

## Motor protection circuit breaker

- For thermal and magnetic protection of AC and DC motors
- Conformity to standards IEC 947-2, IEC 947-4-1 and VDE 0660
- Manual push-button operation
- Setting ranges from 0.1 to 25A at 690V AC and 220V DC
- Short-circuit capacity of 65kA up to setting range of 1.6-2.5A/400V

### Standards

IEC 947-2  
IEC 947-4-1  
VDE 0660

### Approvals




UL



CSA



CE

- Trip class 10
- Instant magnetic tripping (12 times the maximum operating current Ie)
- Single phase protection
- Ambient temperature compensation between - 5° C and + 40° C
- Internal and external accessories easy to mount
- Quick fixing on DIN rail EN 50022-35 and, with two screws, on plate or wall
- Terminals protected against accidental contacts (IP20)
- Suitable for isolation (  ) and positive padlocking in open position (IEC 947-1 § 7-1-6)



### Motor protection circuit breakers





3-phase motor AC3 380/415V kW	Magnetical tripping current A	Thermal tripping current (setting range)		Cat. no.	Ref. no.	Pack
		Min. A	Max. A			
0.02	1.9	0.1	0.16	SFK0A	120001	1/5
0.06	3.0	0.16	0.25	SFK0B	120002	1/5
0.06 / 0.09	4.8	0.25	0.4	SFK0C	120003	1/5
0.12 / 0.18	7.5	0.4	0.63	SFK0D	120004	1/5
0.25	12	0.63	1	SFK0E	120005	1/5
0.37 / 0.55	19	1	1.6	SFK0F	120006	1/5
0.75	30	1.6	2.5	SFK0G	120007	1/5
1.1 / 1.5	48	2.5	4	SFK0H	120008	5
2.2	75	4	6.3	SFK0I	120009	5
3.7 / 4.0	120	6.3	10	SFK0J	120010	5
5.5 / 7.5	190	10	16	SFK0K	120011	5
9.0	240	16	20	SFK0L	120012	1/5
11 / 12.5	300	20	25	SFK0M	120013	1/5

Circuit breaker to protect transformers on request


**Auxiliary contact blocks**

				Cat. no.	Ref. no.	Pack	
 <p><b>Side mounting</b></p>		1NO	1NC	SFAL11N	120020	5	
		2NO		SFAL20N	120021	5	
		1NO	1NC	SFAL11D	120022	5	
		(advanced on closing)					
		2NO		SFAL20D	120023	5	
		(advanced on closing)					
	For lower energy levels ( $\geq 4V, \geq 4mA$ )	1change-over		SFAL11S	120027	1	
		PE + N conductor		SFALPEN	264826	1	
 <p><b>Internal mounting</b></p>		1NO	1NC	SFAI11	120024	5	
	Switch trip indicator-alarm	1NO		SFAK10	120025	5	
		1NC		SFAK01	120026	5	

**Coils for internal mounting**

				Cat. no.	Ref. no.	Pack
 <p><b>Minimum power</b></p>	Functioning range: $0.35U_e < U < 0.7U_e$					
	Manual reset					
	Dissipated power 2.2VA / 1W					
		110V / 50Hz	120V / 60Hz	SFB0RJ	120034	5
	220V / 50Hz	240V / 60Hz	SFB0RN	120035	5	
	380V / 50Hz	440V / 60Hz	SFB0RU	120036	5	
<p><b>Undervoltage release special for machinery</b></p>	According to IEC204-1, DIN VDE 0113, INRS Art. L233-5					
	A combination of a special undervoltage release and auxiliary contact block SFAL20D					
		110V / 50Hz	120V / 60Hz	SFB0RJM	107256	1
		220V / 50Hz	240V / 60Hz	SFB0RNM	120114	1
	380V / 50Hz	440V / 60Hz	SFB0RUM	120115	1	
 <p><b>Shunt trip</b></p>	Functioning range: $0.7U_e < U < 1.2U_e$					
	Manual reset					
		110V / 50Hz	120V / 60Hz	SFB0AJ	120030	5
		220V / 50Hz	240V / 60Hz	SFB0AN	120031	5
	380V / 50Hz	440V / 60Hz	SFB0AU	120032	5	

**Current limiter**

				Cat. no.	Ref. no.	Pack
 <p><b>Current limiter</b></p>	Combined with SFK.					
	Upgrades breaking capacity to 50kA/3~400V					
	Not available UL, CSA.					
		$I_n = 32A$		SFVH03	243713	1

A

B

C

D

E

F

G



H

I





X



## Enclosures

					Cat. no.	Ref. no.	Pack
	Surface mounting			IP41-PG16	SFS04	120040	1
				Conversion kit IP55	SFS0K2	120046	1
				IP55-PG16	SFS05	120041	1
				IP41-M25	SFS04M	212558	1
				IP65-M25	SFS05M	212559	1
	Flush mounting			IP41	SFE04	120042	1
				Conversion kit IP55	SFE0K2	120047	1
				IP55	SFE05	120043	1

## Accessories for enclosures

					Cat. no.	Ref. no.	Pack
	Neutral connection	For use with surface and flush mounting enclosures			SFVN0	101369	1
	Padlocking device	Up to 3 padlocks 6 - 8 mm			SFVCD	120054	1
	Emergency mushroom push-buttons IP55	Impulse function			SFPS0	120051	1
		Latched, pull to release			SFPR0	120052	1
		Key locked, turn to release			SFPE0	120053	5
		Conversion kit IP55 for SFS04			SFS04K1	245217	1
		Conversion kit IP55 for SFE04			SFE04K1	216604	1
	Indicator lamps for AC and DC	Green 110/120V			GPELGAJ	101375	1
		Green 220/240V			GPELGAN	101376	1
		Green 380/440V			GPELGAU	101377	1
		Green 480/500V			GPELGAX	101378	1
		Green 600V			GPELGAY	101379	1
		Red 110/120V			GPELRAJ	101380	1
		Red 220/240V			GPELRAU	101381	1
		Red 380/440V			GPELRAU	101382	1
		Red 480/500V			GPELRAX	101383	1
		Red 600V			GPELRAY	101384	1
		Transparent 110/120V			GPELCAJ	101385	1
		Transparent 220/240V			GPELCAN	101386	1
		Transparent 380/440V			GPELCAU	101387	1
		Transparent 480/500V			GPELCAU	101388	1
Transparent 600V			GPELCAY	101389	1		

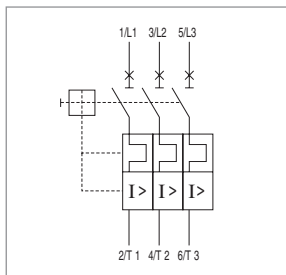
Accessories for enclosures (continued)

				Cat. no.	Ref. no.	Pack
Three phase busbar block	4 units	Ui 690V / Ie 63A	L = 207mm	GPB104A	101392	2
	5 units	Ui 690V / Ie 63A	L = 261mm	GPB105A	101393	2
	Plastic cover for 3 unused terminals			GPB1GA	101408	2
Supply block	Ie = 63A Fully insulated			SFVB8	254537	5

Terminal numbering

Motor protection circuit breaker

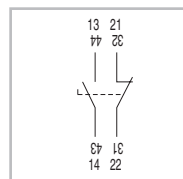
SFK...



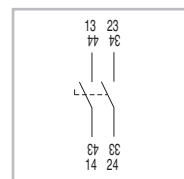
Auxiliary contact blocks

Side mounting

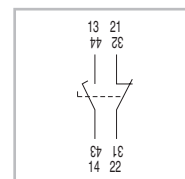
SFAL11N



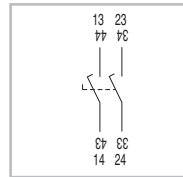
SFAL20N



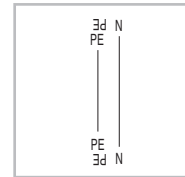
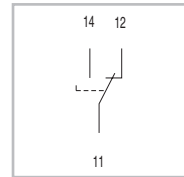
SFAL11D



SFAL20D

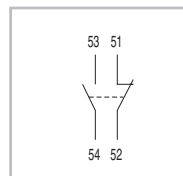


SFAL11S

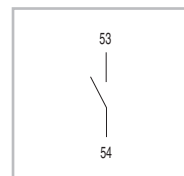


Internal mounting

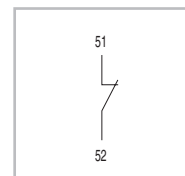
SFAI11



SFAK10



SFAK01



A

B

C

D

E

F

G

H

I

X