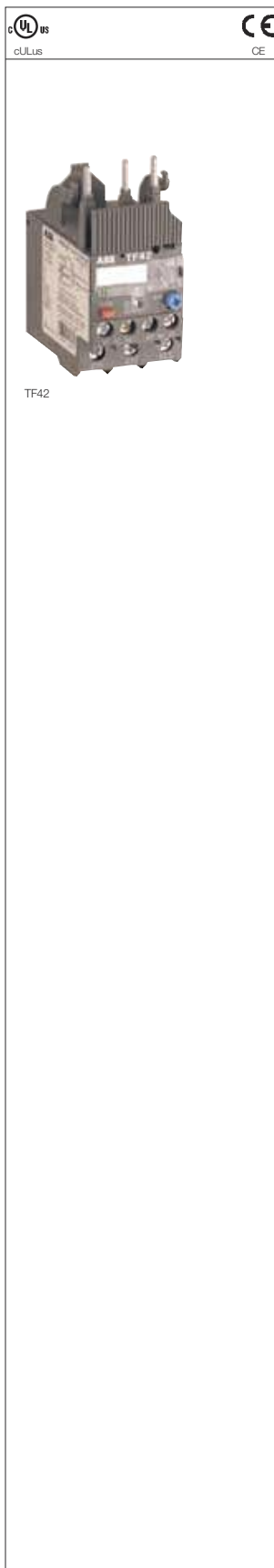


TF42 Thermal Overload Relays

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	0.10 ... 38.0 A
	Class 10



Application

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

Description

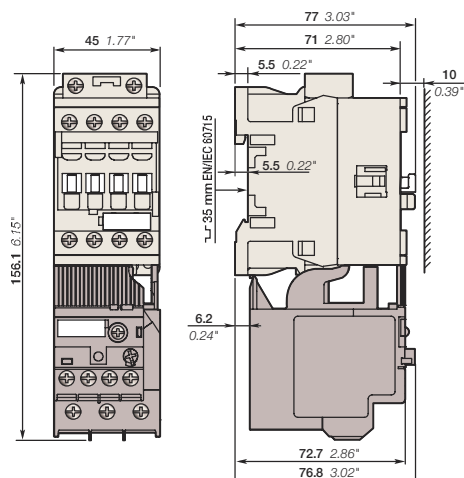
- 45 mm width
- Suitable for contactor AF09 ... AF38
- Sealable operating elements

Ordering Details

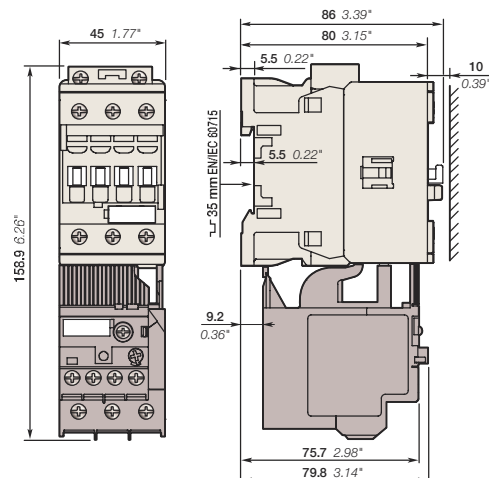
Setting ranges	Type	Order code	Max. fuse	Suitable for contactors	Pack ^(ng) pieces	Weight
A ... A			A			kg (1 pos)
0.10 ... 0.13	TF42-0.13	1SAZ 721 201 R1005	0.5 T	AF09 ... AF38	1	0.130
0.13 ... 0.17	TF42-0.17	1SAZ 721 201 R1008	1 T	AF09 ... AF38	1	0.130
0.17 ... 0.23	TF42-0.23	1SAZ 721 201 R1009	1 T	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

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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_n				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 (acc. to IEC/EN 60947-1)	Rated impulse withstand voltage U_{imp}				6 kV			
	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_n (acc. to IEC/EN 60947-5-1)				600 V			
	Rated operational current I_n (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 mm²	1.5 ... 2.5 mm² - 2.5 ... 10 mm²		
			Flexible with ferrule	1 or 2 x	0.75 ... 4 mm²	1.5 ... 6 mm²		
			Flexible without ferrule	1 or 2 x	0.75 ... 4 mm²	2.5 ... 4 mm² - 4 ... 6 mm²		
		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 mm²			
			Flexible with ferrule	1 or 2 x	0.75 ... 2.5 mm²			
			Flexible without ferrule	1 or 2 x	0.75 ... 1 mm² - 1 ... 2.5 mm²			
		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		