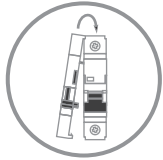


Motor protection circuit breakers FMP

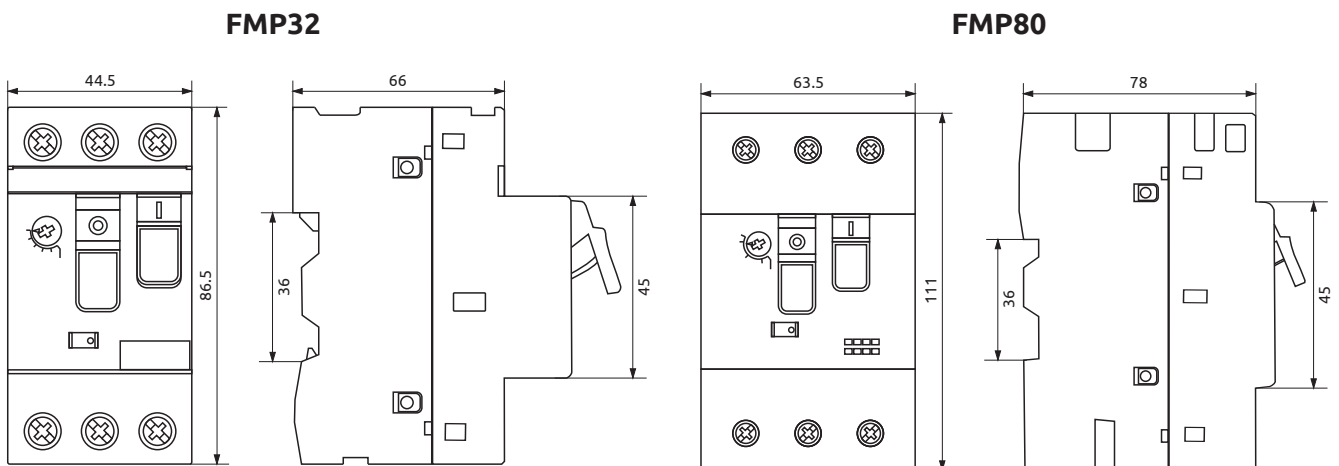


FMP

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 ²	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

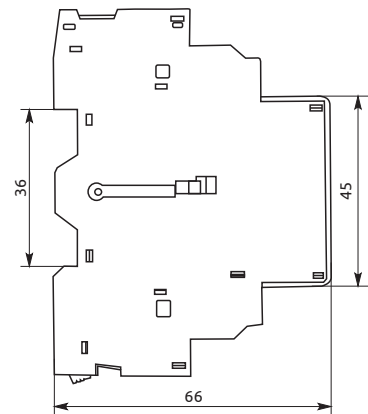
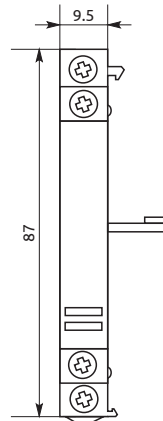
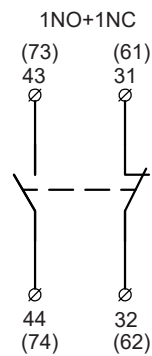
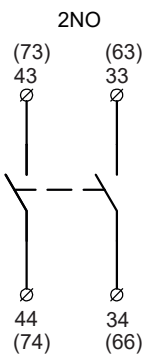
Auxiliary contact (side) F/ACs



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 ²	up to 2.5	
Connection side	on the left side	
Operating position	any	

Schematic diagrams



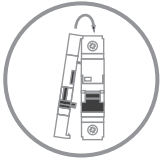
Overall dimensions

Order code	Full name of	Packaging, pcs		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

Additional devices for motor protection circuit breakers

Signal contact F/ALCs

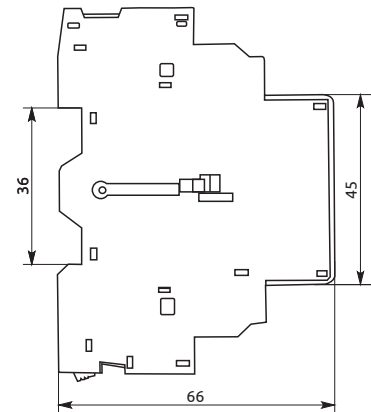
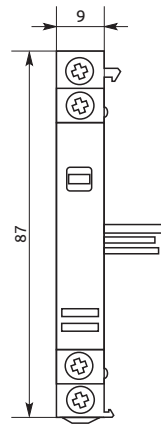
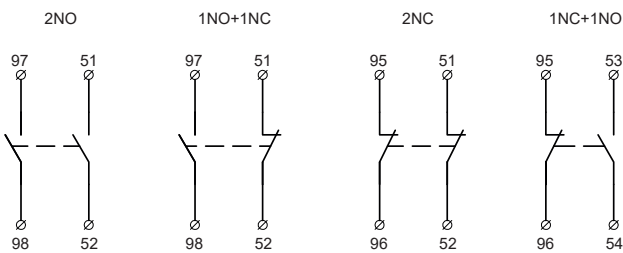


Additional devices

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

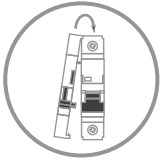


Overall dimensions

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

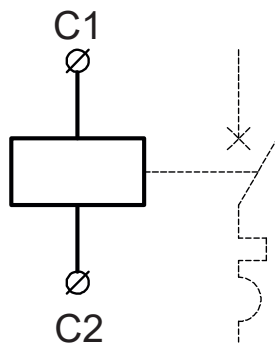


Technical specifications

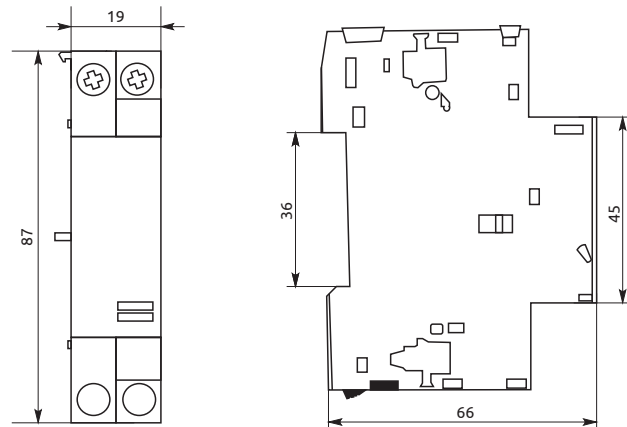
Series	F/SRs
Standard	IEC/EN 60947-2
Use with a circuit breaker	FMP32
Rated voltage U_n , V	230/400
Rated frequency f , Hz	50/60
Switching wear resistance (number of cycles on/off)	6 000/10 000 (electrical/mechanical)
Tripping voltage of the starter, U_n	70-110%
Rated insulation voltage U_i , V	690
Rated 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

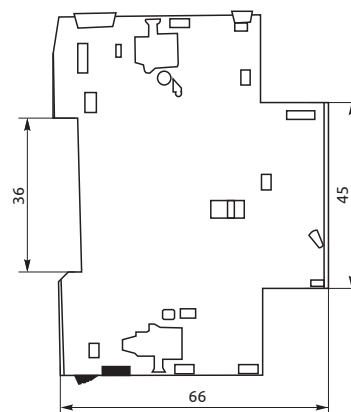
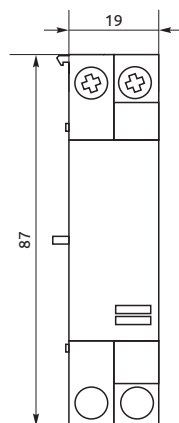
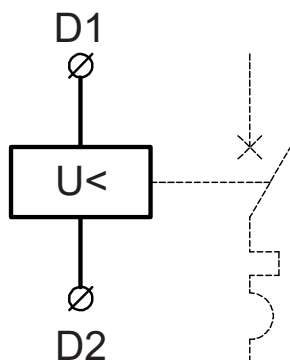
Undervoltage release F/UVs



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