


TF42 Thermal Overload Relays

Catalogue Page 1SBC 101 082 S0202

	0.10 ... 38.0 A
	Class 10



Application

- Overload protection
- Trip class 10
- Phase loss sensitivity
- Manual/automatic reset selectable

Description

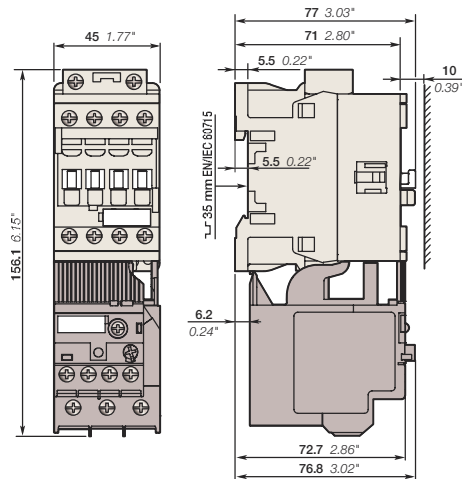
- 45 mm width
- Suitable for contactor AF09 ... AF38
- Sealable operating elements

Ordering Details

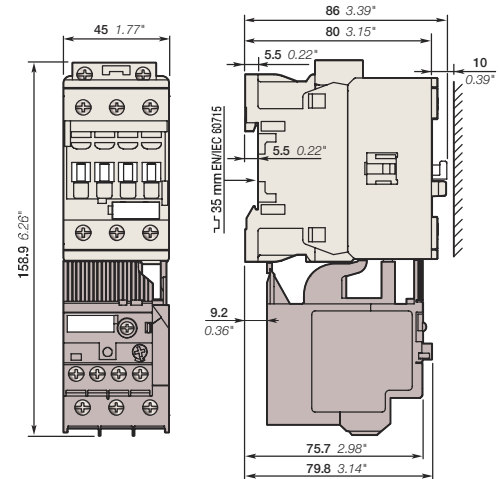
Setting ranges	Type	Order code	Max. fuse	Suitable for contactors	Pack ⁽ⁿ⁾ pieces	Weight (1 pos)
A ... A			A			kg (1 pos)
0.10 ... 0.13	TF42-0.13	1SAZ 721 201 R1005	0.5 T	AF09 ... AF38	1	0.130
0.13 ... 0.17	TF42-0.17	1SAZ 721 201 R1008	1 T	AF09 ... AF38	1	0.130
0.17 ... 0.23	TF42-0.23	1SAZ 721 201 R1009	1 T	AF09 ... AF38	1	0.130
0.23 ... 0.31	TF42-0.31	1SAZ 721 201 R1013	1 T	AF09 ... AF38	1	0.130
0.31 ... 0.41	TF42-0.41	1SAZ 721 201 R1014	2 gG	AF09 ... AF38	1	0.130
0.41 ... 0.55	TF42-0.55	1SAZ 721 201 R1017	2 gG	AF09 ... AF38	1	0.130
0.55 ... 0.74	TF42-0.74	1SAZ 721 201 R1021	4 gG	AF09 ... AF38	1	0.130
0.74 ... 1.00	TF42-1.0	1SAZ 721 201 R1023	6 gG	AF09 ... AF38	1	0.130
1.00 ... 1.30	TF42-1.3	1SAZ 721 201 R1025	6 gG	AF09 ... AF38	1	0.130
1.30 ... 1.70	TF42-1.7	1SAZ 721 201 R1028	10 gG	AF09 ... AF38	1	0.130
1.70 ... 2.30	TF42-2.3	1SAZ 721 201 R1031	10 gG	AF09 ... AF38	1	0.130
2.30 ... 3.10	TF42-3.1	1SAZ 721 201 R1033	10 gG	AF09 ... AF38	1	0.130
3.10 ... 4.20	TF42-4.2	1SAZ 721 201 R1035	20 gG	AF09 ... AF38	1	0.130
4.20 ... 5.70	TF42-5.7	1SAZ 721 201 R1038	20 gG	AF09 ... AF38	1	0.130
5.70 ... 7.60	TF42-7.6	1SAZ 721 201 R1040	35 gG	AF09 ... AF38	1	0.130
7.60 ... 10.0	TF42-10	1SAZ 721 201 R1043	35 gG	AF09 ... AF38	1	0.130
10.0 ... 13.0	TF42-13	1SAZ 721 201 R1045	40 gG	AF09 ... AF38	1	0.130
13.0 ... 16.0	TF42-16	1SAZ 721 201 R1047	40 gG	AF09 ... AF38	1	0.130
16.0 ... 20.0	TF42-20	1SAZ 721 201 R1049	63 gG	AF09 ... AF38	1	0.130
20.0 ... 24.0	TF42-24	1SAZ 721 201 R1051	63 gG	AF09 ... AF38	1	0.145
24.0 ... 29.0	TF42-29	1SAZ 721 201 R1052	63 gG	AF09 ... AF38	1	0.145
29.0 ... 35.0	TF42-35	1SAZ 721 201 R1053	80 gG	AF09 ... AF38	1	0.145
35.0 ... 38.0/40.0	TF42-38	1SAZ 721 201 R1055	80 gG	AF09 ... AF38	1	0.145

Main Dimensions (mm, inches)

AF09, AF12, AF16 3-pole contactors
+ TF42 thermal overload relay



AF26, AF30, AF38 3-pole contactors
+ TF42 thermal overload relay



TF42 Thermal Overload Relays



0.10 ... 38.0 A

Class 10

Main Technical Data

Overload Relay Type		TF42	
		up to 20.0 A	up to 38.0/40.0 A
Standards	Conformity to standards	IEC/EN60947-1, IEC/EN60947-4-1, IEC/EN60947-5-1, UL 508, CSA C22.2 No. 14	
	Phase loss sensitivity (acc. to IEC/EN 60947-4-1)	Yes	
General data	Mounting position	Position 1	
	Degree of protection (acc. to IEC 60947-1)	IP 20	
IEC			
Main circuit	Rated operational voltage U_e	690 V AC	
	Rated operational current AC-3 I_n	up to 20.0 A	up to 38.0/40.0 A (50 °C)
	Rated frequency	50 / 60 Hz	
	Trip class	10	
Isolation data	Rated impulse withstand voltage U_{imp}	6 kV	
(acc. to IEC/EN 60947-1)	Rated insulation voltage U_i	690 V	
Environmental data			
	Ambient air temperature range		
	Operation	Open - compensated	-25 ... +60 °C
		Open	-25 ... +60 °C
	Storage	-50 ... +80 °C	
	Altitude	≤ 2000 m	
	Vibration (acc. to IEC/EN 60068-2-6)	5 g / 3-150 Hz	
	Shock (acc. to IEC/EN 60068-2-27)	25 g / 11 ms	
Auxiliary circuit	Rated operational voltage U_c (acc. to IEC/EN 60947-5-1)	600 V	
	Rated operational current I_c (acc. to IEC/EN 60947-5-1 utilization category)		
	AC-15	110-120 V	N.C. 3 A
			N.O. 0.75 A
		220-230-240 V	N.C. 3 A
			N.O. 0.75 A
		400 V	N.C. 0.75 A
			N.O. 0.75 A
		480-500 V	N.C. 0.75 A
			N.O. 0.75 A
		600 V	N.C. 0.6 A
			N.O. -
	DC-13	24 V	N.C. 1.25 A
			N.O. 1.25 A
		110-120-125 V	N.C. 0.55 A
			N.O. 0.55 A
		250 V	N.C. 0.27 A
			N.O. 0.27 A
		500 V	N.C. 0.15 A
			N.O. 0.15 A
	Minimum switching capacity	17 V / 3 mA	
	Short-circuit protection device	N.C.	6
		N.O.	4
Connecting capacity	Main circuit		
	Rigid	1 or 2 x	0.75 ... 4 mm ² 1.5 ... 2.5 mm ² - 2.5 ... 10 mm ²
	Flexible with ferrule	1 or 2 x	0.75 ... 4 mm ² 1.5 ... 6 mm ²
	Flexible without ferrule	1 or 2 x	0.75 ... 4 mm ² 2.5 ... 4 mm ² - 4 ... 6 mm ²
	Stripping length	12 mm	
	Tightening torque	1.5 ... 2.5 Nm 2.5 ... 2.7 Nm	
	Auxiliary circuit		
	Rigid	1 or 2 x	0.75 ... 4 mm ²
	Flexible with ferrule	1 or 2 x	0.75 ... 2.5 mm ²
	Flexible without ferrule	1 or 2 x	0.75 ... 1 mm ² - 1 ... 2.5 mm ²
	Stripping length	9 mm	
	Tightening torque	1.0 ... 1.5 Nm	
UL/CSA			
Main circuit	Max. operational voltage	600 V AC	
	Trip rating	125 % of FLA	
Connecting capacity	Main circuit		
	Stranded	1 or 2 x	AWG 18 ... 10 AWG 14 ... 6
	Flexible without ferrule	1 or 2 x	AWG 18 ... 10 AWG 14 ... 6
	Stripping length	12 mm	
	Tightening torque	13 ... 22 lb.in 22 lb.in	
	Auxiliary circuit		
	Stranded	1 or 2 x	AWG 18 ... 12
	Flexible without ferrule	1 or 2 x	AWG 18 ... 12
	Stripping length	9 mm	
	Tightening torque	9 ... 13 lb.in	