

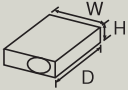


Specification List




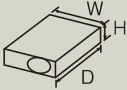
Model list

Frame			T18	T25		
Appearance						
Model name	with 2-elements	For Magnetic Starters For independent mounting	TH-T18 -	TH-T25		
	with 3-elements	For Magnetic Starters For independent mounting	TH-T18KP -	TH-T25KP		
	Outside dimensions [mm]	For Magnetic Starters	45×55×76,5	63×51×79		
	W×H×D	For independent mounting	-	-		
	Product weight [kg]	For Magnetic Starters For independent mounting	0.11 -	0.16		
Applicable standard			IEC60947-4-1, EN60947-4-1, JIS C8201-4-1, GB14048.4			
Use condition		Ambient temperature [°C]	-10 to +40 (Standard: 20°C; maximum temperature on the board: 55°C)			
		Frequency [Hz]	0(DC) to 400			
Main circuit specifications	Rated insulation voltage [V]		690			
	Rated impulse withstand voltage [kV]		6			
	Pollution degree		3			
	Heater designation (adjustable range of stabilized current) [A] (Rated operational voltage : 550V maximum)		0.12 (0.1 to 0.16)	2.1 (1.7 to 2.5)	0.24 (0.2 to 0.32)	2.5 (2 to 3)
			0.17 (0.14 to 0.22)	2.5 (2 to 3)	0.35 (0.28 to 0.42)	3.6 (2.8 to 4.4)
			0.24 (0.2 to 0.32)	3.6 (2.8 to 4.4)	0.5 (0.4 to 0.6)	5 (4 to 6)
			0.35 (0.28 to 0.42)	5 (4 to 6)	0.7 (0.55 to 0.85)	6.6 (5.2 to 8)
			0.5 (0.4 to 0.6)	6.6 (5.2 to 8)	0.9 (0.7 to 1.1)	9 (7 to 11)
			0.7 (0.55 to 0.85)	9 (7 to 11)	1.3 (1 to 1.6)	11 (9 to 13)
			0.9 (0.7 to 1.1)	11 (9 to 13)	1.7 (1.4 to 2)	15 (12 to 18)
1.3 (1 to 1.6)			15 (12 to 18)	2.1 (1.7 to 2.5)	22 (18 to 26)	
Power consumption [VA/element] at minimum/maximum stabilization		0.8 / 1.8		1.5 / 3.0		
Terminal screw size		M3.5		M4		
Compatible with terminal	Electric wire size [mm ²]	φ 1.6, 0.75 to 2.5		φ 1.6 to 2.6, 1.25 to 6		
	Crimp lug size	1.25-3.5 to 2-3.5, 5.5-S3		1.25-4 to 5.5-4		
Contact arrangement			1a1b			
Conventional free air thermal current Ith [A]			2			
Operation circuit (contact) specifications	Rating Operational Current [A]	Category AC-15 (AC operated Magnetic Contactors) Coil opening and closing a contact/b contact	24VAC	2(0.5) / 2(0.5)	2(0.5) / 3(0.5)	
			120VAC	2(0.5) / 2(0.5)	2(0.5) / 3(0.5)	
			240VAC	1(0.5) / 1(0.5)	1(0.5) / 2(0.5)	
		550VAC	0.3(0.3) / 0.3(0.3)	0.3(0.3) / 0.3(0.3)		
		Category DC-13 (DC operated Magnetic Contactors) Coil opening and closing	24VDC	0.5(0.3)	1(0.3)	
			110VDC	0.2(0.2)	0.2(0.2)	
		220VDC	0.1(0.1)	0.1(0.1)		
Minimum applicable load level			20V 5mA			
Terminal screw size			M3.5			
Compatible with terminal	Electric wire size [mm ²]	φ 1.6, 0.75 to 2.5		φ 1.6, 0.75 to 2.5		
	Crimp lug size	1.25-3.5 to 2-3.5		1.25-3.5 to 2-3.5		
Trip class			10A			
Operating characteristic curve description page			Page 27			
Vibration resistance (vibration resistance malfunction performance)			10 to 55 Hz, 19.6 m/s ²			
Trip-free			○			
Reset method			Manual/Automatic switchable			
Operation indication (lever indication)			○			
Manual trip check			○			
Applied products	With saturable reactor		TH-□SR			
	With 3-element (2E) thermal saturable reactor		TH-□KPSR			
	2-element quick-acting characteristics thermal		TH-□FS			
	With 3-element (2E) thermal quick-acting characteristics		TH-□FSKP			

Note 1: The ambient temperature compensator is mounted on all types.

Thermal Overload Relays

Model list

Frame			T50	T65	T100
Appearance					
Model name	with 2-elements	For Magnetic Starters For independent mounting	TH-T50 —	TH-T65	TH-T100 —
	with 3-elements	For Magnetic Starters For independent mounting	TH-T50KP —	TH-T65KP	TH-T100KP —
	Outside dimensions [mm] W×H×D	For Magnetic Starters For independent mounting	74.3×72×83.5 —	89×57×83.5	89×73.5×83.5 —
	Product weight [kg]	For Magnetic Starters For independent mounting	0.2 —	0.26	0.32 —
Applicable standard			IEC60947-4-1, EN60947-4-1, JIS C8201-4-1, GB14048.4		
Use condition		Ambient temperature [°C] Frequency [Hz]	-10 to +40 (Standard: 20°C; maximum temperature on the board: 55°C) 0(DC) to 400		
Main circuit specifications	Rated insulation voltage [V]		690		
	Rated impulse withstand voltage [kV]		6		
	Pollution degree		3		
	Heater designation (adjustable range of stabilized current) [A] (Rated operational voltage : 550V maximum)		29 (24 to 34) 35 (30 to 40) 42 (34 to 50)	15 (12 to 18) 22 (18 to 26) 29 (24 to 34) 35 (30 to 40) 42 (34 to 50) 54 (43 to 65)	67 (54 to 80) 82 (65 to 100)
	Power consumption [VA/element] at minimum/maximum stabilization		1.6/3.2 2.4/5.5 2.5/6.0		
	Terminal screw size		M5 M6 M6		
	Compatible with terminal	Electric wire size [mm ²]	φ5.5 to 14 — —		
		Crimp lug size	5.5-5 to 14-5 5.5-6 to 22-6 14-6 to 22-6, 38-S6		
	Contact arrangement		1a1b 1a1b 1a1b		
	Conventional free air thermal current I _{th} [A]		5 5 5		
Rating Operational Current [A]	Category AC-15 (AC operated Magnetic Contactors) (Coil opening and closing a contact/b contact) The value in brackets indicates the rating for automatic reset.	24VAC	2(0.5) / 3(0.5)	2(0.5) / 3(0.5)	2(0.5) / 3(0.5)
		120VAC	2(0.5) / 3(0.5)	2(0.5) / 3(0.5)	2(0.5) / 3(0.5)
		240VAC	1(0.5) / 2(0.5)	1(0.5) / 2(0.5)	1(0.5) / 2(0.5)
		550VAC	0.3(0.3) / 0.3(0.3)	0.5(0.5) / 1(0.5)	0.5(0.5) / 1(0.5)
Category DC-13 (DC operated Magnetic Contactors) (Coil opening and closing) The value in brackets indicates the rating for automatic reset.	24VDC	1(0.3)	1(0.3)	1(0.3)	
	110VDC	0.2(0.2)	0.2(0.2)	0.2(0.2)	
	220VDC	0.1(0.1)	0.1(0.1)	0.1(0.1)	
Minimum applicable load level		20V 5mA 20V 5mA 20V 5mA			
Terminal screw size		M3.5 M4 M4			
Compatible with terminal	Electric wire size [mm ²]	φ 1.6, 1.25 to 2 φ 1.6, 1.25 to 2 φ 1.6, 1.25 to 2			
	Crimp lug size	1,25-3,5 to 2-3,5 1,25-4 to 2-4, 5,5-S4 1,25-4 to 2-4, 5,5-S4			
Trip class		10A 15 to 42A:10 54A:10A 67A:10 82A:10A			
Operating characteristic curve description page		Page 27			
Vibration resistance (vibration resistance malfunction performance)		10 to 55Hz 19.6m/s ²			
Trip-free		○ ○ ○			
Reset method		Manual/Automatic switchable Manual/Automatic switchable Manual/Automatic switchable			
Operation indication (lever indication)		○ ○ ○			
Manual trip check		○ ○ ○			
Applied products	With saturable reactor	TH-□SR	○(TH-T50SR)	○(TH-T65SR)	○(TH-T100SR)
	With 3-element (2E) thermal saturable reactor	TH-□KPSR	○(TH-T50KPSR)	○(TH-T65KPSR)	○(TH-T100KPSR)
	2-element quick-acting characteristics thermal	TH-□FS	○(TH-T50FS)	○(TH-T65FS)	○(TH-T100FS)
	With 3-element (2E) thermal quick-acting characteristics	TH-□FSKP	○(TH-T50FSKP)	○(TH-T65FSKP)	○(TH-T100FSKP)

Note 1: The ambient temperature compensator is mounted on all types.