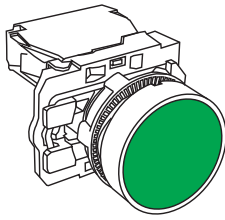
FP4-BW8425230	1NO 1NC	96	1/20
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# FP push-button switches, metal and plastic

## Plastic push-button switches

### Plastic button switch FP5

concealed  
without fixing



Color

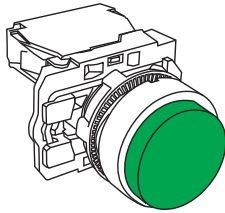
- green
- yellow
- blue
- black
- white
- red

Order code    Contact group    Gross weight, kg    Packaging, pcs

FP5-AA31	1NO	28	1/20
FP5-AA51	1NO	28	1/20
FP5-AA61	1NO	28	1/20
FP5-AA21	1NO	28	1/20
FP5-AA11	1NO	28	1/20
FP5-AA42	1NC	28	1/20

### Plastic button switch FP5

convex  
without fixing

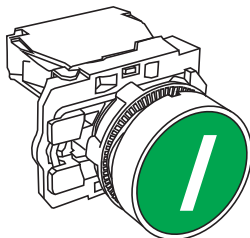









- green
- yellow
- blue
- black
- white
- red

FP5-AL31	1NO	28	1/20
FP5-AL51	1NO	28	1/20
FP5-AL61	1NO	28	1/20
FP5-AL21	1NO	28	1/20
FP5-AL11	1NO	28	1/20
FP5-AL42	1NC	28	1/20

### Plastic button switch FP5 with marking

concealed  
without fixing

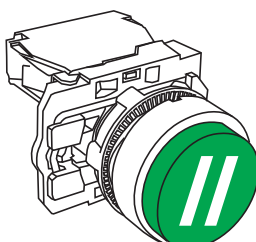









-  red button with marking ○
-  red button with marking **STOP**
-  green button with marking I
-  green button with marking II
-  white button marked with a black arrow ↑
-  black button marked with a white arrow ↑
-  green button with marking **START**

FP5-AA4322	1NC	28	1/20
FP5-AA4342	1NC	28	1/20
FP5-AA3311	1NO	28	1/20
FP5-AA3361	1NO	28	1/20
FP5-AA3341	1NO	28	1/20
FP5-AA3351	1NO	28	1/20
FP5-AA4331	1NO	28	1/20

### Plastic button switch FP5 with marking

convex  
without fixing



-  red button with marking ○
-  red button with marking **STOP**
-  green button with marking I
-  green button with marking II
-  white button marked with a black arrow ↑
-  black button marked with a white arrow ↑
-  green button with marking **START**

FP5-AL4322	1NC	28	1/20
FP5-AL4342	1NC	28	1/20
FP5-AL3311	1NO	28	1/20
FP5-AL3361	1NO	28	1/20
FP5-AL3341	1NO	28	1/20
FP5-AL3351	1NO	28	1/20

FP

## FP push-button switches, metal and plastic

### Plastic push-button switches

Color

Order code

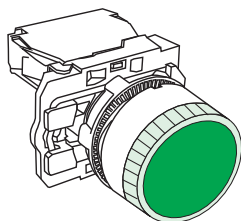
Contact group

Gross weight, kg

Packaging, pcs

#### Plastic button switch FP5

convex  
without fixing  
with LED indication

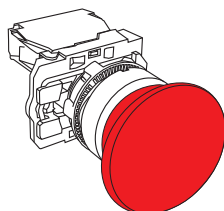


- green
- yellow
- blue
- black
- white
- red

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP5-AW3361230	1NO	36	1/20
FP5-AW3561230	1NO	36	1/20
FP5-AW3661230	1NO	36	1/20
FP5-AW3161230	1NO	36	1/20
FP5-AW3461230	1NO	36	1/20

#### Plastic button switch FP5

«mushroom»  
without fixing

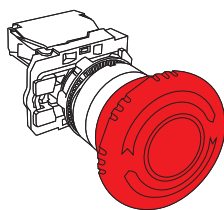


- green
- black
- red

FP5-AC31	1NO	51	1/20
FP5-AC21	1NO	51	1/20
FP5-AC42	1NC	51	1/20

#### Plastic button switch FP5

«mushroom»  
with fixing  
return by turning

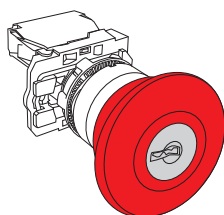


- red

FP5-AS542	1NC	44	1/20
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#### Plastic button switch FP5

«mushroom» with key mechanism  
with fixing  
return by turning



- red

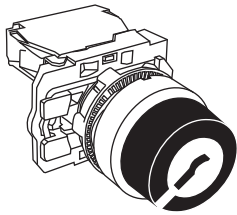
FP5-AS142	1NC	69	1/20
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# FP push-button switches, metal and plastic

## Plastic push-button switches

### Plastic button switch FP5

key set  
2 position

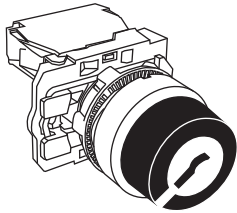


Color	Scheme
● black	

Order code	Contact group	Gross weight, kg	Packaging, pcs
FP5-AG21	1NO	55	1/20
FP5-AG41	1NO	55	1/20

### Plastic button switch FP5

key set  
3 position

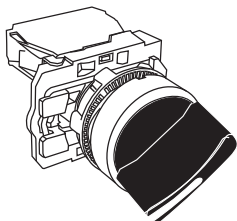


Color	Scheme
● black	

FP5-AG33	2NO	64	1/20
FP5-AG03	2NO	64	1/20

### Plastic button switch FP5

2 position

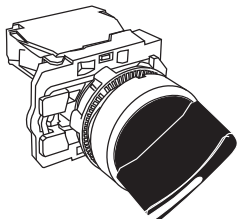


Color	Scheme
● black	

FP5-AD21	1NO	31	1/20
FP5-AD41	1NO	31	1/20

### Plastic button switch FP5

3 position



Color	Scheme
● black	

FP5-AD33	2NO	40	1/20
FP5-AD53	2NO	40	1/20

#### Conventional notation:

- with fixation

- with self-return

- removing the key from position

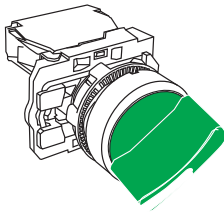
# FP push-button switches, metal and plastic

## Plastic push-button switches

Color      Scheme      Order code      Contact group      Gross weight, kg      Packaging, pcs

### Plastic button switch FP5

2 position  
with LED indication



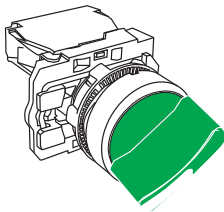
- green
- yellow
- blue
- white
- red



FP5-AK2365230	1NO	41	1/20
FP5-AK2565230	1NO	41	1/20
FP5-AK2665230	1NO	41	1/20
FP5-AK2165230	1NO	41	1/20
FP5-AK2465230	1NO	41	1/20

### Plastic button switch FP5

3 position  
with LED indication



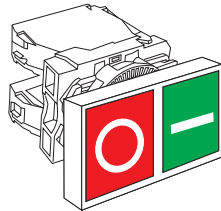
- green
- yellow
- blue
- white
- red



FP5-AK3365230	2NO	50	1/20
FP5-AK3565230	2NO	50	1/20
FP5-AK3665230	2NO	50	1/20
FP5-AK3165230	2NO	50	1/20
FP5-AK3465230	2NO	50	1/20

### Plastic button switch FP5 Plastic button switch FP5 LED

Start-Stop



green-red



green-red

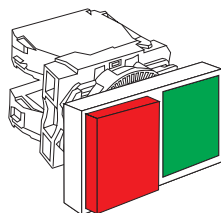
**LED**

FP5-AL8325	1NO 1NC	39	1/20
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FP5-AW8325230	1NO 1NC	39	1/20
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### Plastic button switch FP5 Plastic button switch FP5 LED

Start-Stop



green-red



green-red

**LED**






FP5-AL8425	1NO 1NC	39	1/20
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FP5-AW8425230	1NO 1NC	39	1/20
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## Push-buttons accessories

	Order code	Full name of	Gross weight, kg
	FPNO	Normally opened contact FP NO	0,010
	FPNC	Normally closed contact FP NC	0,010
	FPES	Information tag "emergency stop" FP ES	0,010
	FPB	Information tag FPB FP B	0,010
	FPSD	Silicone cap for button switch FP SD for FP PCP, FP PCPB, FP PCPI	0,010
	FPSSD	Silicone cap for button switch FP SDSS for rectangular push-button switches FP Prec LG, FP PrecB LG	0,010

## LED module for push-button switches for push-button switches FP

Color	Order code	Full name of	Voltage, V
 green	FPMG024	LED module for push-button switches FPM	24
	FPMG110	LED module for push-button switches FPM	110
	FPMG230	LED module for push-button switches FPM	230
 red	FPMR024	LED module for push-button switches FPM	24
	FPMR110	LED module for push-button switches FPM	110
	FPMR230	LED module for push-button switches FPM	230
 yellow	FPMY024	LED module for push-button switches FPM	24
	FPMY110	LED module for push-button switches FPM	110
	FPMY230	LED module for push-button switches FPM	230
 blue	FPMBL024	LED module for push-button switches FPM	24
	FPMBL110	LED module for push-button switches FPM	110
	FPMBL230	LED module for push-button switches FPM	230
 white	FPMW24	LED module for push-button switches FPM	24
	FPMW110	LED module for push-button switches FPM	110
	FPMW230	LED module for push-button switches FPM	230



## Push-button control stations BOX



### Features

- Switching of electrical control circuits with a frequency of 50Hz and voltage up to 380V and direct current with voltage up to 220V.
- Push-button stations are modern control devices for technological equipment used in household and industrial switchgear, equipment control panels and automation systems

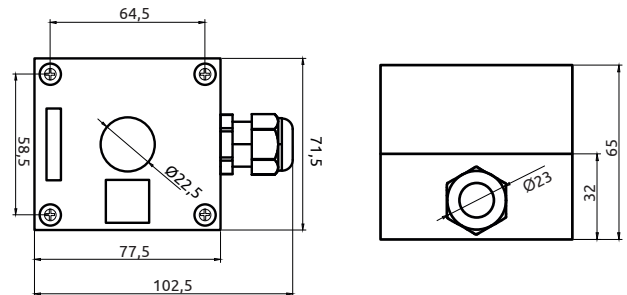
### Technical specifications

Series	BOX					
Mounting diameter, mm	22					
Enclosure	ABS plastic					
Number of mounting holes	1	2	3	4	5	6
Degree of protection	IP54					
Fasteners	on a flat surface					

### Overall and installation dimensions

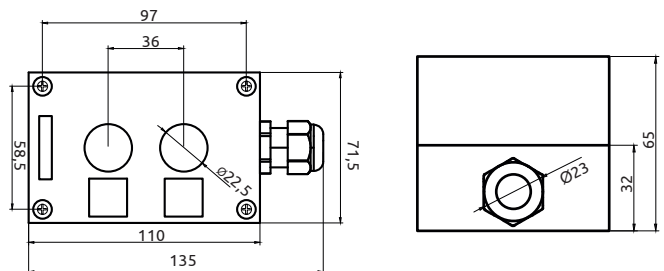
#### Push-button control stations BOX

BoxP2-1 IP54  
BoxP1-1 IP40  
BoxP2-1 IP54



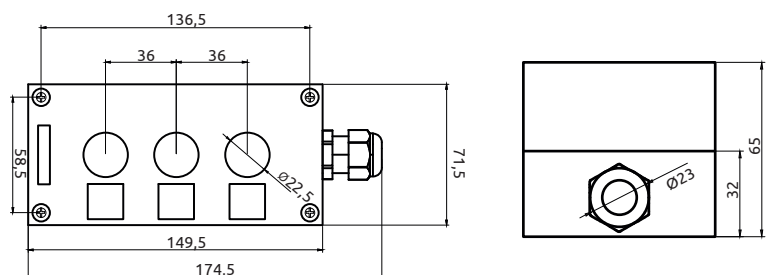
#### Push-button control stations BOX

BoxP1-2 IP40  
BoxP2-2 IP54



#### Push-button control stations BOX

BoxP1-3 IP40  
BoxP2-3 IP54

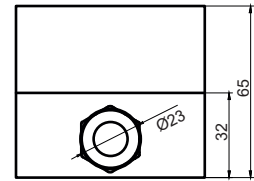
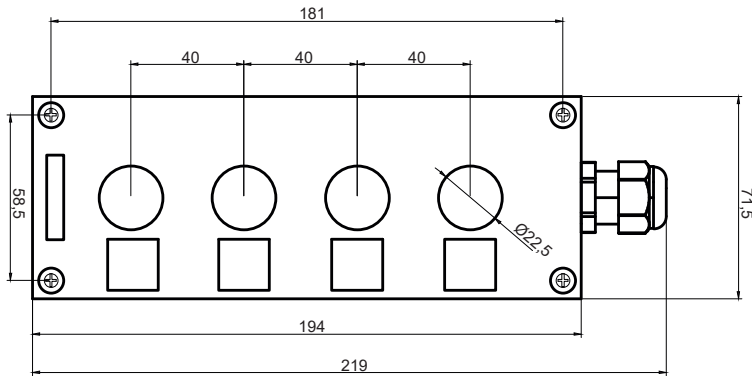


## Overall and installation dimensions

### Push-button control stations BOX

BoxP1-4 IP40

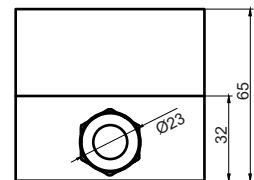
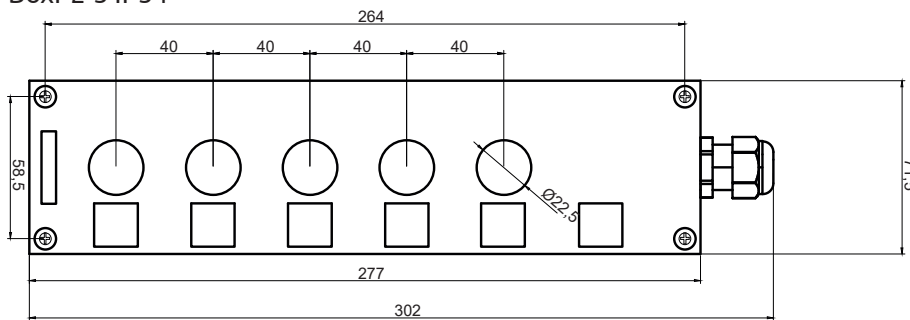
BoxP2-4 IP54



### Push-button control stations BOX

BoxP1-5 IP40

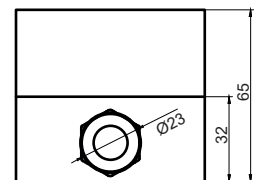
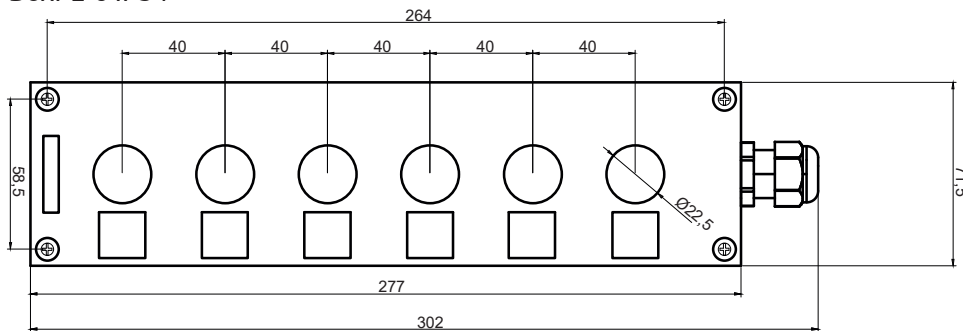
BoxP2-5 IP54



### Push-button control stations BOX

BoxP1-6 IP40

BoxP2-6 IP54



BOX

Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
BOXP2-1	BOX 1-place white BoxP2-1	1	50	0,070	0,070	7,100
BOXP2-2	BOX 2-place white BoxP2-2	1	50	0,150	0,150	15,100
BOXP2-3	BOX 3-place white BoxP2-3	1	50	0,220	0,220	11,100
BOXP2-4	BOX 4-place white BoxP2-4	1	50	0,300	0,300	15,100
BOXP2-5	BOX 5-place white BoxP2-5	1	50	0,370	0,370	18,600
BOXP2-6	BOX 6-place white BoxP2-6	1	50	0,450	0,450	22,600

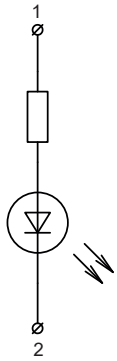
## Indicator lamps FPL and Alarm bells FPB



### Technical specifications

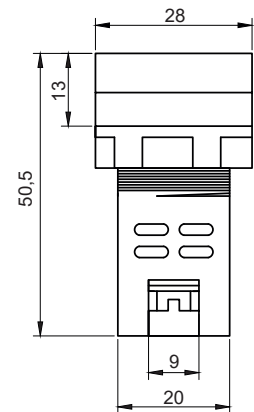
Series	FPB024 d=28mm	FPB230 d=28mm	FPB1024 d=22mm	FPB1230 d=22mm	FPL
Standard	IEC/EN 60947-5				
Category of application	AC, DC				
Module supply voltage/backlight, AC/DC, V	24	230	24	230	12, 24, 36, 48, 110, 230, 400
Rated current, A	0.03				
Maximum volume, dB	75				
Operating time not less than, h	50 000				
Degree of protection	IP54				
Setting diameter, mm	28		22		
Clamping torque of contact group bolts, Nm	0.8				
Rated frequency f, Hz	50/60				

### Schematic diagrams



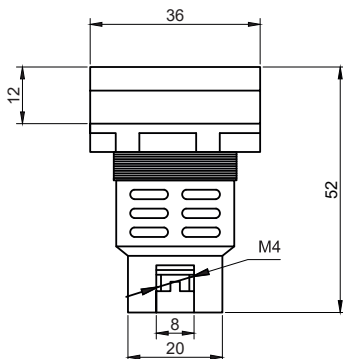
### Overall dimensions

FPL



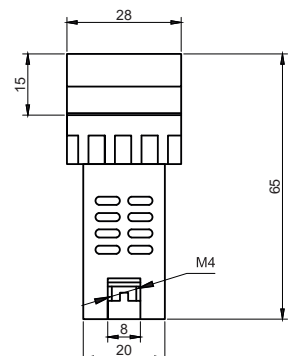
### Overall dimensions

FP B



### Overall dimensions

FP B1



## Indicator lamps FPL



● green



● red



● blue



● yellow



○ white

Color	Order code	Rated current In, A	Packaging	Gross weight, kg
green	FPL012G	12	1/10	0.02/0.23
	FPL024G	24	1/10	0.02/0.23
	FPL036G	36	1/10	0.02/0.23
	FPL048G	48	1/10	0.02/0.23
	FPL110G	110	1/10	0.02/0.23
	FPL230G	230	1/10	0.02/0.23
red	FPL400G	400	1/10	0.02/0.23
	FPL012R	12	1/10	0.02/0.23
	FPL024R	24	1/10	0.02/0.23
	FPL036R	36	1/10	0.02/0.23
	FPL048R	48	1/10	0.02/0.23
	FPL110R	110	1/10	0.02/0.23
blue	FPL230R	230	1/10	0.02/0.23
	FPL400R	400	1/10	0.02/0.23
	FPL012BL	12	1/10	0.02/0.23
	FPL024BL	24	1/10	0.02/0.23
	FPL036BL	36	1/10	0.02/0.23
	FPL048BL	48	1/10	0.02/0.23
yellow	FPL110BL	110	1/10	0.02/0.23
	FPL230BL	230	1/10	0.02/0.23
	FPL400BL	400	1/10	0.02/0.23
	FPL012Y	12	1/10	0.02/0.23
	FPL024Y	24	1/10	0.02/0.23
	FPL036Y	36	1/10	0.02/0.23
white	FPL048Y	48	1/10	0.02/0.23
	FPL110Y	110	1/10	0.02/0.23
	FPL230Y	230	1/10	0.02/0.23
	FPL400Y	400	1/10	0.02/0.23
	FPL012W	12	1/10	0.02/0.23
	FPL024W	24	1/10	0.02/0.23
	FPL036W	36	1/10	0.02/0.23
	FPL048W	48	1/10	0.02/0.23
	FPL110W	110	1/10	0.02/0.23
	FPL230W	230	1/10	0.02/0.23
	FPL400W	400	1/10	0.02/0.23

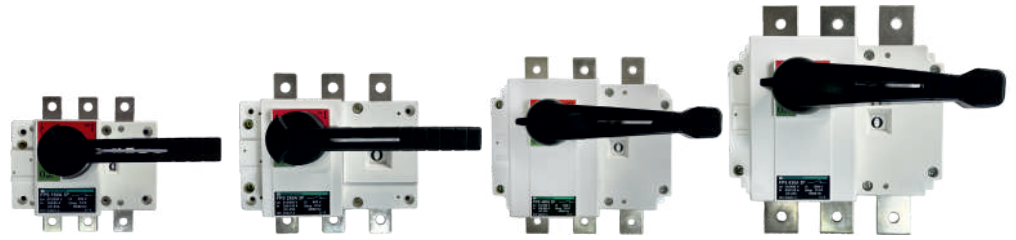
FPL

## Alarm bells FPB



Order code	Full name of	Rated current In, A
FPB024	Alarm bell FP B 24V, d=28mm	24
FPB230	Alarm bell FP B 230V, d=28mm	230
FPB1024	Alarm bell FP B1 24V, d=22mm	24
FPB1230	Alarm bell FP B1 230V, d=22mm	230

## Switch disconnectors FPS

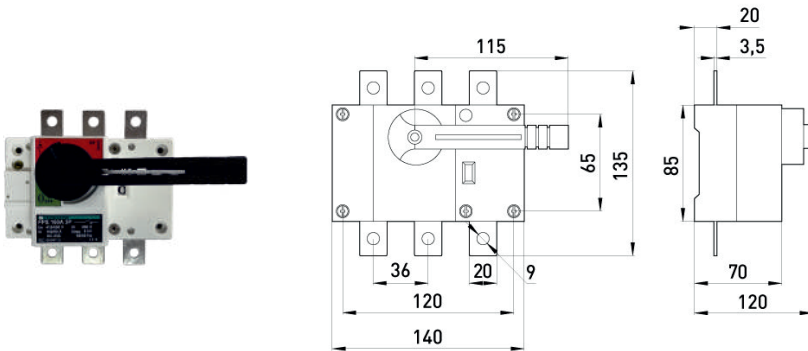


### Technical specifications

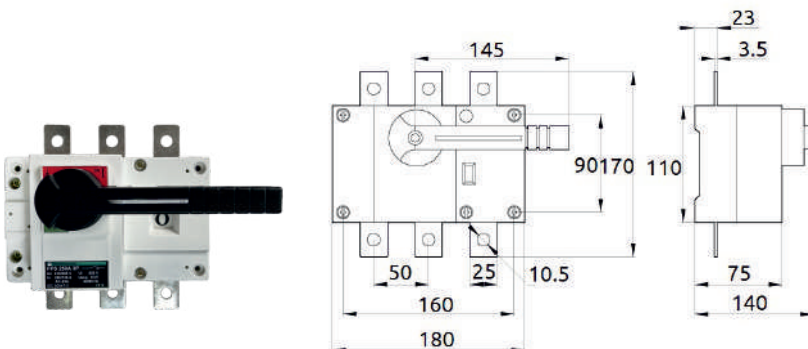
Series	FPS			
Rated current $I_n$ , A	160	250	400	630
Rated voltage $U_n$ , V	~415/690			
Rated frequency $f$ , Hz	50/60			
Rated insulation voltage $U_i$ , V	800			
Rated pulse voltage $U_{imp}$ , kV	8			
Current at AC23A, 415/690	160/80	250/125	400/200	630/315
Short-term permissible current 0.3s $I_{cw}$ , kA	15		25	
Switching wear resistance (electrical/mechanical)	10000/1500			
Maximum power of AC23A, kW	80	125	200	315
Cross-section of the connected conductors, mm <sup>2</sup>	70	120	240	300
Degree of protection	IP20			
Degree of pollution	3			
Operating position	vertical with possible deviation to the left and right by 90°			
Mounting	handpieces			

## Switch disconnectors FPS

Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
<b>FPS1603</b>	FPS1603 Switch disconnector FPS 160A 3P	1	6	1,417	1,417	8,502	

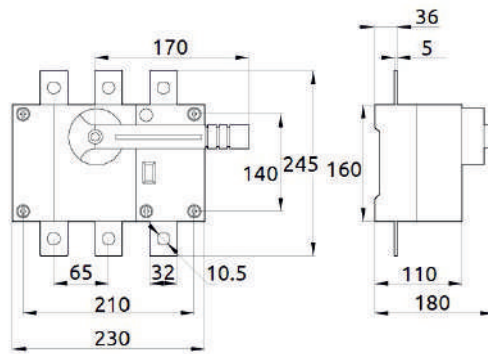
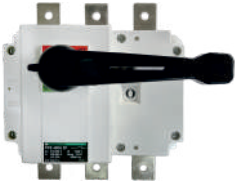


<b>FPS2503</b>	FPS2503 Switch disconnector FPS 250A 3P	1	6	2,160	2,16	12,96
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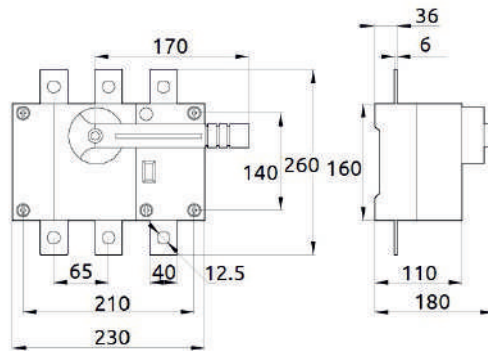
## Switch disconnectors FPS

Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
<b>FPS4003</b>	FPS4003	Switch disconnector FPS 400A 3P	1	4	4,673	4,673	18,692



## FPS6303

FPS6303	Switch disconnector FPS 630A 3P	1	4	5,210	5,210	20,840
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## Horizontal fuse-switch disconnectors FPSH

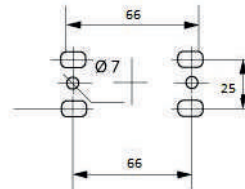
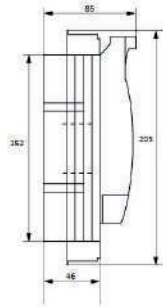
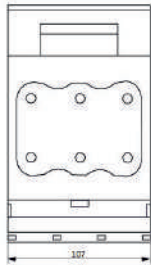


### Technical specifications

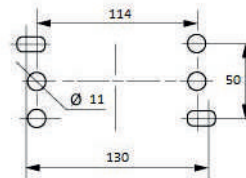
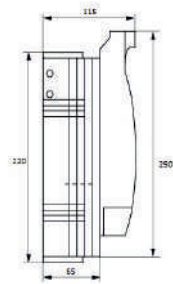
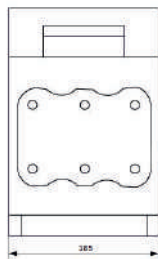
Series	FPSH
Standard	IEC 60947-3
Number of poles	3
Rated current $I_n$ , A	160, 250, 400, 630
Rated voltage $U_n$ , V	~415/690
Rated frequency $f$ , Hz	50
Category of application	AC-21B
Fuse dimension	00, 0, 1, 2, 3
Degree of protection	IP20
Height above sea level, m	2000
Operating temperature range, °C	-25...+55
Storage temperature, °C	-25...+70

## Horizontal fuse-switch disconnectors FPSH

Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
<b>FPSH1603</b> FPSH1603	Horizontal fuse switch disconnector FPSH 160A 3P 1	1	12	0,814	0,814	9,768

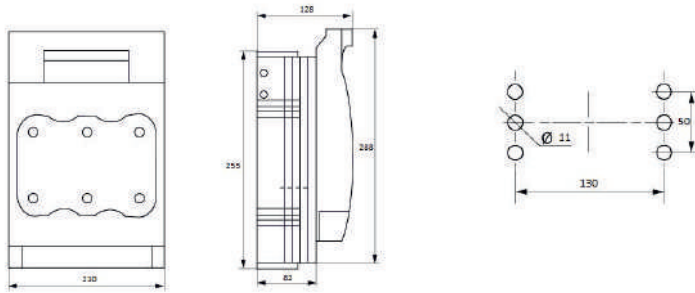


<b>FPSH2503</b> FPSH2503	Horizontal fuse switch disconnector FPSH 250A 3P 1	1	6	3,038	3,038	18,228
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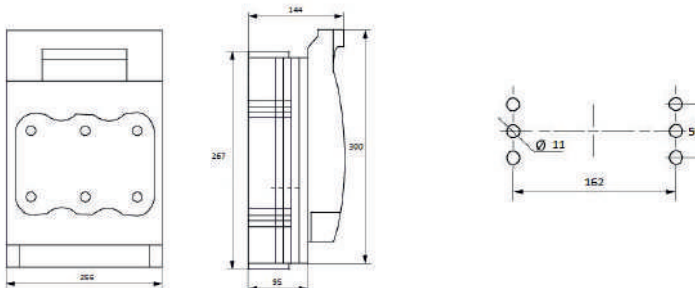
## Horizontal fuse-switch disconnectors FPSH

Order code	Full name of	Packaging, pcs		Unit	Gross weight, kg	
		Packaging	Box		Packaging	Box
<b>FPSH4003</b>	FPSH4003 Horizontal fuse switch disconnecter FPSH 400A 3P	1	4	3,500	3,500	14,000

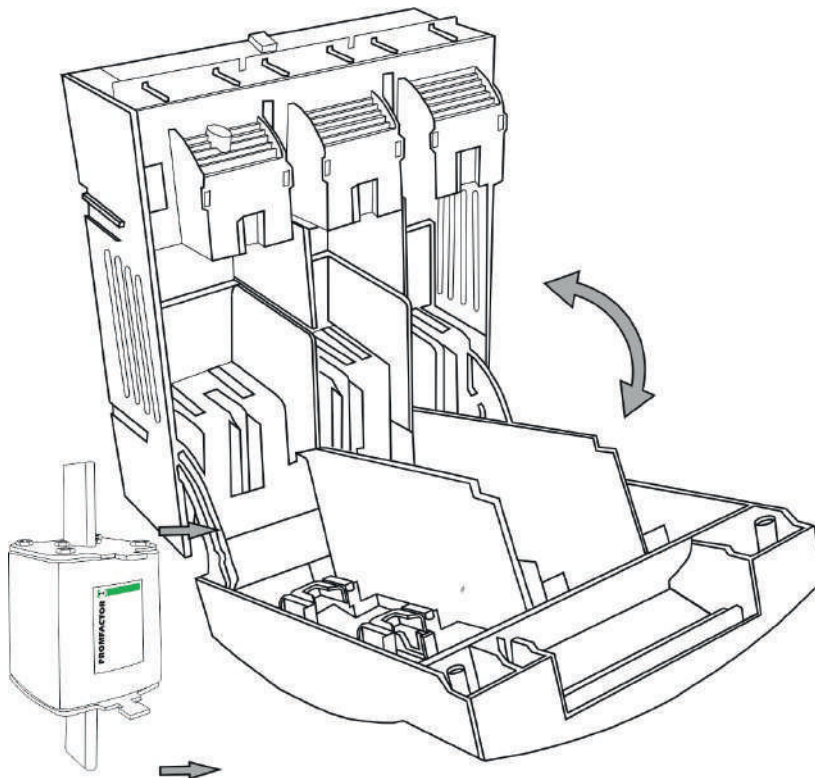


## FPSH6303

FPSH6303	Horizontal fuse switch disconnecter FPSH 630A 3P	1	4	4,835	4,835	19,340
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## Example of FPSH application



FPSH

## Fuses NF



### Technical specifications

Series	NF				
Standard	IEC/EN 60269				
Dimensions	00	0	1	2	3
Rated voltage $U_n$ , V	~690				
Rated current $I_n$ , A	10, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125	25, 32, 40, 50, 63, 80, 100, 125, 160	63, 80, 100, 125, 160, 200, 225, 250	63, 80, 100, 125, 160, 200, 225, 250, 315, 400	315, 400, 500, 630
Rated frequency $f$ , Hz	50/60				
Classification group	gG				
Rated breaking capacity at - 500V - 900V	120kA 50kA				
Degree of pollution	3				
Degree of protection	IP00				

## Fuse bases NFT



### Technical specifications

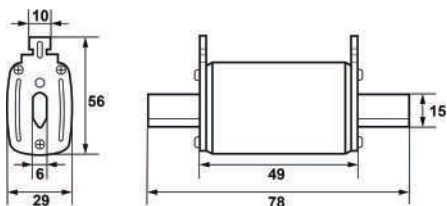
Series	NFT				
Standard	IEC/EN 60269				
Dimensions	00	0	1	2	3
Number of poles	1				
Rated voltage $U_n$ , V	~690				
Rated current $I_n$ , A	160	160	250	400	630
Rated frequency $f$ , Hz	40-60				
Rated insulation voltage $U_i$ , V	1500				
Rated pulse voltage $U_{imp}$ , V	6000				
Degree of pollution	3				
Degree of protection	IP00				
Case material	ceramics				
Material of knives	tinned copper				
Mounting	mounting panel				

# Fuses NF

## NF00



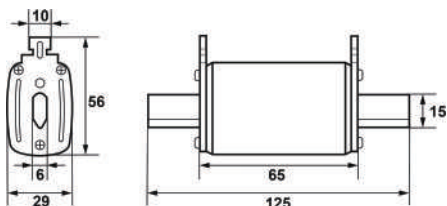
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
NF0010	Fuse NF00.10A 500V 120kA	5	180	0,160	0,800	28,800
NF0016	Fuse NF00.16A 500V 120kA	5	180	0,160	0,800	28,800
NF0020	Fuse NF00.20A 500V 120kA	5	180	0,160	0,800	28,800
NF0025	Fuse NF00.25A 500V 120kA	5	180	0,160	0,800	28,800
NF0032	Fuse NF00.32A 500V 120kA	5	180	0,160	0,800	28,800
NF0040	Fuse NF00.40A 500V 120kA	5	180	0,160	0,800	28,800
NF0050	Fuse NF00.50A 500V 120kA	5	180	0,160	0,800	28,800
NF0063	Fuse NF00.63A 500V 120kA	5	180	0,160	0,800	28,800
NF0080	Fuse NF00.80A 500V 120kA	5	180	0,160	0,800	28,800
NF00100	Fuse NF00.100A 500V 120kA	5	180	0,160	0,800	28,800
NF00125	Fuse NF00.125A 500V 120kA	5	180	0,160	0,800	28,800
NF00160	Fuse NF00.160A 500V 120kA	5	180	0,160	0,800	28,800



## NF0



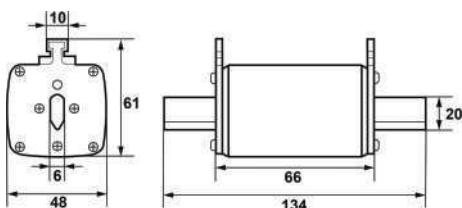
NF025	Fuse NF0.25A 500V 120kA	5	120	0,220	1,100	26,400
NF032	Fuse NF0.32A 500V 120kA	5	120	0,220	1,100	26,400
NF040	Fuse NF0.40A 500V 120kA	5	120	0,220	1,100	26,400
NF050	Fuse NF0.50A 500V 120kA	5	120	0,220	1,100	26,400
NF063	Fuse NF0.63A 500V 120kA	5	120	0,220	1,100	26,400
NF080	Fuse NF0.80A 500V 120kA	5	120	0,220	1,100	26,400
NF0100	Fuse NF0.100A 500V 120kA	5	120	0,220	1,100	26,400
NF0125	Fuse NF0.125A 500V 120kA	5	120	0,220	1,100	26,400
NF0160	Fuse NF0.160A 500V 120kA	5	120	0,220	1,100	26,400



## NF1



NF1100	Fuse NF1.100A 500V 120kA	3	60	0,380	1,140	22,800
NF163	Fuse NF1.63A 500V 120kA	3	60	0,380	1,140	22,800
NF180	Fuse NF1.80A 500V 120kA	3	60	0,380	1,140	22,800
NF1125	Fuse NF1.125A 500V 120kA	3	60	0,380	1,140	22,800
NF1160	Fuse NF1.160A 500V 120kA	3	60	0,380	1,140	22,800
NF1200	Fuse NF1.200A 500V 120kA	3	60	0,380	1,140	22,800
NF1250	Fuse NF1.250A 500V 120kA	3	60	0,380	1,140	22,800



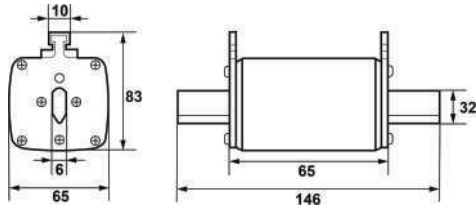
NF/NFT

## Fuses NF

### NF2



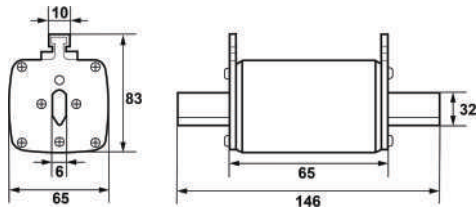
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
NF263	Fuse NF2.63A 500V 120kA	1	40	0,560	0,560	22,400
NF280	Fuse NF2.80A 500V 120kA	1	40	0,560	0,560	22,400
NF2100	Fuse NF2.100A 500V 120kA	1	40	0,560	0,560	22,400
NF2125	Fuse NF2.125A 500V 120kA	1	40	0,560	0,560	22,400
NF2160	Fuse NF2.160A 500V 120kA	1	40	0,560	0,560	22,400
NF2200	Fuse NF2.200A 500V 120kA	1	40	0,560	0,560	22,400
NF2250	Fuse NF2.250A 500V 120kA	1	40	0,560	0,560	22,400
NF2315	Fuse NF2.315A 500V 120kA	1	40	0,560	0,560	22,400
NF2400	Fuse NF2.400A 500V 120kA	1	40	0,560	0,560	22,400



### NF3



NF3315	Fuse NF3.315A 500V 120kA	1	30	0,740	0,740	22,200
NF3400	Fuse NF3.400A 500V 120kA	1	30	0,740	0,740	22,200
NF3500	Fuse NF3.500A 500V 120kA	1	30	0,740	0,740	22,200
NF3630	Fuse NF3.630A 500V 120kA	1	30	0,740	0,740	22,200

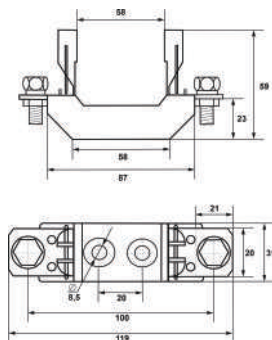


## Fuse bases NFT

### NFT00



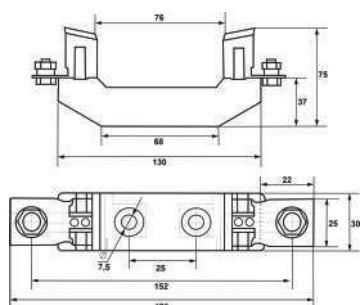
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
NFT00	Fuse base NFT00	3	150	0,140	0,420	21,000



### NFT0

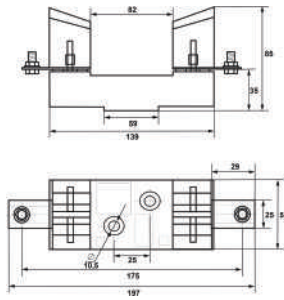


NFT0	Fuse base NFT0	3	90	0,290	0,870	26,100
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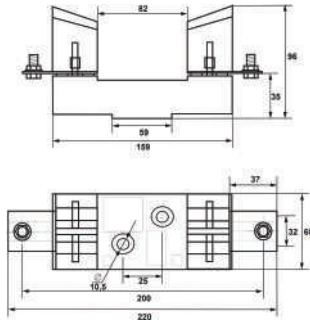
## Fuse bases NFT

	Order code	Full name of	Packaging, pcs			Gross weight, kg	
			Packaging	Box	Unit	Packaging	Box
<b>NFT1</b>	NFT1	Fuse base NFT1	1	40	0,460	0,460	18,400



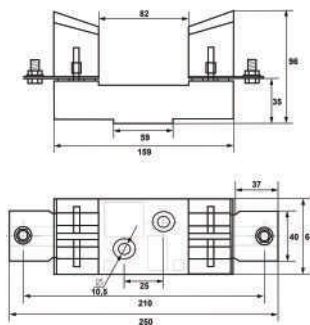
## NFT2

NFT2	Fuse base NFT2	1	30	0,710	0,710	21,300
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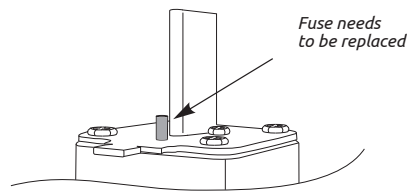


## NFT3

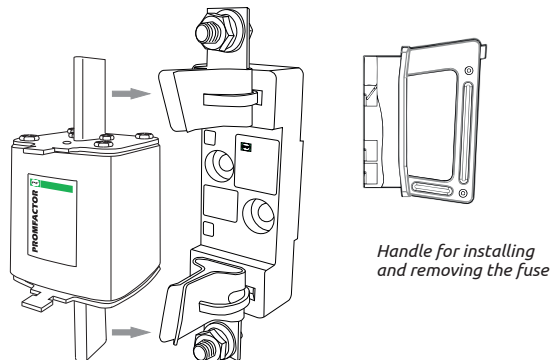
NFT3	Fuse base NFT3	1	20	0,870	0,870	17,400
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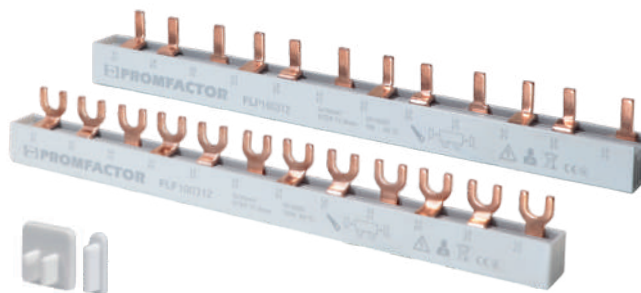


## Example of NF application



### Installing the fuse in the holder



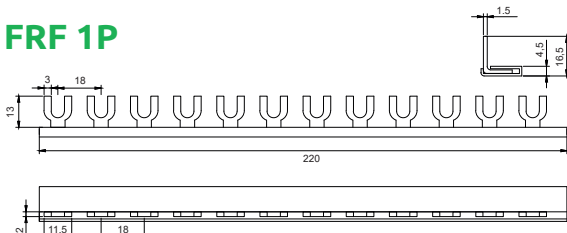


Technical specifications

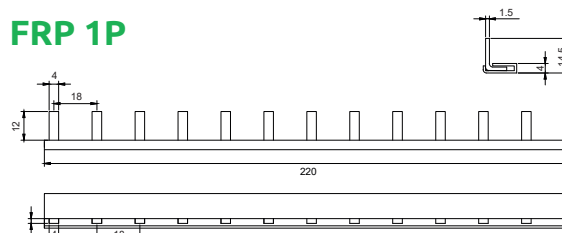
Series	PIN	FORK
Standard	IEC 60664, IEC/EN 60439-1	
Number of poles	1P, 3P	
Tire cross-section, mm <sup>2</sup>	10, 16, 18	10, 16
Number of modules	12, 36, 54	12, 54
Inter-pole spacing, mm	18, 27	18
Ability to cut the tire	yes	
Additional equipment	side caps, adapters for connection	
Rated voltage U <sub>n</sub> , V	~230/400	
Rated current I <sub>n</sub> , A	63, 100, 125	63, 100
Rated insulation voltage U <sub>i</sub> , V	500	
Degree of pollution	3	
Fire resistance in accordance with IEC60695-2-1	850 °C (30s)	
Degree of protection	IP20	

Overall dimensions

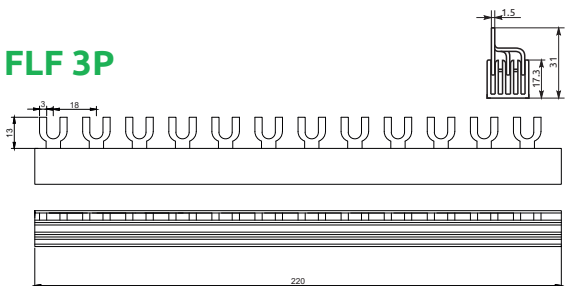
FRF 1P



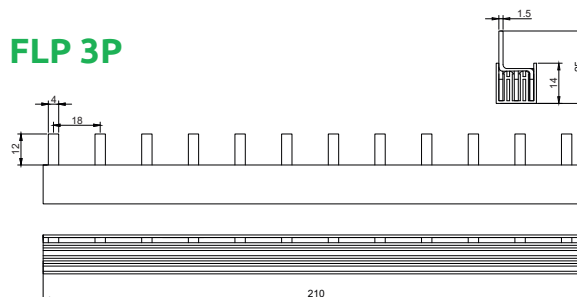
FRP 1P



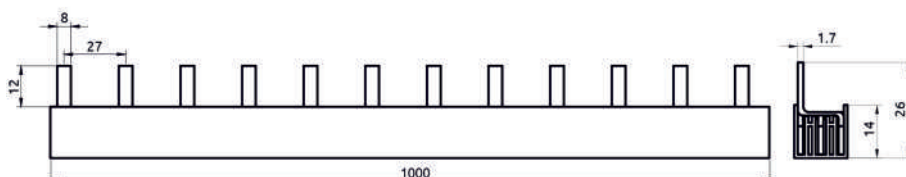
FLF 3P



FLP 3P



FLP 3P



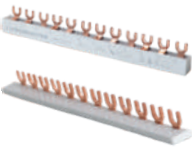
## Busbars PIN, FORK

### PIN



Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
FLP180336	Busbar FLP 18mm <sup>2</sup> 125A 3P 36 modules PIN type	5	50	0,780	3,900	39,000
FLP100354	Busbar FLP 10mm <sup>2</sup> 3P 63A 54 modules PIN type	5	50	0,480	2,400	24,000
FLP100312	Busbar FLP 10mm <sup>2</sup> 63A 3P 12 modules PIN type	20	200	0,095	1,900	19,000
FLP160312	Busbar FLP 16mm <sup>2</sup> 100A 3P 12 modules PIN type	20	200	0,130	2,600	26,000
FLP160354	Busbar FLP 16mm <sup>2</sup> 100A 3P 54 modules PIN type	5	50	0,640	3,200	32,000
FRP100112	Busbar FRP 10mm <sup>2</sup> 63A 1P 12 modules PIN type	40	200	0,037	1,480	7,400
FRP100154	Busbar FRP 10mm <sup>2</sup> 63A 1P 54 modules PIN type	5	100	0,170	0,850	17,000
FRP160112	Busbar FRP 16mm <sup>2</sup> 100A 1P 12 modules PIN type	40	200	0,060	2,400	12,000
FRP160154	Busbar FRP 16mm <sup>2</sup> 100A 1P 54 modules PIN type	5	100	0,250	1,250	25,000
FRP180136	Busbar FRP 18mm <sup>2</sup> 125A 1P 36 modules PIN type	5	50	0,270	1,350	13,500

### FORK



FLF100354	Busbar FLF 10mm <sup>2</sup> 63A 3P 54 modules FORK type	5	50	0,480	2,400	24,000
FLF100312	Busbar FLF 10mm <sup>2</sup> 63A 3P 12 modules FORK type	20	200	0,100	2,000	20,000
FLF160312	Busbar FLF 16mm <sup>2</sup> 100A 3P 12 modules FORK type	20	200	0,130	2,600	26,000
FLF160354	Busbar FLF 16mm <sup>2</sup> 100A 3P 54 modules FORK type	5	50	0,680	3,400	34,000
FRF100112	Busbar FRF 10mm <sup>2</sup> 63A 1P 12 modules FORK type	40	200	0,053	2,120	10,600
FRF100154	Busbar FRF 10mm <sup>2</sup> 63A 1P 54 modules FORK type	5	100	0,220	1,100	22,000
FRF160112	Busbar FRF 16mm <sup>2</sup> 100A 1P 12 modules FORK type	40	200	0,065	2,600	13,000
FRF160154	Busbar FRF 16mm <sup>2</sup> 100A 1P 54 modules FORK type	5	100	0,280	1,400	28,000

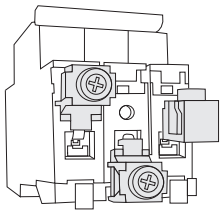
### Side cap for busbar



EC1003	Side cap for busbar FLF 3P 10mm <sup>2</sup>	10	100	0,001	0,010	0,100
EC1603	Side cap for busbar FLF 3P 16mm <sup>2</sup>	10	100	0,001	0,010	0,100
EC1001	Side cap for busbar FRF 1P 10mm <sup>2</sup>	10	100	0,001	0,010	0,100
EC1601	Side cap for busbar FRF 1P 16mm <sup>2</sup>	10	100	0,001	0,010	0,100

## Accessories for circuit breakers

### F/AD, F/ADS adapter

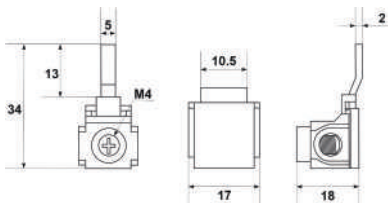


The adapter for side and top connection is used for connecting wires with a cross-section of up to 50 mm<sup>2</sup>.

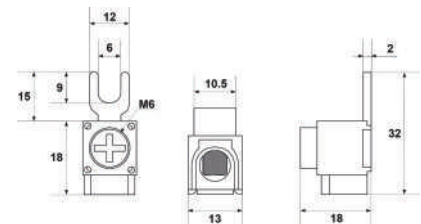


## Overall dimensions

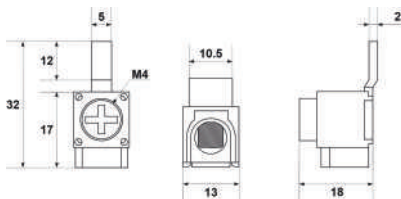
### F/AD



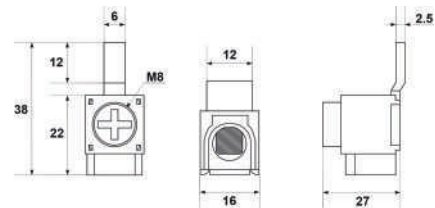
### FORK F/AD



### F/ADS



### PIN F/AD



### Order code

### Full name of

F/AD25

Adapter top connection F/AD

F/ADS25

Adapter side connection F/ADS

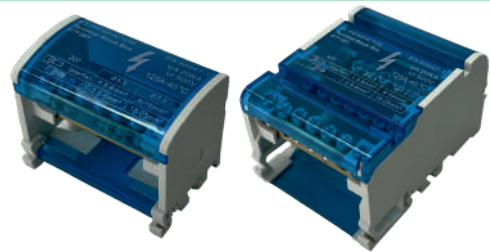
F/ADF25

Adapter top connection FORK F/AD 25mm<sup>2</sup>

F/AD50

Adapter top connection F/AD

## Terminal Block Boxes BTF

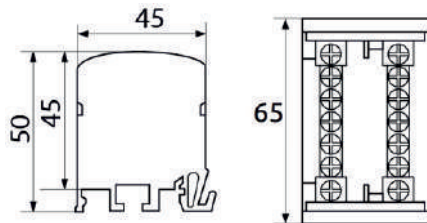
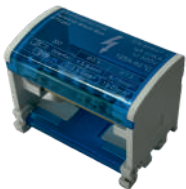


### Technical specifications

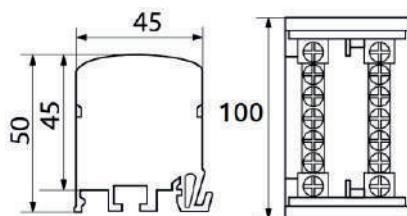
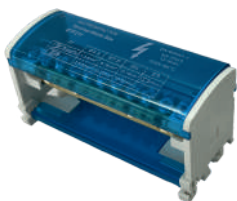
Series	BTF207 2P 125A 2x7	BTF407 4P 125A 4x7	BTF211 2P 125A 2x11	BTF411 4P 125A 4x11	BTF215 2P 125A 2x15	BTF415 4P 125A 4x15
Standard	IEC/EN 60947-1					
Rated operating current $I_n$ , A	125					
Rated voltage $U_n$ , V	415/690					
Insulation voltage $U_i$ , V	800					
Material of manufacture	terminal - brass, cover - polycarbonate					
Type of mounting	DIN rail, screw on the mounting panel					
Number of tires	2	4	2	4	2	4
Number of holes per tire	7		11		15	
Number of connection holes on one bus	Ø5,3 mm - 5, Ø7,5 mm - 2	Ø5,3 mm - 5, Ø7,5 mm - 2	Ø5,3 mm - 7, Ø7,5 mm - 2, Ø9 mm - 2	Ø5,3 mm - 7, Ø7,5 mm - 2, Ø9 mm - 2	Ø5,3 mm - 11, Ø7,5 mm - 2, Ø9 mm - 2	Ø5,3 mm - 11, Ø7,5 mm - 2, Ø9 mm - 2
Total number of connection holes	Ø5,3 mm - 10, Ø7,5 mm - 4	Ø5,3 mm - 20, Ø7,5 mm - 8	Ø5,3 mm - 14, Ø7,5 mm - 4, Ø9 mm - 4	Ø5,3 mm - 28, Ø7,5 mm - 8, Ø9 mm - 8	Ø5,3 mm - 22, Ø7,5 mm - 4, Ø9 mm - 4	Ø5,3 mm - 44, Ø7,5 mm - 8, Ø9 mm - 8

## Terminal Block Boxes BTF

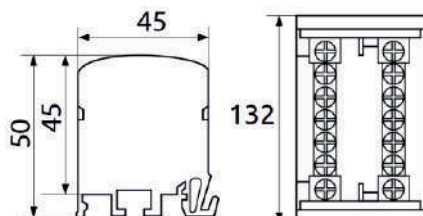
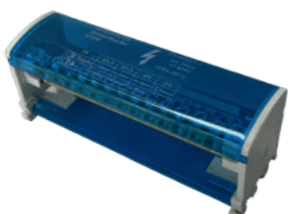
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
<b>BTF207</b>	Terminal Block Box BTF207 2P 125A 2x7 690V	1	100	0,130	0,130	13,000



<b>BTF211</b>	Terminal Block Box BTF211 2P 125A 2x11 690V	1	100	0,220	0,220	22,000
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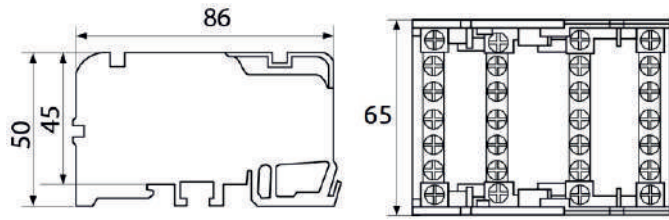


<b>BTF215</b>	Terminal Block Box BTF407 4P 125A 4x7 690V	1	100	0,305	0,305	30,500
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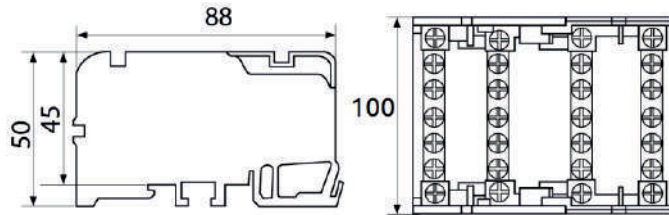
## Terminal Block Boxes BTF

Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
<b>BTF407</b>	Terminal Block Box BTF411 4P 125A 4x11 690V	1	100	0,260	0,260	26,000



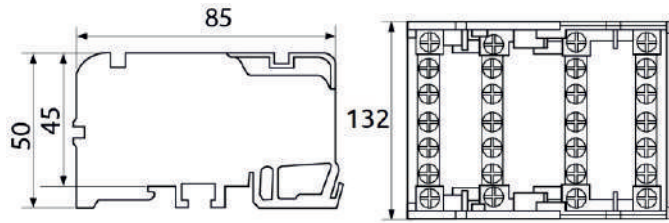
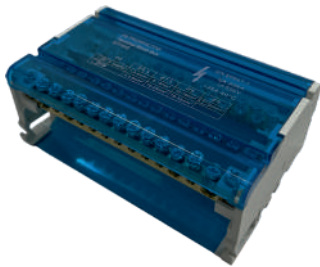
## BTF411

BTF411	Terminal Block Box BTF411 4P 125A 4x11 690V	1	50	0,430	0,430	21,500
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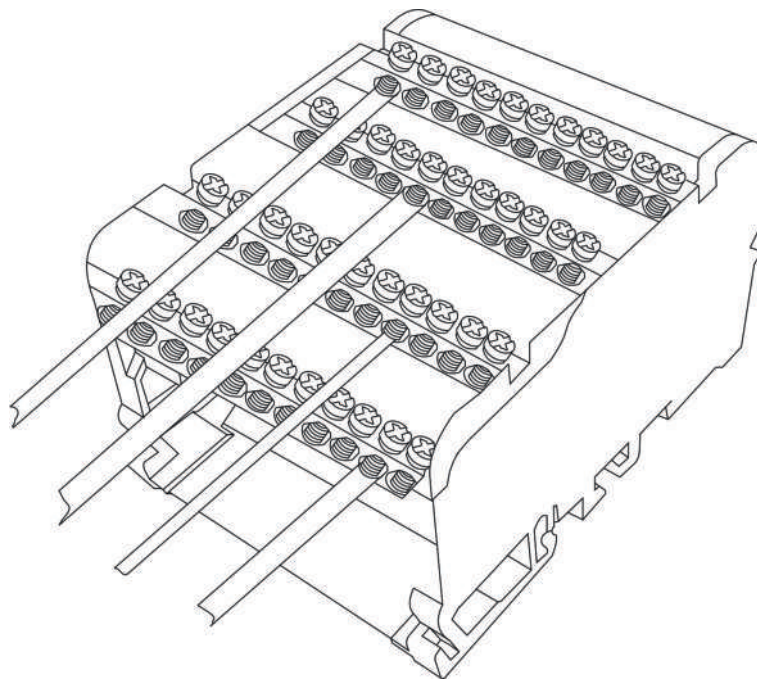


## BTF415

BTF415	Terminal Block Box BTF415 4P 125A 4x15 690V	1	50	0,570	0,570	28,500
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## Example of BTF application



## Power distribution terminal blocks DTB

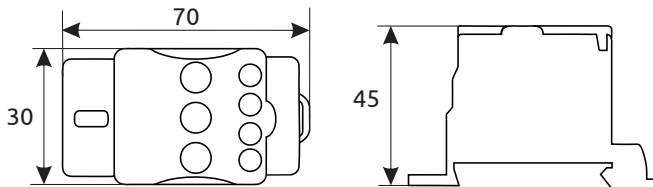


### Technical specifications

Series	DTB					
Standard	IEC/EN 60947-7-1					
Rated voltage $U_n$ , V	~690					
Rated current $I_n$ , A	80	125	160	250	400	500
Rated insulation voltage $U_i$ , V	800					
Withstand pulse voltage $U_{imp}$ , V	6000					
Number of holes and connection cross-section	3x16 mm <sup>2</sup>	1x16 mm <sup>2</sup> , 1x35 mm <sup>2</sup>	1x16 mm <sup>2</sup> , 1x70 mm <sup>2</sup>	1x120 mm <sup>2</sup>	1x185 mm <sup>2</sup>	8x24 mm <sup>2</sup>
	4x6 mm <sup>2</sup>	6x16 mm <sup>2</sup>	1x16 mm <sup>2</sup>	2x35 mm <sup>2</sup> , 5x16 mm <sup>2</sup> , 4x10 mm <sup>2</sup>	2x35 mm <sup>2</sup> , 5x16 mm <sup>2</sup> , 4x10 mm <sup>2</sup>	2x35 mm <sup>2</sup> , 5x16 mm <sup>2</sup> , 4x10 mm <sup>2</sup>
Case material	heat-resistant polyamide					
Terminal material	aluminum alloy					
Clamps	for a hexagonal wrench					

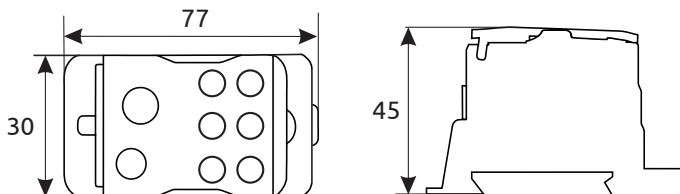
## Power distribution terminal blocks DTB

	Order code	Full name of	Packaging, pcs			Gross weight, kg	
			Packaging	Box	Unit	Packaging	Box
<b>DTB080</b>	DTB080	Power distribution terminal block DTB080 80A (7 terminals) 690V	1	150	0,060	0,060	9,000



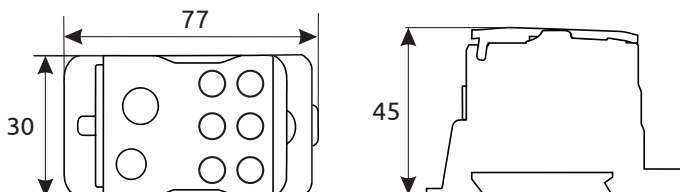
### DTB125

DTB125	Power distribution terminal block DTB125 125A (8 terminals) 690V	1	150	0,180	0,180	27,000
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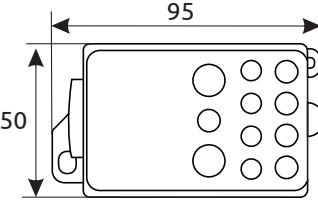
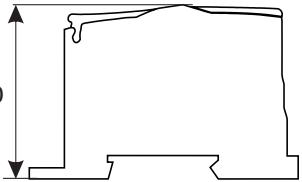

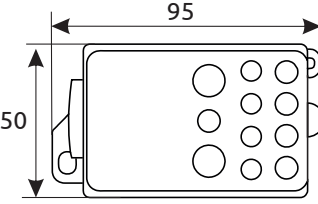
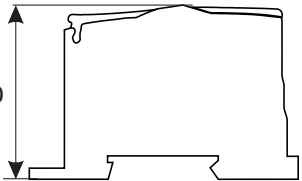

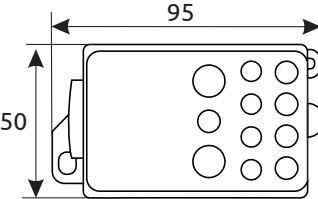
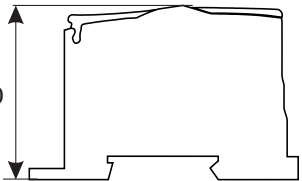


### DTB160

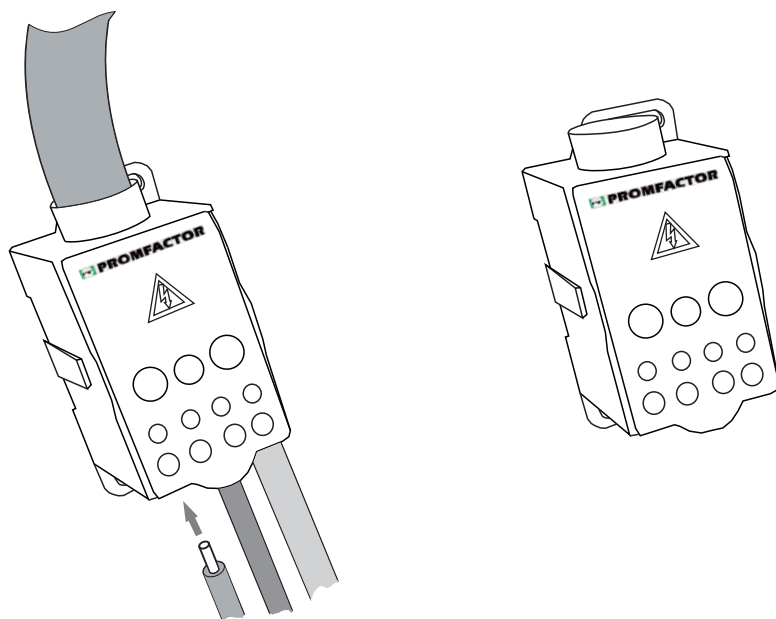
DTB160	Power distribution terminal block DTB160 160A (8 terminals) 690V	1	150	0,200	0,200	30,000
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## Power distribution terminal blocks DTB

	Order code	Full name of	Packaging, pcs			Gross weight, kg	
			Packaging	Box	Unit	Packaging	Box
<b>DTB250</b>	DTB250	Power distribution terminal block DTB250 250A (12 terminals) 690V	1	30	0,420	0,420	12,600
							
<b>DTB400</b>	DTB400	Power distribution terminal block DTB400 400A (12 terminals) 690V	1	30	0,440	0,440	13,200
							
<b>DTB500</b>	DTB500	Power distribution terminal block DTB500 500A (12 terminals) 690V	1	30	1,460	0,460	13,800
							

## Example of DTB application



## Primary terminals FT

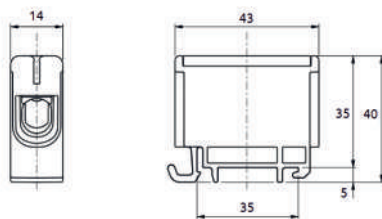


### Technical specifications

Series	FT					
Standards	IEC/EN 61238-1, IEC/EN 60947-7-1					
Number of poles	1 2 3					
Number of connections	2, 4, 6					
Rated voltage $U_n$ , AC/DC, V	1000/1500					
Rated current $I_n$ , Cu/Al, A	85/85	135/120	160/145	245/220	320/290	425/380
Number of holes and cross-section of connected conductors, Cu/Al, mm <sup>2</sup>	1.5...16/ 1.5...16	2.5...35/ 2.5...35	2.5...50/ 6...50	16...95/ 16...95	35...150/ 35...150	35...240/ 35...240
Bolt clamping torque, Nm	1.5 - (1.5 mm <sup>2</sup> ) 3.5 - (2.5...6 mm <sup>2</sup> ) 7 - (10...16 mm <sup>2</sup> )	3 - (2.5...16 mm <sup>2</sup> ) 6 - (25...35 mm <sup>2</sup> )	4 - (2.5...4 mm <sup>2</sup> ) 12 - (6...50 mm <sup>2</sup> )	20 - (16...95 mm <sup>2</sup> ) 30 - (120...150 mm <sup>2</sup> )	20 - (35...95 mm <sup>2</sup> )	12 - (35...75 mm <sup>2</sup> ) 45 - (95...240 mm <sup>2</sup> )
Case material	polyamide Pa66					
Terminal material	aluminum alloy					
Degree of protection	IP20					
DIN rail mounting	35x7.5					
Operating position	any					

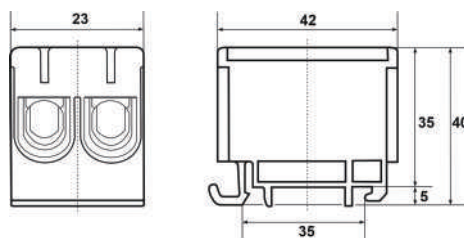
## Primary terminals FT

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
<b>FT1016F</b>	FT1016F Primary terminal FT1016F 1P,Cu:1.5-16 / Al:1.5-16 mm <sup>2</sup> , grey	24	240	0,021	0,504	5,040



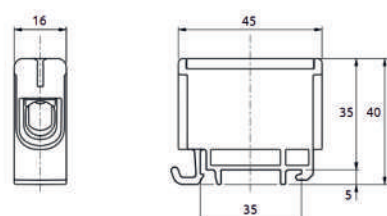
### FT1016F2

FT1016F2	Primary terminal FT1016F 2P, Cu:1.5-16/Al:1.5-16 mm <sup>2</sup> , grey	14	140	0,037	0,518	5,180
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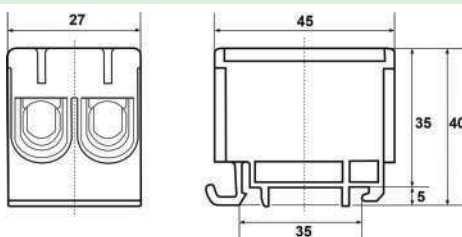

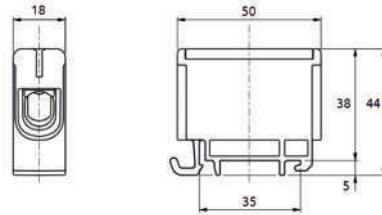

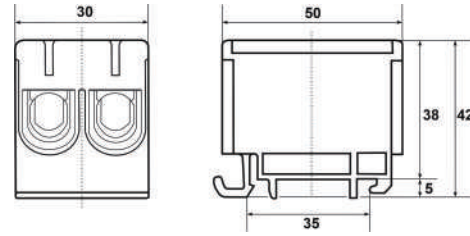

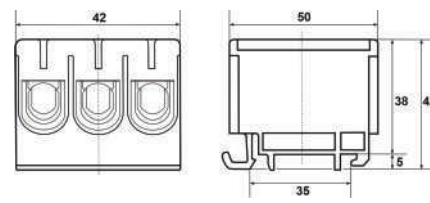

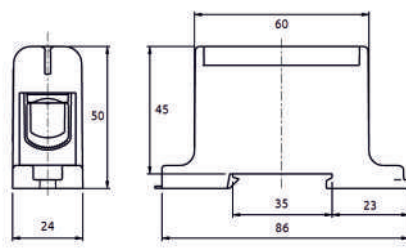

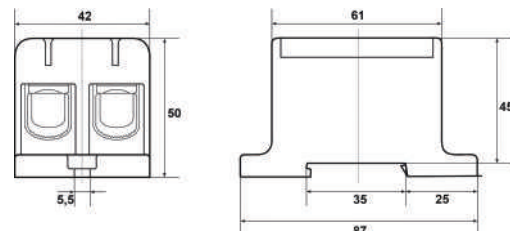


### FT1035F


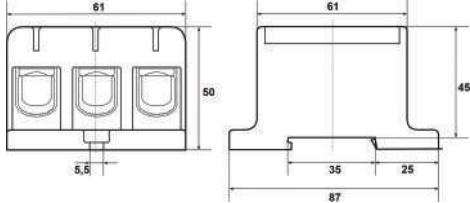
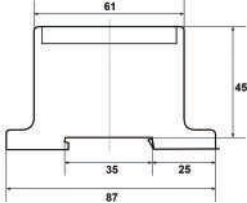

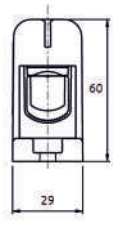
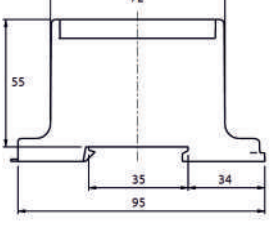

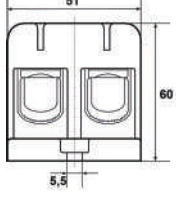
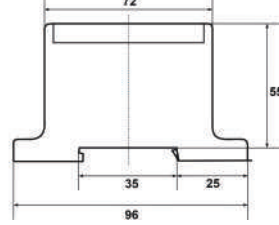

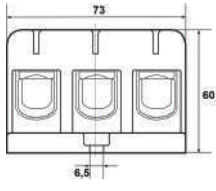
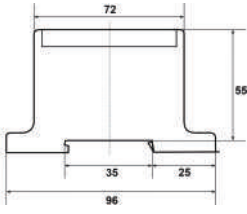

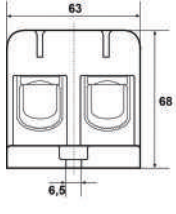
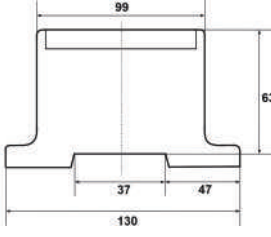

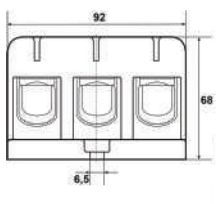
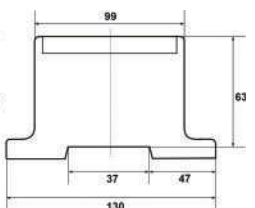
FT1035F	Primary terminal FT1035F 1P,Cu:2.5-35 / Al:2.5-35 mm <sup>2</sup> , grey	20	200	0,025	0,500	5,000
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## Primary terminals FT

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FT1035F2</b> 	FT1035F2	Primary terminal FT1035F 2P,Cu:2.5-35/Al:2.5-35 mm2, grey	12	120	0,043	0,516	5,160
							
<b>FT1050F</b> 	FT1050F	Primary terminal FT1050F 1P,Cu:2.5-50 / Al:6-50 mm2, grey	23	230	0,035	0,805	8,050
							
<b>FT1050F2</b> 	FT1050F2	Primary terminal FT1050F 2P,Cu:2.5-50 / Al:6-50 mm2, grey	14	140	0,062	0,868	8,680
							
<b>FT1050F3</b> 	FT1050F3	Primary terminal FT1050F 3P,Cu:2.5-50 / Al:6-50 mm2, grey	10	100	0,089	0,890	8,900
							
<b>FT1095F</b> 	FT1095F	Primary terminal FT1095F 1P,Cu:16-95 / Al:16-95 mm2, grey	7	70	0,093	0,651	6,510
							
<b>FT1095F2</b> 	FT1095F2	Primary terminal FT1095F 2P,Cu:16-95 / Al:16-95 mm2, grey	4	40	0,165	0,660	6,600
							

# Primary terminals FT

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FT1095F3</b>	FT1095F3	Primary terminal FT1095F 3P,Cu:16-95 / Al:16-95 mm <sup>2</sup> , grey	3	30	0,240	0,720	7,200
							
<b>FT1150F</b>	FT1150F	Primary terminal FT1150F 1P,Cu:35-150 / Al:35-150 mm <sup>2</sup> , grey	5	50	0,160	0,800	8,000
							
<b>FT1150F2</b>	FT1150F2	Primary terminal FT1150F 2P,Cu:35-150 / Al:35-150 mm <sup>2</sup> , grey	3	30	0,290	0,870	8,700
							
<b>FT1150F3</b>	FT1150F3	Primary terminal FT1150F 3P,Cu:35-150 / Al:35-150 mm <sup>2</sup> , grey	2	20	0,420	0,840	8,400
							
<b>FT1240F2</b>	FT1240F2	Primary terminal FT1240F 2P,Cu:35-240 / Al:35-240 mm <sup>2</sup> , grey	3	30	0,550	1,650	16,500
							
<b>FT1240F3</b>	FT1240F3	Primary terminal FT1240F 3P,Cu:35-240 / Al:35-240 mm <sup>2</sup> , grey	2	20	0,800	1,600	16,000
							

## Primary terminals FT

Yellow/  
green



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FT1016G	Primary terminal FT1016G 1P, Cu:1.5-16 / Al:1.5-16 mm2, yellow/green	24	240	0,021	0,504	5,040
FT1016G2	Primary terminal FT1016G 2P, Cu:1.5-16/Al:1.5-16 mm2, yellow/green	14	140	0,037	0,518	5,180
FT1035G	Primary terminal FT1035G 1P, Cu:2.5-35 / Al:2.5-35 mm2, yellow/green	20	200	0,025	0,500	5,000
FT1035G2	Primary terminal FT1035G 2P, Cu:2.5-35 / Al:2.5-35 mm2, yellow/green	12	120	0,043	0,516	5,160
FT1050G	Primary terminal FT1050G 1P Cu:2.5-50 / Al:6-50 mm2, yellow/green	23	230	0,035	0,805	8,050
FT1050G2	Primary terminal FT1050G 2P, Cu:2.5-50 / Al:6-50 mm2, yellow/green	14	140	0,062	0,868	8,680
FT1050G3	Primary terminal FT1050G 3P, Cu:2.5-50 / Al:6-50 mm2, yellow/green	10	100	0,089	0,890	8,900
FT1095G	Primary terminal FT1095G 1P, Cu:16-95 / Al:16-95 mm2, yellow/green	7	70	0,093	0,651	6,510
FT1095G2	Primary terminal FT1095G 2P, Cu:16-95 / Al:16-95 mm2, yellow/green	4	40	0,165	0,660	6,600
FT1095G3	Primary terminal FT1095G 3P, Cu:16-95 / Al:16-95 mm2, yellow/green	3	30	0,240	0,720	7,200
FT1150G	Primary terminal FT1150G 1P, Cu:35-150 / Al:35-150 mm2, yellow/green	5	50	0,160	0,800	8,000
FT1150G2	Primary terminal FT1150G 2P, Cu:35-150 / Al:35-150 mm2, yellow/green	3	30	0,290	0,870	8,700
FT1150G3	Primary terminal FT1150G 3P, Cu:35-150 / Al:35-150 mm2, yellow/green	2	20	0,420	0,840	8,400
FT1240G2	Primary terminal FT1240G 2P, Cu:35-240 / Al:35-240 mm2, yellow/green	3	30	0,550	1,650	16,500
FT1240G3	Primary terminal FT1240G 3P, Cu:35-240 / Al:35-240 mm2, yellow/green	2	20	0,800	1,600	16,000

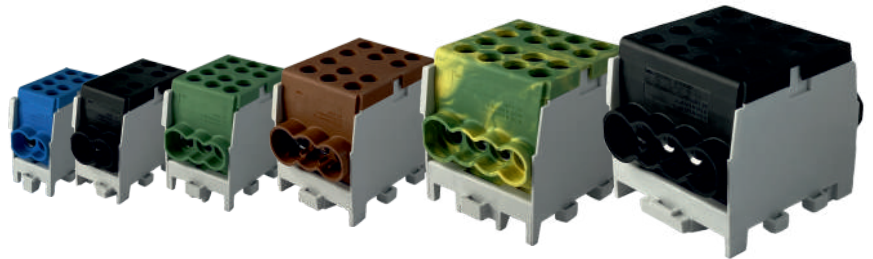
Blue



FT1016N	Primary terminal FT1016N 1P Cu:1.5-16 / Al:1.5-16 mm2, blue	24	240	0,021	0,504	5,040
FT1016N2	Primary terminal FT1016N 2P, Cu:1.5-16 / Al:1.5-16 mm2, blue	14	140	0,037	0,518	5,180
FT1035N	Primary terminal FT1035N 1P, Cu:2.5-35 / Al:2.5-35 mm2, blue	20	200	0,025	0,500	5,000
FT1035N2	Primary terminal FT1035N 2P, Cu:2.5-35 / Al:2.5-35 mm2, blue	12	120	0,043	0,516	5,160
FT1050N	Primary terminal FT1050N 1P, Cu:2.5-50 / Al:6-50 mm2, blue	23	230	0,035	0,805	8,050
FT1050N2	Primary terminal FT1050N 2P, Cu:2.5-50 / Al:6-50 mm2, blue	14	140	0,062	0,868	8,680
FT1050N3	Primary terminal FT1050N 3P, Cu:2.5-50 / Al:6-50 mm2, blue	10	100	0,089	0,890	8,900
FT1095N	Primary terminal FT1095N 1P, Cu:16-95 / Al:16-95 mm2, blue	7	70	0,093	0,651	6,510
FT1095N2	Primary terminal FT1095N 2P, Cu:16-95 / Al:16-95 mm2, blue	4	40	0,165	0,660	6,600
FT1095N3	Primary terminal FT1095N 3P, Cu:16-95 / Al:16-95 mm2, blue	3	30	0,240	0,720	7,200
FT1150N	Primary terminal FT1150N 1P, Cu:35-150 / Al:35-150 mm2, blue	5	50	0,160	0,800	8,000
FT1150N2	Primary terminal FT1150N 2P, Cu:35-150 / Al:35-150 mm2, blue	3	30	0,290	0,870	8,700
FT1150N3	Primary terminal FT1150N 3P, Cu:35-150 / Al:35-150 mm2, blue	2	20	0,420	0,840	8,400
FT1240N2	Primary terminal FT1240N 2P, Cu:35-240 / Al:35-240 mm2, blue	3	30	0,550	1,650	16,500
FT1240N3	Primary terminal FT1240N 3P, Cu:35-240 / Al:35-240 mm2, blue	2	20	0,800	1,600	16,000

FT


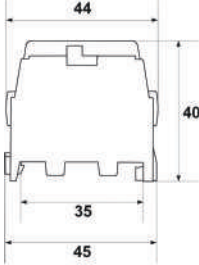
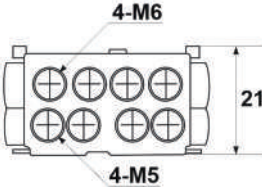

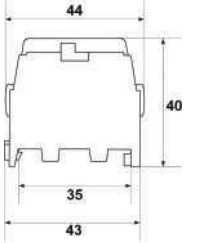
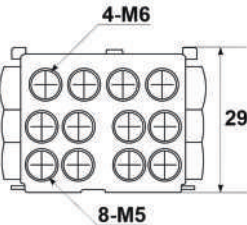

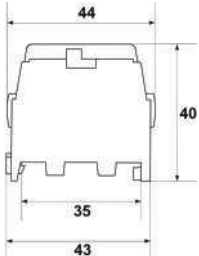
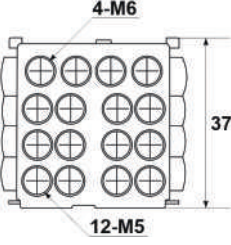
## Distribution blocks FJ




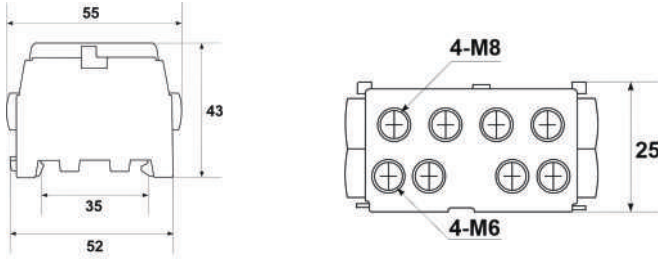

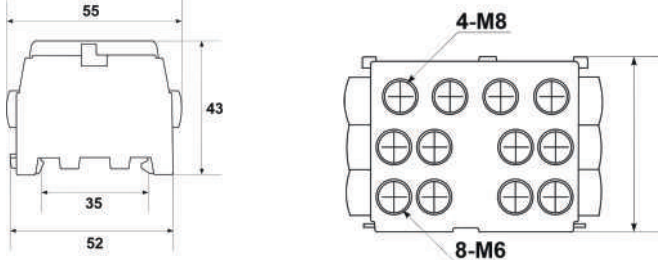

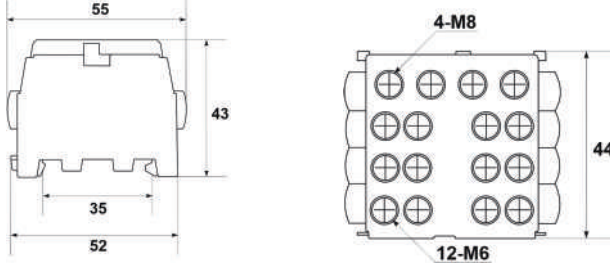

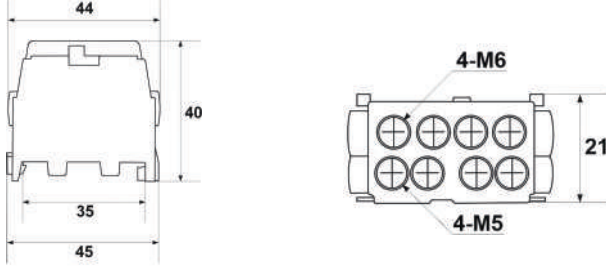

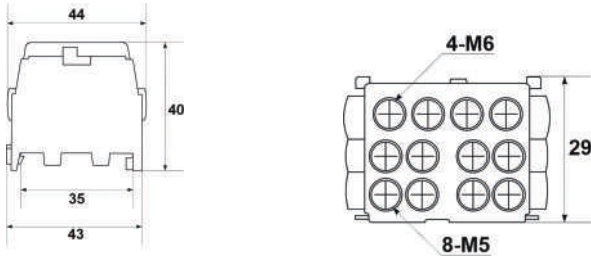

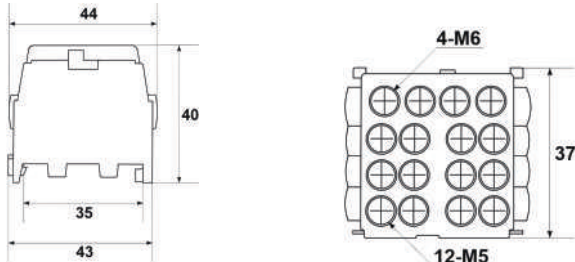
### Technical specifications

Series	FJ					
Standards	IEC/EN 60998-2-1, IEC/EN 60998-1					
Rated voltage $U_n$ , AC, V	400					
Rated current $I_n$ , A	100	100	100	125	125	125
Rated voltage $U_i$ , V	1000					
Rated pulse voltage $U_{imp}$ , V	6000					
Number of holes and cross-section of connected conductors	2 x 25 mm <sup>2</sup> 2 x 16 mm <sup>2</sup>	4 x 25 mm <sup>2</sup> 2 x 16 mm <sup>2</sup>	6 x 25 mm <sup>2</sup> 2 x 16 mm <sup>2</sup>	2 x 35 mm <sup>2</sup> 2 x 25 mm <sup>2</sup>	4 x 35 mm <sup>2</sup> 2 x 25 mm <sup>2</sup>	6 x 35 mm <sup>2</sup> 2 x 25 mm <sup>2</sup>
Bolt clamping torque, Nm	2.5 - (25 mm <sup>2</sup> ) 2 - (16 mm <sup>2</sup> )			3.5 - (35 mm <sup>2</sup> ) 2.5 - (25 mm <sup>2</sup> )		
Case material	heat-resistant polyamide PA66					
Terminal material	aluminum alloy					
Clamps	for a screwdriver					


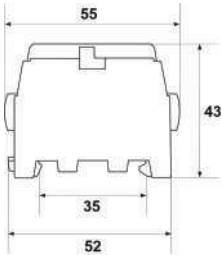
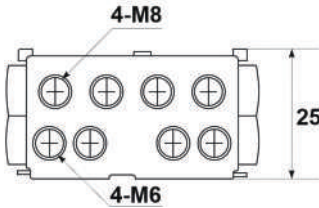

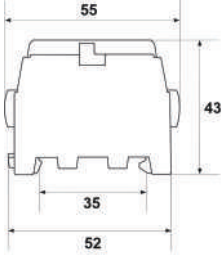
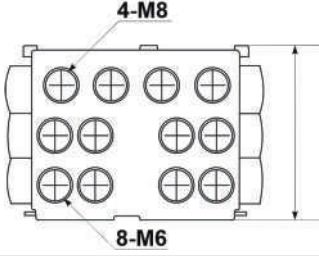

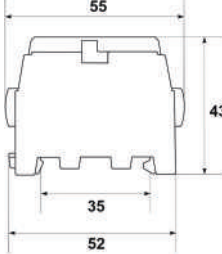
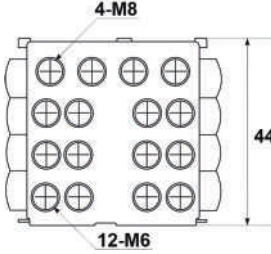

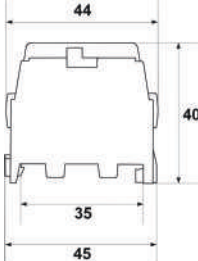
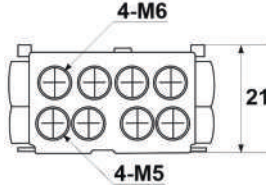

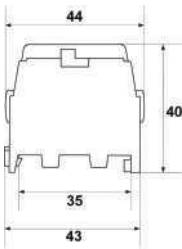
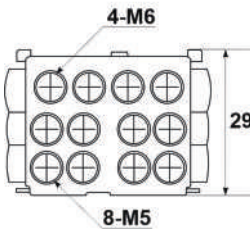
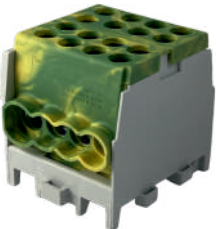
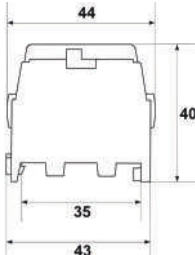
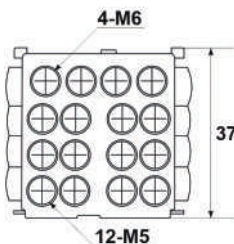
## Distribution blocks FJ

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FJ25161G</b>	FJ25161B	Distribution block FJ-25/16.1B 100A blue	14	10	0,050	0,700	0,500
							
<b>FJ25162G</b>	FJ25162B	Distribution block FJ-25/16.2B 100A blue	10	10	0,072	0,720	0,720
							
<b>FJ25163G</b>	FJ25163B	Distribution block FJ-25/16.3B 100A blue	8	10	0,094	0,752	0,940
							


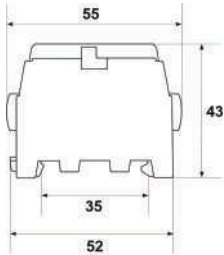
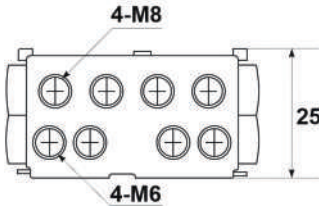

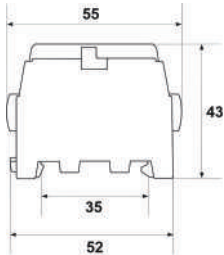
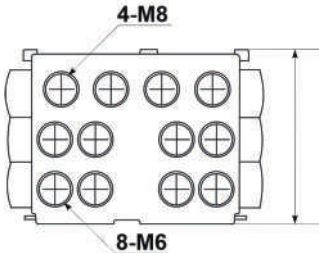

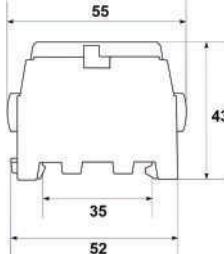
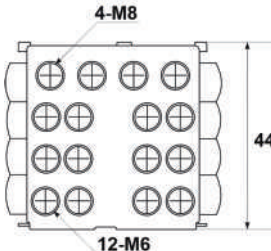

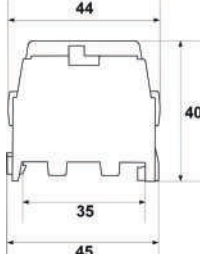
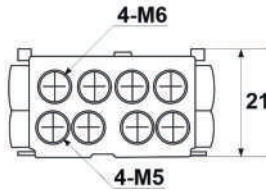

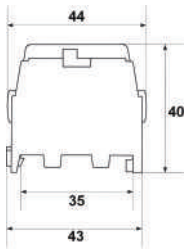
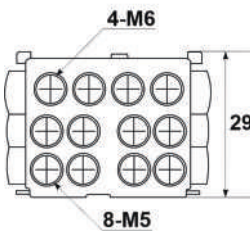

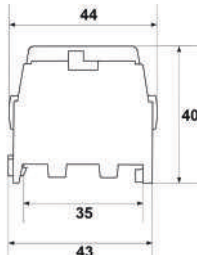
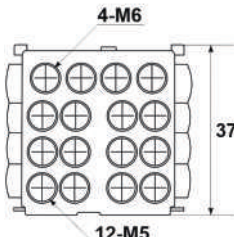
## Distribution blocks FJ

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FJ35251B</b> 	FJ35251B	Distribution block FJ-35/25.1B 125A blue	14	10	0,076	1,064	0,760
							
<b>FJ35252B</b> 	FJ35252B	Distribution block FJ-35/25.2B 125A blue	10	10	0,113	1,130	1,130
							
<b>FJ35253B</b> 	FJ35253B	Distribution block FJ-35/25.3B 125A blue	8	10	0,155	1,240	1,550
							
<b>FJ25161G</b> 	FJ25161G	Distribution block FJ-25/16.1G 100A green	14	10	0,050	0,700	0,500
							
<b>FJ25162G</b> 	FJ25162G	Distribution block FJ-25/16.2G 100A green	10	10	0,072	0,720	0,720
							
<b>FJ25163G</b> 	FJ25163G	Distribution block FJ-25/16.3G 100A green	8	10	0,094	0,752	0,940
							


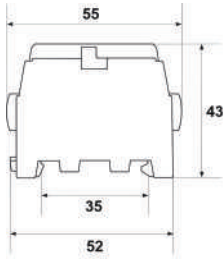
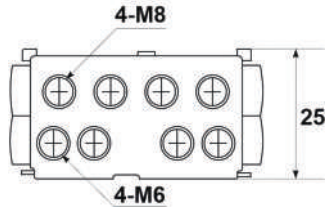

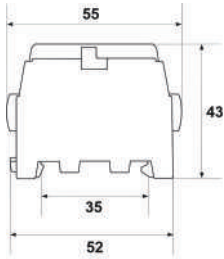
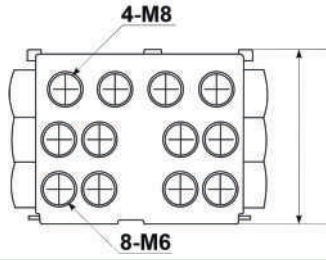

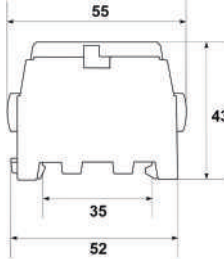
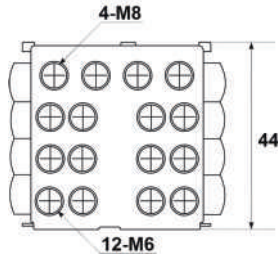

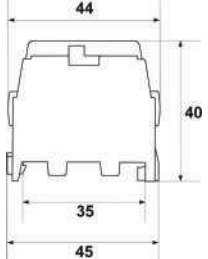
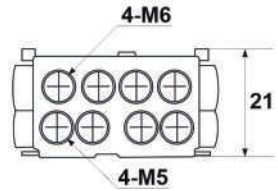

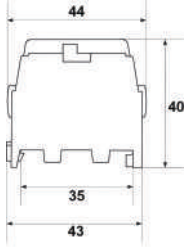
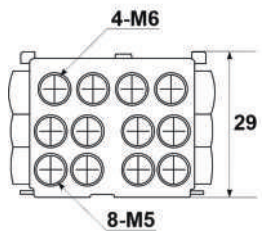

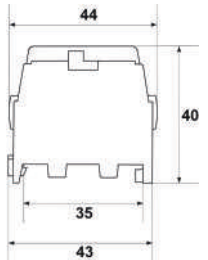
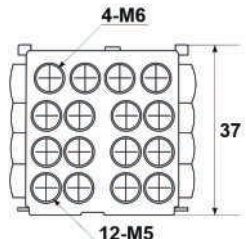
## Distribution blocks FJ

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FJ35251G</b>	FJ35251G	Distribution block FJ-35/25.1G 125A green	14	10	0,076	1,064	0,760
							
<b>FJ35252G</b>	FJ35252G	Distribution block FJ-35/25.2G 125A green	10	10	0,113	1,130	1,130
							
<b>FJ35253G</b>	FJ35253G	Distribution block FJ-35/25.3G 125A green	8	10	0,155	1,240	1,550
							
<b>FJ25161PE</b>	FJ25161PE	Distribution block FJ-25/16.1PE 100A PE	14	10	0,050	0,700	0,500
							
<b>FJ25162PE</b>	FJ25162PE	Distribution block FJ-25/16.2PE 100A PE	10	10	0,072	0,720	0,720
							
<b>FJ25163PE</b>	FJ25163PE	Distribution block FJ-25/16.3PE 100A PE	8	10	0,094	0,752	0,940
							

## Distribution blocks FJ

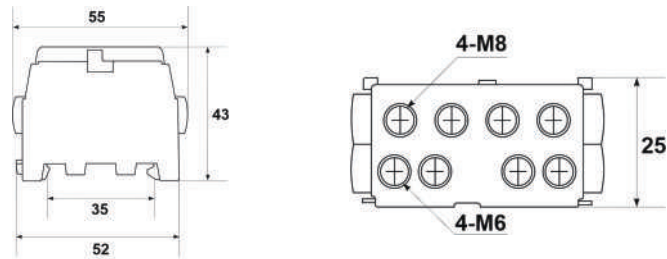
	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FJ35251PE</b>	FJ35251PE	Distribution block FJ-35/25.1PE 125A PE	14	10	0,076	1,064	0,760
							
<b>FJ35252PE</b>	FJ35252PE	Distribution block FJ-35/25.2PE 125A PE	10	10	0,113	1,130	1,130
							
<b>FJ35253PE</b>	FJ35253PE	Distribution block FJ-35/25.3PE 125A PE	8	10	0,155	1,240	1,550
							
<b>FJ25161BL</b>	FJ25161BL	Distribution block FJ-25/16.1BL 100A black	14	10	0,050	0,700	0,500
							
<b>FJ25162BL</b>	FJ25162BL	Distribution block FJ-25/16.2BL 100A black	10	10	0,072	0,720	0,720
							
<b>FJ25163BL</b>	FJ25163BL	Distribution block FJ-25/16.3BL 100A black	8	10	0,094	0,752	0,940
							

## Distribution blocks FJ

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FJ35251BL</b>	FJ35251BL	Distribution block FJ-35/25.1BL 125A black	14	10	0,076	1,064	0,760
							
<b>FJ35252BL</b>	FJ35252BL	Distribution block FJ-35/25.2BL 125A black	10	10	0,113	1,130	1,130
							
<b>FJ35253BL</b>	FJ35253BL	Distribution block FJ-35/25.3BL 125A black	8	10	0,155	1,240	1,550
							
<b>FJ25161BR</b>	FJ25161BR	Distribution block FJ-25/16.1BR 100A brown	14	10	0,050	0,700	0,500
							
<b>FJ25216BR</b>	FJ25216BR	Distribution block FJ-25/16.2BR 100A brown	10	10	0,072	0,720	0,720
							
<b>FJ25163BR</b>	FJ25163BR	Distribution block FJ-25/16.3BR 100A brown	8	10	0,094	0,752	0,940
							

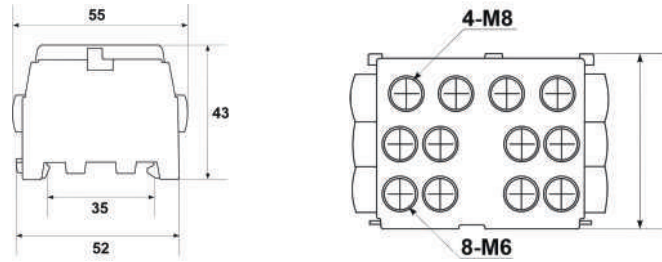
## Distribution blocks FJ

Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
<b>FJ35251BR</b>	Distribution block FJ-35/25.1BR 125A brown	14	10	0,076	1,064	0,760	



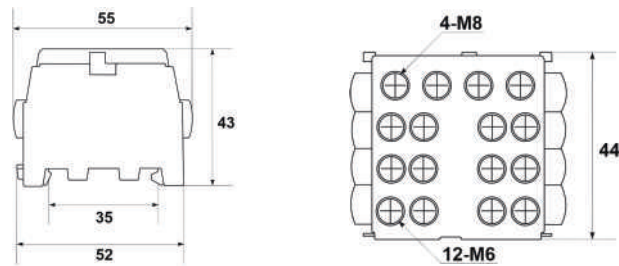
### FJ35252BR

FJ35252BR	Distribution block FJ-35/25.2BR 125A brown	10	10	0,113	1,130	1,130
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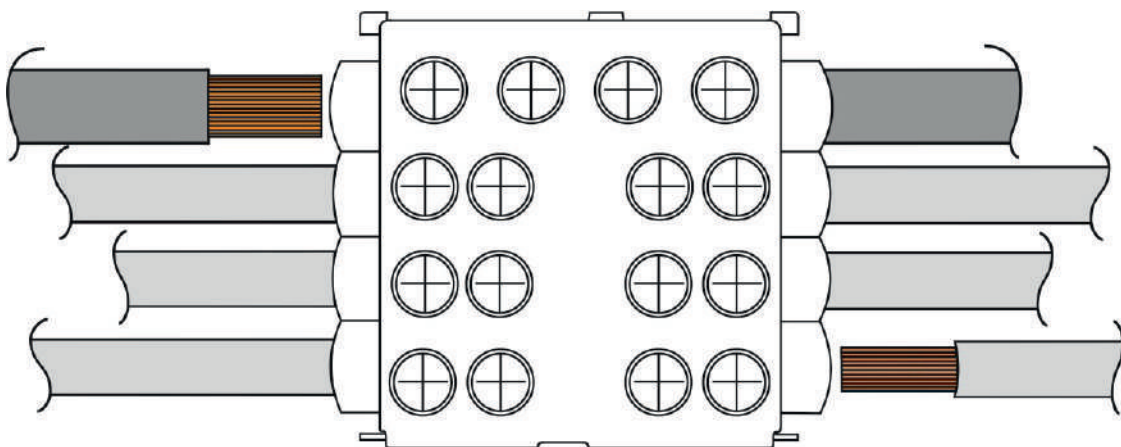


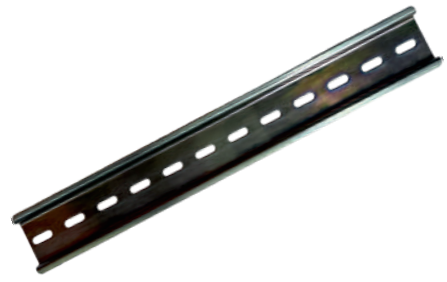
### FJ35253BR

FJ35253BR	Distribution block FJ-35/25.3BR 125A brown	8	10	0,155	1,240	1,550
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## Example of FJ application

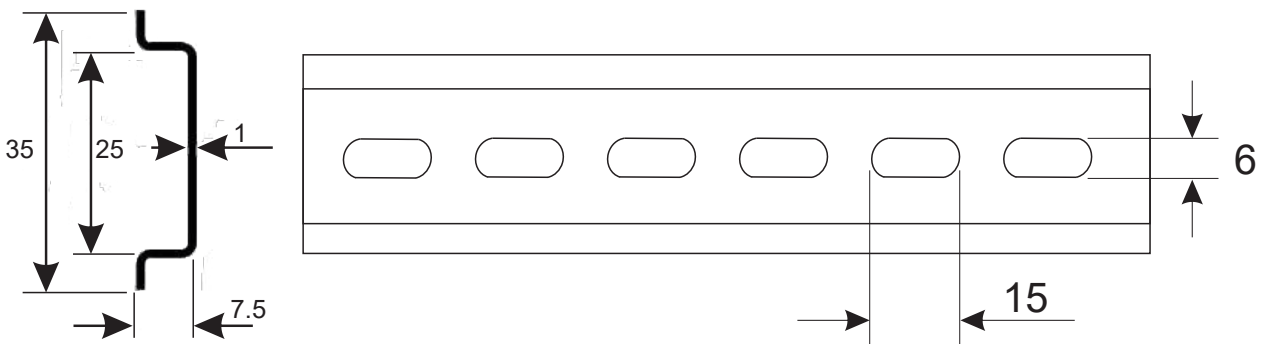
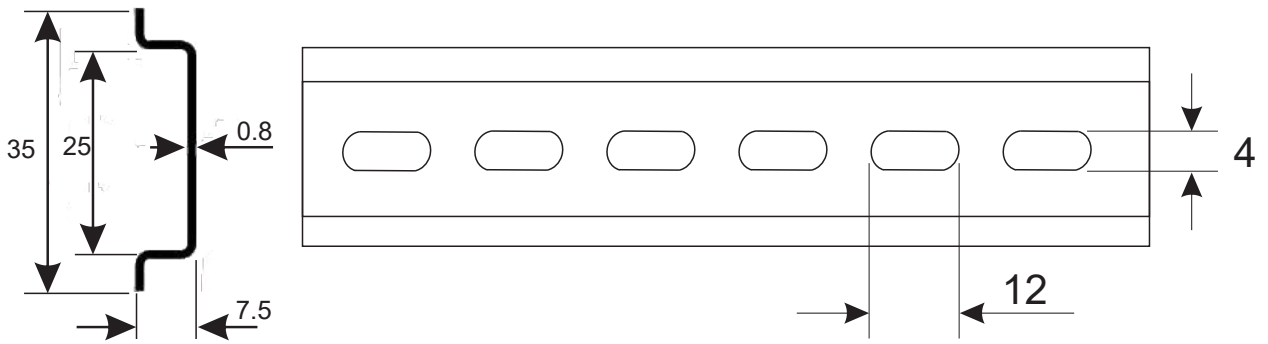




**Technical specifications**

Series	FD						
Standard	EN 60715						
Material of manufacture	galvanized steel						
Length, cm	10	15	20	25	30	50	100
Material thickness, mm	1; 0.8						
Perforation	6x15/4x12						

**Overall dimensions**



## DIN rails FD

### 4x12



Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
FD181000	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (1000mm)	1	100	0,241	0,250	25,000
FD180100	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (100mm)	1	100	0,023	0,030	3,000
FD180150	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (150mm)	1	100	0,036	0,040	4,000
FD182000	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (2000mm)	1	100	0,483	0,490	49,000
FD180200	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (200mm)	1	100	0,048	0,050	5,000
FD180250	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (250mm)	1	100	0,061	0,070	7,000
FD180300	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (300mm)	1	100	0,073	0,080	8,000
FD180500	DIN rail FD 35x7.5 (0,8mm) perforated 4x12 (500mm)	1	100	0,120	0,130	13,000
FD111000	DIN rail FD 35x7.5 (1mm) perforated 4x12 (1000mm)	1	100	0,314	0,320	32,000
FD110100	DIN rail FD 35x7.5 (1mm) perforated 4x12 (100mm)	1	100	0,031	0,040	4,000
FD110150	DIN rail FD 35x7.5 (1mm) perforated 4x12 (150mm)	1	100	0,047	0,050	5,000
FD112000	DIN rail FD 35x7.5 (1mm) perforated 4x12 (2000mm)	1	100	0,629	0,630	63,000
FD110200	DIN rail FD 35x7.5 (1mm) perforated 4x12 (200mm)	1	100	0,063	0,070	7,000
FD110250	DIN rail FD 35x7.5 (1mm) perforated 4x12 (250mm)	1	100	0,078	0,080	8,000
FD110300	DIN rail FD 35x7.5 (1mm) perforated 4x12 (300mm)	1	100	0,095	0,100	10,000
FD110500	DIN rail FD 35x7.5 (1mm) perforated 4x12 (500mm)	1	100	0,158	0,160	16,000

### 6x15



FD081000	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (1000mm)	1	100	0,251	0,260	26,000
FD080100	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (100mm)	1	100	0,024	0,030	3,000
FD080150	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (150mm)	1	100	0,037	0,040	4,000
FD080200	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (200mm)	1	100	0,049	0,050	5,000
FD080250	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (250mm)	1	100	0,063	0,070	7,000
FD080300	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (300mm)	1	100	0,076	0,080	8,000
FD080500	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (500mm)	1	100	0,125	0,130	13,000
FD082000	DIN rail FD 35x7.5 (0,8mm) perforated 6x15 (2000mm)	1	100	0,503	0,510	51,000
FD011000	DIN rail FD 35x7.5 (1mm) perforated 6x15 (1000mm)	1	100	0,324	0,330	33,000
FD010100	DIN rail FD 35x7.5 (1mm) perforated 6x15 (100mm)	1	100	0,032	0,040	4,000
FD010150	DIN rail FD 35x7.5 (1mm) perforated 6x15 (150mm)	1	100	0,048	0,050	5,000
FD010200	DIN rail FD 35x7.5 (1mm) perforated 6x15 (200mm)	1	100	0,065	0,070	7,000
FD010250	DIN rail FD 35x7.5 (1mm) perforated 6x15 (250mm)	1	100	0,081	0,090	9,000
FD010300	DIN rail FD 35x7.5 (1mm) perforated 6x15 (300mm)	1	100	0,097	0,100	10,000
FD010500	DIN rail FD 35x7.5 (1mm) perforated 6x15 (500mm)	1	100	0,162	0,170	17,000
FD012000	DIN rail FD 35x7.5 (1mm) perforated 6x15 (2000mm)	1	100	0,649	0,650	65,000

## End stopper EW-35



### Technical specifications

Series	EW
Color	gray
Electrical strength of insulation, V	2500
Rated insulation voltage $U_i$ , V	400
Case material	polyamide
Clamp material	galvanized steel
Screw clamping torque, Nm	0,6
DIN rail mounting	TN35

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
EW-35	End stopper EW-35	10	3 000	0,0054	0,054	16,200

## Terminals for flat bars FA

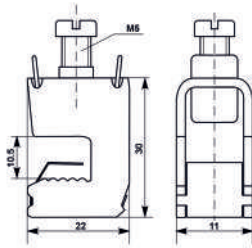


### Technical specifications

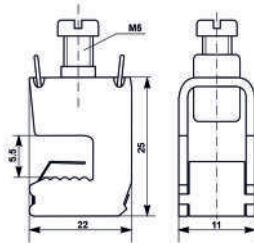
Series	FA1.5-16mm 180A (5mm)	FA4-35mm 270A (5mm)	FA16-70mm 400A (5mm)	FA16-120mm 440A (5mm)	FA1.5-16mm 180A (10mm)	FA4-35mm 270A (10mm)	FA16-70mm 400A (10mm)	FA16-120mm 440A (10mm)
Rated voltage, V	up to 1000							
Rated current, A	180	270	400	440	180	270	400	440
Material of manufacture	galvanized steel							
Minimum conductor cross-section, mm <sup>2</sup>	1,5	4	16	16	1,5	4	16	16
Maximum conductor cross-section, mm <sup>2</sup>	16	35	70	120	16	35	70	120
Busbar thickness, mm	5				10			
Bolt clamping torque, Nm	10							

## Terminals for flat bars FA

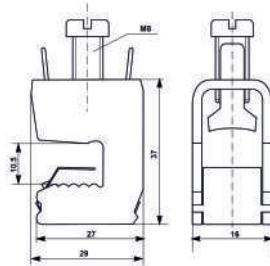
Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
<b>FA1501618010</b>	Terminal for flat bars FA1.5-16mm 180A (10mm)	100	700	0,021	2,100	14,700



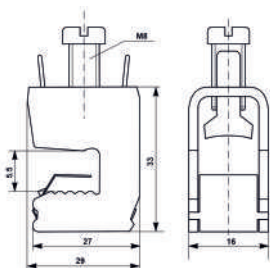
<b>FA1501618005</b>	Terminal for flat bars FA1.5-16mm 180A (5mm)	100	1 200	0,021	2,100	25,200
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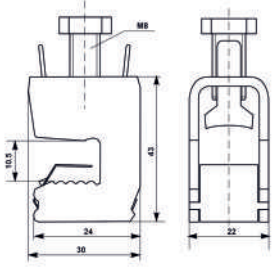

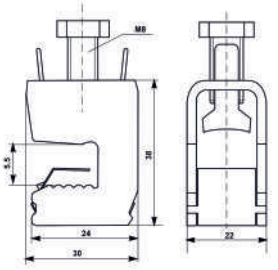

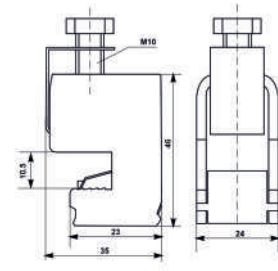

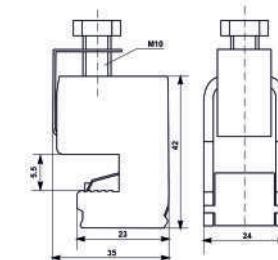
<b>FA1501618005</b>	Terminal for flat bars FA16-120mm 440A (10mm)	25	250	0,103	2,575	25,750
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<b>FA1501618005</b>	Terminal for flat bars FA16-120mm 440A (5mm)	25	300	0,100	2,500	30,000
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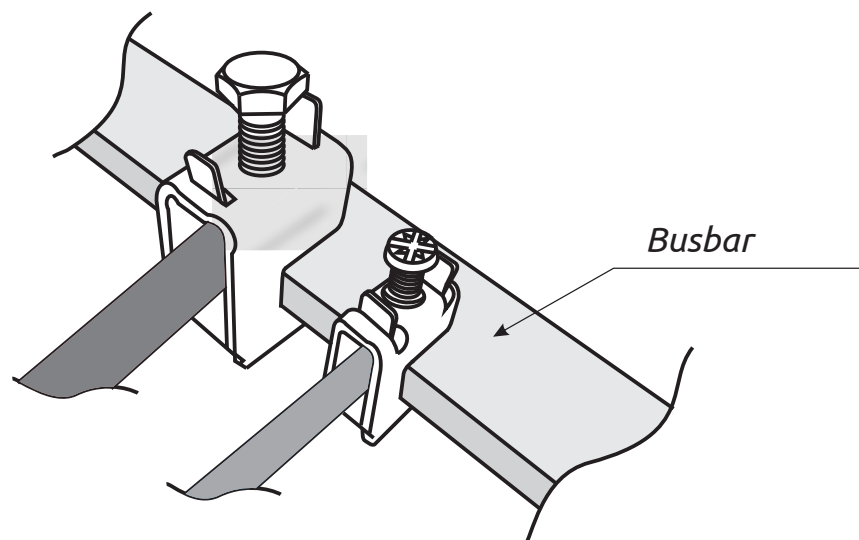


## Terminals for flat bars FA

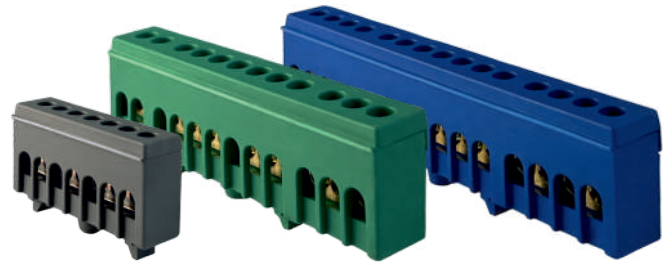
	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FA1607044010</b>  	FA1607044010	Terminal for flat bars FA16-70mm 400A (10mm)	25	400	0,070	1,750	28,000
<b>FA1607040005</b>  	FA1607040005	Terminal for flat bars FA16-70mm 400A (5mm)	25	400	0,067	1,675	26,800
<b>FA0403524010</b>  	FA0403524010	Terminal for flat bars FA4-35mm 270A (10mm)	50	500	0,048	2,400	24,000
<b>FA0403527005</b>  	FA0403527005	Terminal for flat bars FA4-35mm 270A (5mm)	50	600	0,046	2,300	27,600

## Example of FA application

Mounting



## Insulated terminals FMD

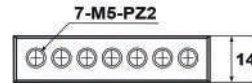
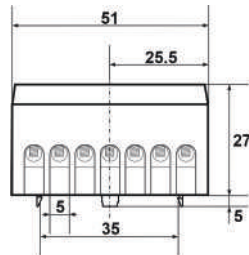


### Technical specifications

Series	FMD		
Standards	IEC/EN 60998-2-1, IEC/EN 60998-1		
Rated voltage $U_n$ , AC, V	415		
Rated current $I_n$ , A	63		
Rated insulation voltage $U_i$ , V	800		
Rated pulse voltage $U_{imp}$ , V	2500		
Bar size, mm	6 x 9		
Number of holes and cross-section of connected conductors	7 x 1,5...10 mm <sup>2</sup>	12 x 1,5...10 mm <sup>2</sup>	15 x 1,5...10 mm <sup>2</sup>
Bolt clamping torque, Nm	2		
Case material	heat-resistant polyamide PA66		
Terminal material	brass		
Clamps	for a screwdriver		
Mounting	on a DIN rail / on a mounting panel		

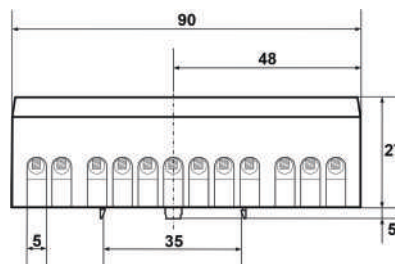
## Insulated terminals FMD

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
<b>FMD815GR</b>	FMD807GR Insulated terminal FMD807GR 7 6x9mm <sup>2</sup> (gray)	50	500	0,027	13,500	1,350



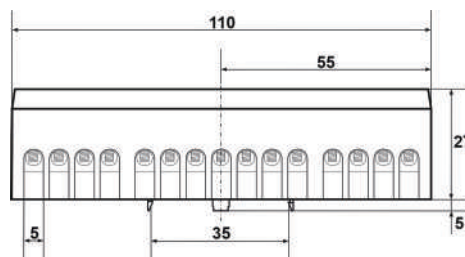
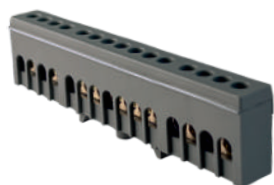
### FMD815GR

FMD812GR	Insulated terminal FMD812GR 12 6x9mm <sup>2</sup> (gray)	25	500	0,051	25,500	1,275
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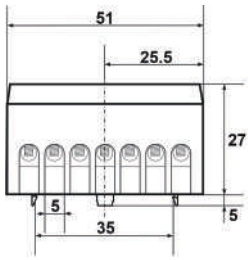


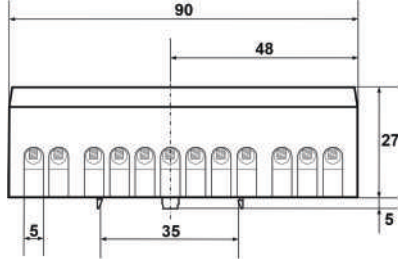


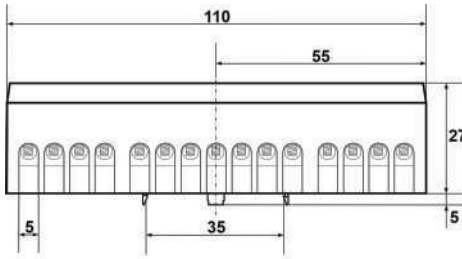
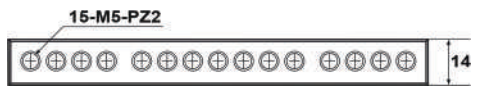

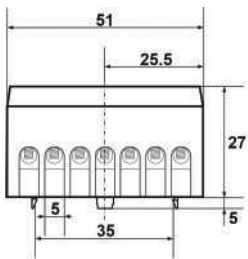


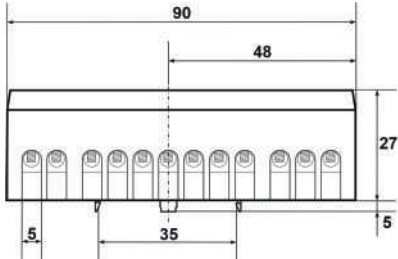


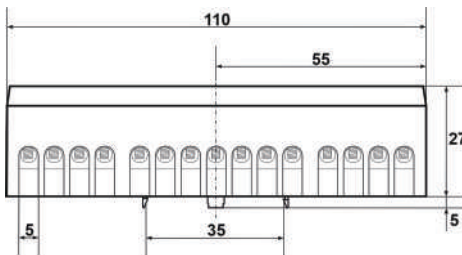



### FMD815GR

FMD815GR	Insulated terminal FMD815GR 15 6x9mm <sup>2</sup> (gray)	25	500	0,062	31,000	1,550
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# Insulated terminals FMD

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>FMD807GN</b>	FMD807GN	Insulated terminal FMD807GN 7 6x9mm <sup>2</sup> (green)	50	500	0,027	13,500	1,350
							
<b>FMD812GN</b>	FMD812GN	Insulated terminal FMD812GN 12 6x9mm <sup>2</sup> (green)	25	500	0,051	25,500	1,275
							
<b>FMD815GN</b>	FMD815GN	Insulated terminal FMD815GN 15 6x9mm <sup>2</sup> (green)	25	500	0,062	31,000	1,550
							
<b>FMD807BL</b>	FMD807BL	Insulated terminal FMD807BL 7 6x9mm <sup>2</sup> (blue)	50	500	0,027	13,500	1,350
							
<b>FMD812BL</b>	FMD812BL	Insulated terminal FMD812BL 12 6x9mm <sup>2</sup> (blue)	25	500	0,051	25,500	1,275
							
<b>FMD815BL</b>	FMD815BL	Insulated terminal FMD815BL 15 6x9mm <sup>2</sup> (blue)	25	500	0,062	31,000	1,550
							

FMD

## Insulated terminals STF

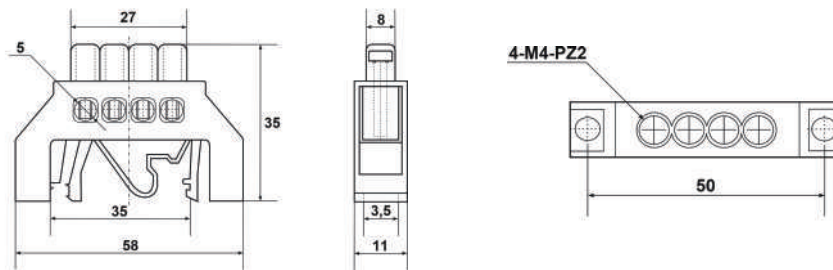


### Technical specifications

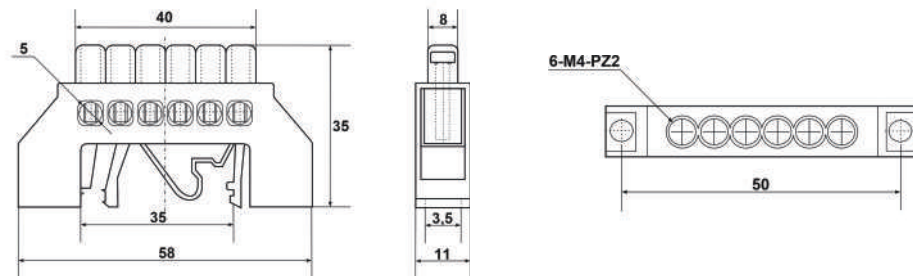
Series	STF			
Standards	IEC/EN 60998-2-1, IEC/EN 60998-1			
Rated voltage $U_n$ , AC, V	415			
Rated current $I_n$ , A	63			
Rated insulation voltage $U_i$ , V	800			
Rated pulse voltage $U_{imp}$ , V	2500			
Bar size, mm	6 x 9			
Number of holes and cross-section of connected conductors	4 x 1,5...10 mm <sup>2</sup>	6 x 1,5...10 mm <sup>2</sup>	8 x 1,5...10 mm <sup>2</sup>	10 x 1,5...10 mm <sup>2</sup>
Bolt clamping torque, Nm	2			
Case material	heat-resistant polyamide PA66			
Terminal material	brass			
Clamps	for a screwdriver			
Mounting	on a DIN rail / on a mounting panel			

## Insulated terminals STF

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>STF704B</b>	STF704B	Insulated terminal STF704B 6x9mm <sup>2</sup> (blue)	50	500	0,016	0,800	8,000

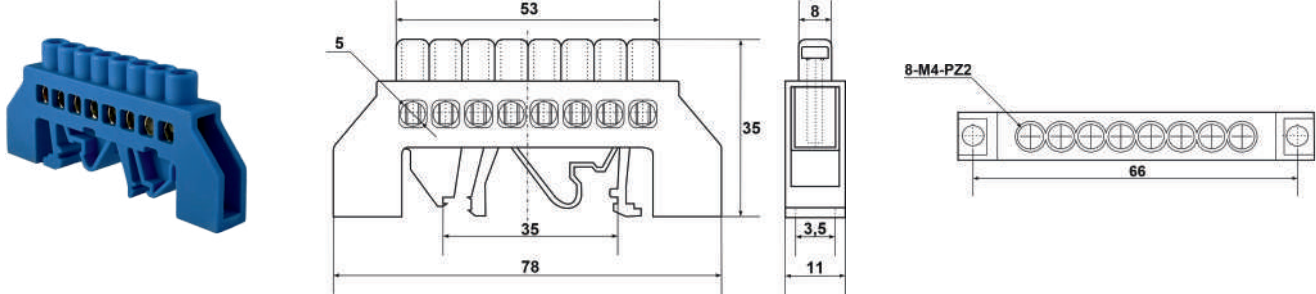


<b>STF706B</b>	STF706B	Insulated terminal STF706B 6x9mm <sup>2</sup> (blue)	50	500	0,022	1,100	11,000
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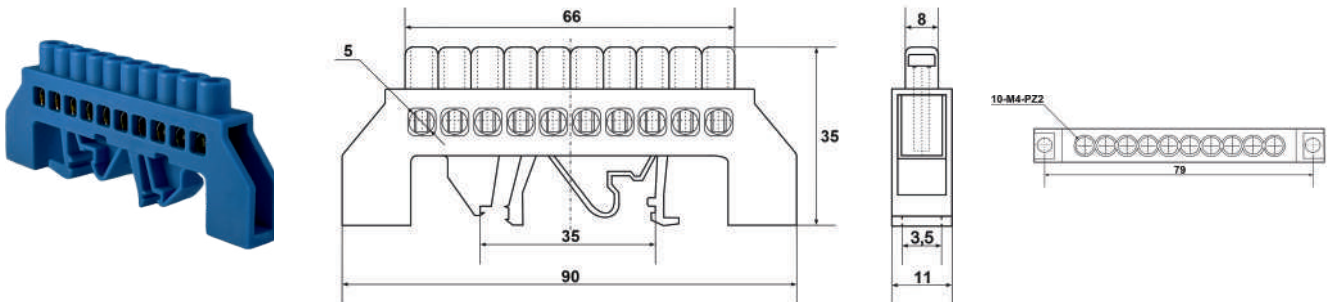


# Insulated terminals STF

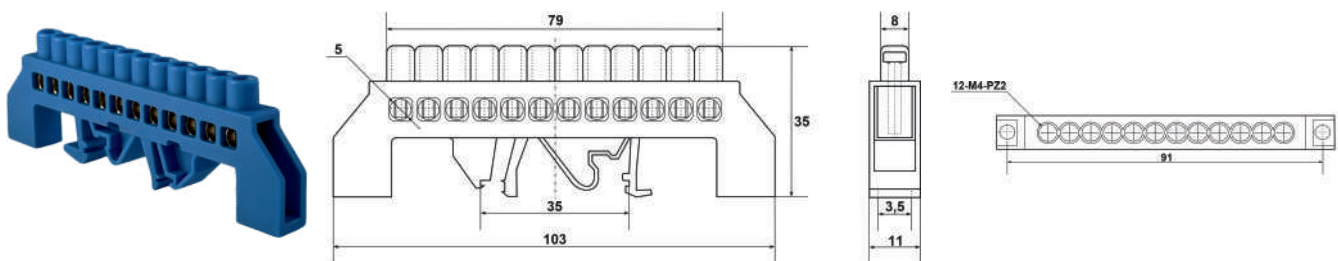
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
<b>STF708B</b>	Insulated terminal STF708B 6x9mm <sup>2</sup> (blue)	50	500	0,029	1,450	14,500



<b>STF710B</b>	Insulated terminal STF710B 6x9mm <sup>2</sup> (blue)	25	500	0,035	0,875	17,500
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<b>STF712B</b>	Insulated terminal STF712B 6x9mm <sup>2</sup> (blue)	25	500	0,041	1,025	20,500
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**STF**

## Terminal blocks SOF

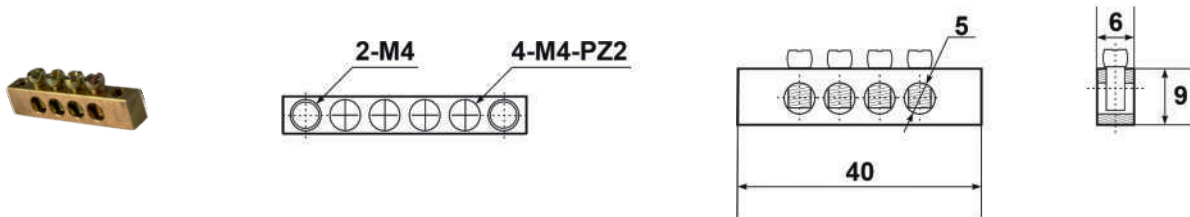


### Technical specifications

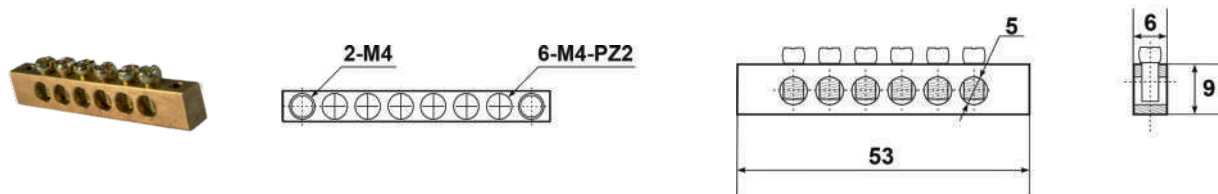
Series	SOF			
Standards	IEC/EN 60998-2-1, IEC/EN 60998-1			
Rated voltage $U_n$ , AC, V	415			
Rated current $I_n$ , A	63			
Rated pulse voltage $U_{imp}$ , V	2500			
Bar size, mm	6 x 9			
Number of holes and cross-section of connected conductors	6 x 1,5...10 mm <sup>2</sup>	8 x 1,5...10 mm <sup>2</sup>	10 x 1,5...10 mm <sup>2</sup>	12 x 1,5...10 mm <sup>2</sup>
Bolt clamping torque, Nm	2			
Terminal material	brass			
Clamps	for a screwdriver			
Mounting	on the mounting panel			

## Terminal blocks SOF

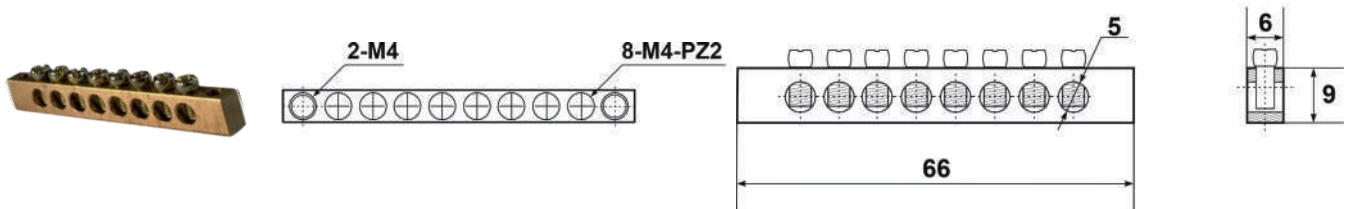
Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
<b>SOF504</b>	SOF504 Terminal block SOF504 6x9mm2	50	500	0,015	0,750	7,500



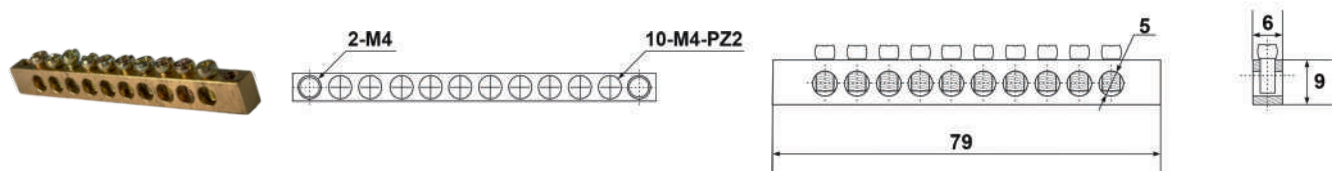
<b>SOF506</b>	SOF506 Terminal block SOF506 6x9mm2	50	500	0,019	0,950	9,500
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<b>SOF508</b>	SOF508 Terminal block SOF508 6x9mm2	50	500	0,024	1,200	12,000
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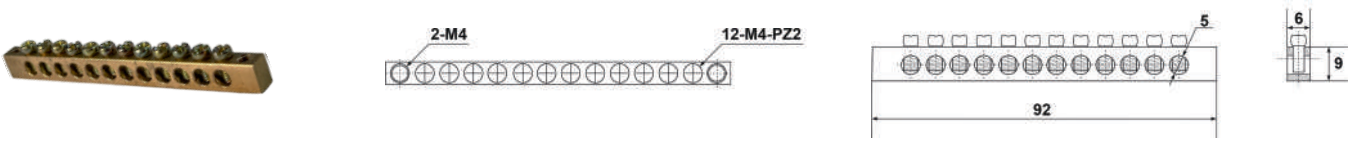


<b>SOF508</b>	SOF510 Terminal block SOF510 6x9mm2	25	500	0,029	0,725	14,500
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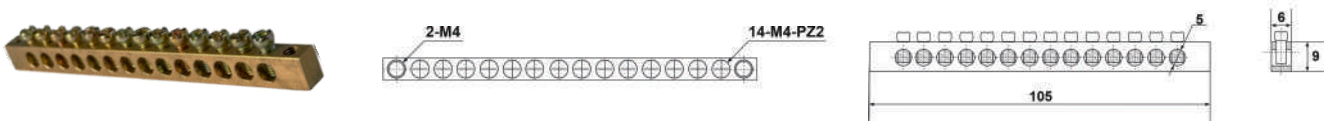


## Terminal blocks SOF

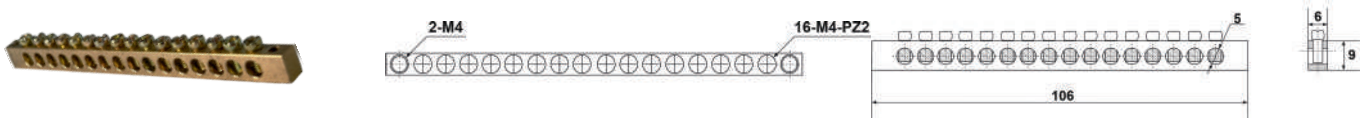
Order code	Full name of	Packaging, pcs			Gross weight, kg	
		Packaging	Box	Unit	Packaging	Box
<b>SOF512</b>	Terminal block SOF512 6x9mm2	25	500	0,034	0,850	17,000



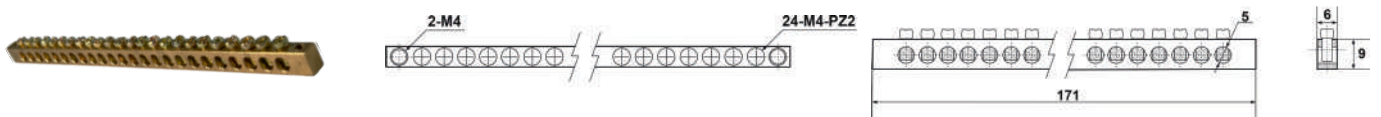
<b>SOF514</b>	Terminal block SOF514 6x9mm2	25	500	0,041	1,025	20,500
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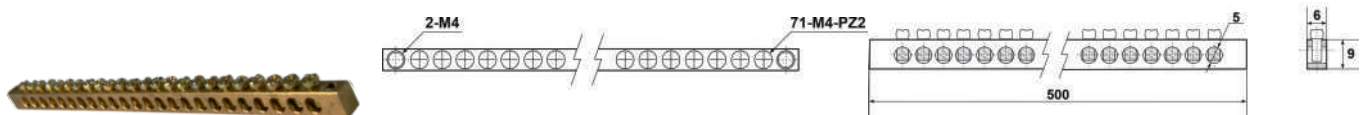
<b>SOF516</b>	Terminal block SOF516 6x9mm2	25	500	0,044	1,100	22,000
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<b>SOF524</b>	Terminal block SOF524 6x9mm2	10	100	0,063	0,630	6,300
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<b>SOF571</b>	Terminal block SOF571 6x9mm2	10	100	0,179	1,790	17,900
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## Cable glands PG

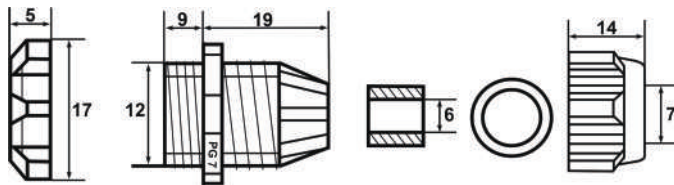


### Technical specifications

Series	PG7	PG9	PG11	PG13,5	PG16	PG19	PG21	PG25	PG29	PG36	PG42	PG48	PG63
Color	grey												
Range of $\varnothing$ (diameter) of the cable, mm	3,5-6	4-8	5-10	6-12	10-14	12-15	13-18	16-21	18-25	22-32	30-38	34-44	42-50
Case material	polyamide												
Sealing material	oil-resistant rubber												
Degree of protection	IP68												

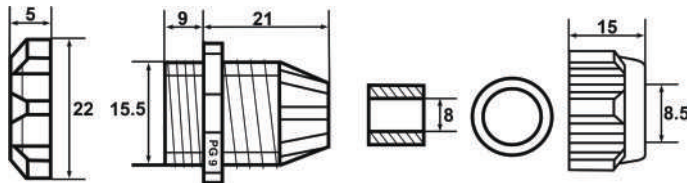
## Cable glands PG

Order code	Full name of	Packaging, pcs			Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box	
<b>PG7</b>	PG7	Cable gland PG-7 Ip68	100	2000	0,013	1,300	26,000



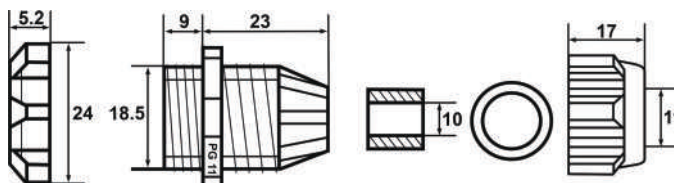
### PG9

PG9	Cable gland PG-9 Ip68	100	2000	0,008	0,800	16,000
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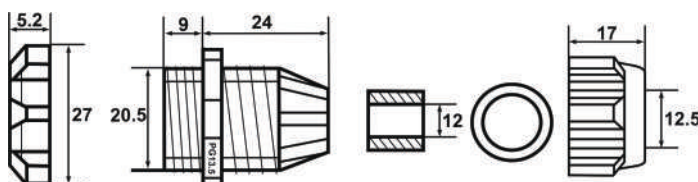
### PG11

PG11	Cable gland PG-11 Ip68	100	2000	0,009	0,900	18,000
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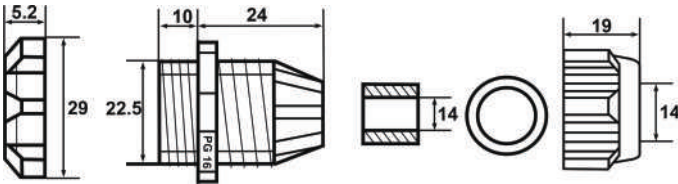

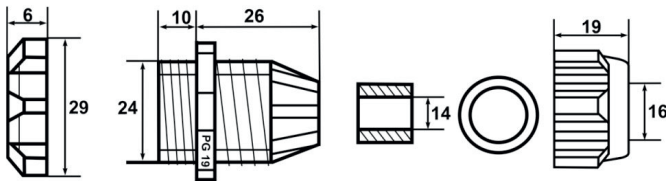

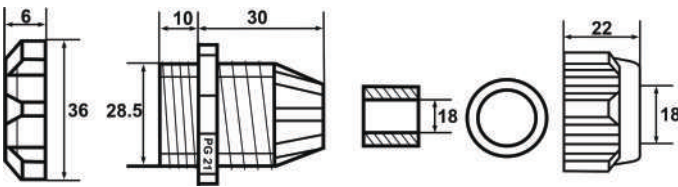

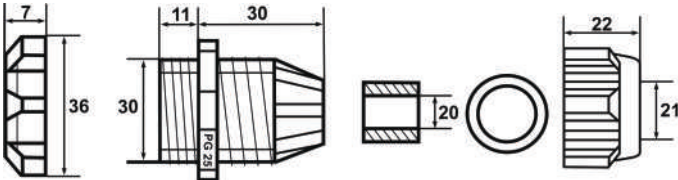

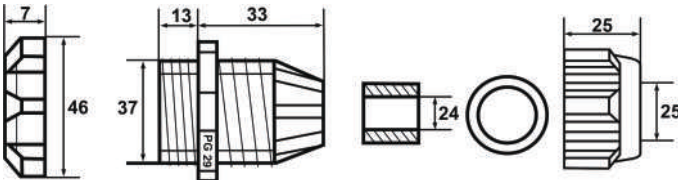

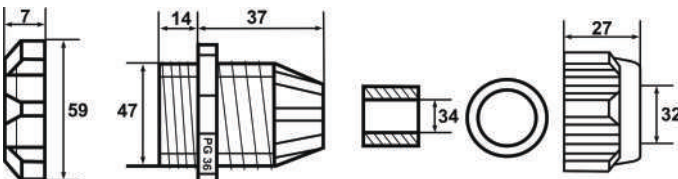


### PG13,5

PG13,5	Cable gland PG-13,5 IP68	100	2300	0,008	0,800	18,400
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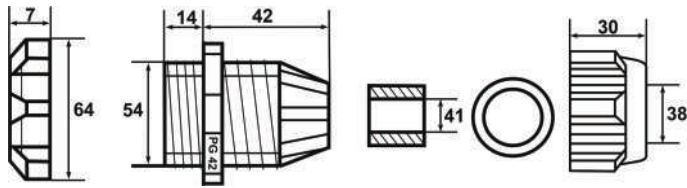


## Cable glands PG

	Order code	Full name of	Packaging, pcs			Gross weight, kg	
			Packaging	Box	Unit	Packaging	Box
<b>PG16</b>	PG16	Cable gland PG-16 Ip68	100	2000	0,014	1,400	28,000
							
<b>PG19</b>	PG19	Cable gland PG-19 Ip68	100	1600	0,015	1,500	24,000
							
<b>PG21</b>	PG21	Cable gland PG-21 Ip68	100	1000	0,023	2,300	23,000
							
<b>PG25</b>	PG25	Cable gland PG-25 Ip68	100	900	0,015	1,500	13,500
							
<b>PG29</b>	PG29	Cable gland PG-29 Ip68	100	500	0,044	4,400	22,000
							
<b>PG36</b>	PG36	Cable gland PG-36 Ip68	10	360	0,223	2,230	80,280
							

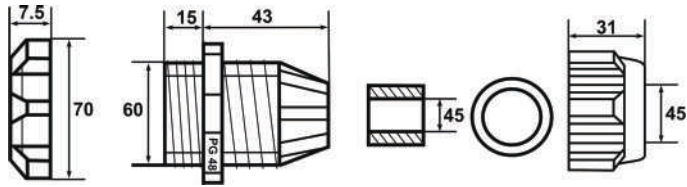
## Cable glands PG

	Order code	Full name of	Packaging, pcs		Gross weight, kg		
			Packaging	Box	Unit	Packaging	Box
<b>PG42</b>	PG42	Cable gland PG-42 Ip68	10	220	0,103	1,030	22,660



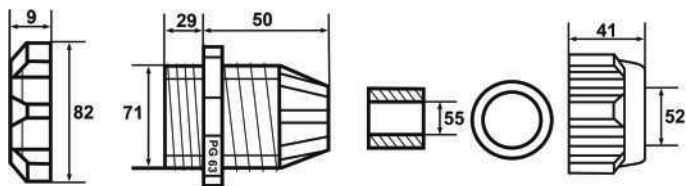
## PG48

PG48	Cable gland PG-48 Ip68	10	240	0,108	1,080	25,920
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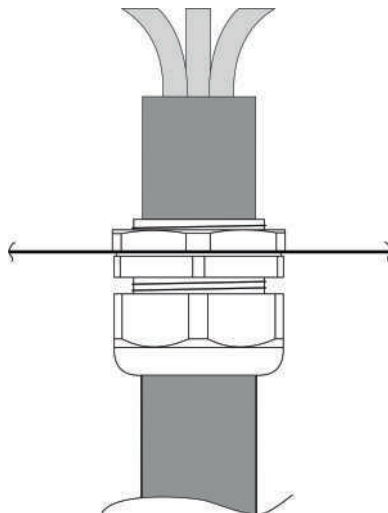


## PG63

PG63	Cable gland PG-63 Ip68	10	100	0,200	2,000	20,000
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## Example of PG application



## Busbar Insulators SM

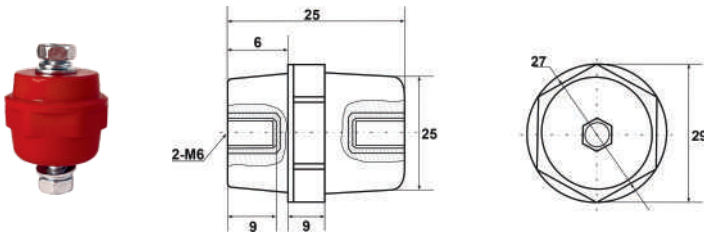


### Technical specifications

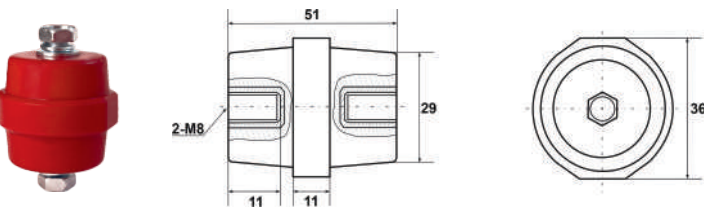
Series	SM25	SM30	SM35	SM40	SM51	SM76	
Rated voltage, V	up to 1000						
Case material	polyamide with fiberglass						
Threaded bushing material	brass						
Arc resistance, s	not less than 120						
Material density, g/cm	1,75-1,95						
Impact strength, kJ/m <sup>2</sup>	not less than 25						
Breakdown voltage, kV	6	8	10		12		
Mechanical destructive forces	bending strength, kN	6	6	10	10	20	30
	torque, kN*m	0,2	0,3	0,6	0,6	0,8	0,8
Equipment	with bolts						
Bolt thread diameter, mm	M6		M8			M10	

## Busbar Insulators SM

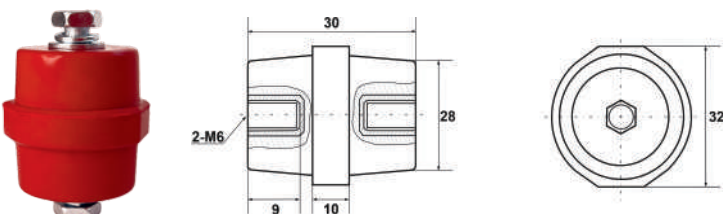
	Order code	Full name of	Packaging, pcs			Gross weight, kg	
			Packaging	Box	Unit	Packaging	Box
<b>SM256R</b>	SM256R	Busbar Insulator SM25*6R red	10	600	0,039	0,390	23,400



<b>SM306R</b>	SM306R	Busbar Insulator SM30*6R red	10	500	0,054	0,540	27,000
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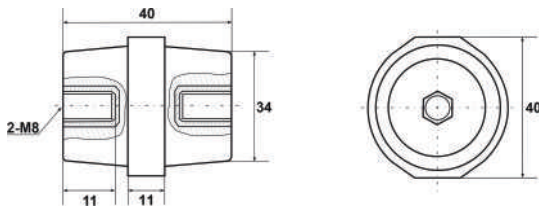


<b>SM358R</b>	SM358R	Busbar Insulator SM35*8R red	8	400	0,073	0,584	29,200
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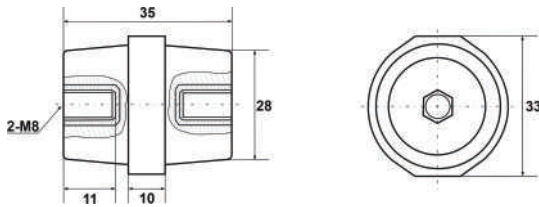
## Busbar Insulators SM

Order code	Full name of	Packaging, pcs		Gross weight, kg		
		Packaging	Box	Unit	Packaging	Box
<b>SM408R</b>	Busbar Insulator SM40*8R red	4	300	0,109	0,436	32,700



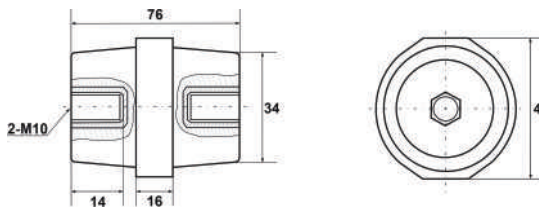
## SM518R

SM518R	Busbar Insulator SM51*8R red	4	300	0,106	0,424	31,800
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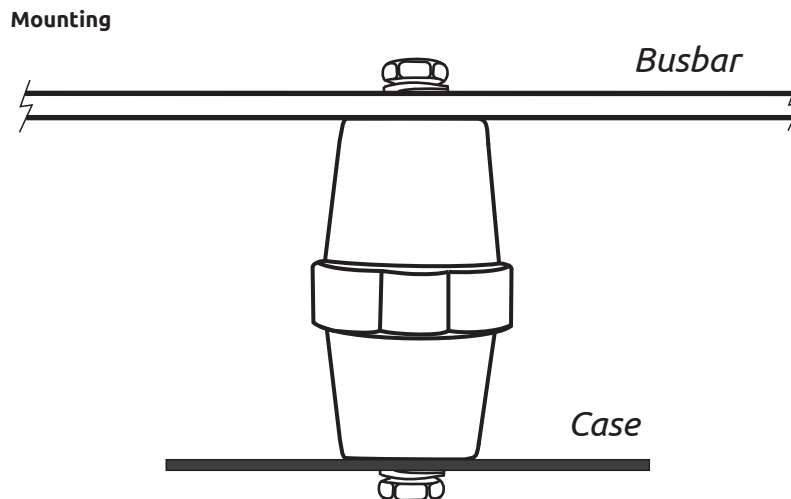


## SM7610R

SM7610R	Busbar Insulator SM76*10R red	2	120	0,230	0,460	27,600
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## Example of SM application




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