MITSUBISHI ELECTRIC

Changes for the Better

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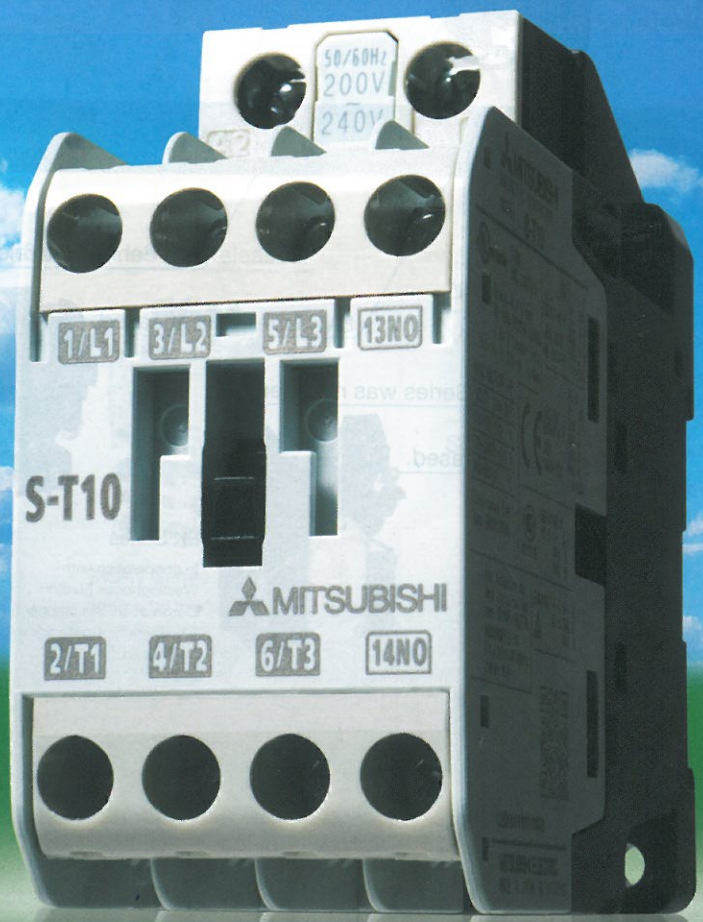
Magnetic Contactors and Magnetic Starters

Exceed your expectations

Mitsubishi's Magnetic Contactors and Magnetic Starters, continuously pushing the boundaries.

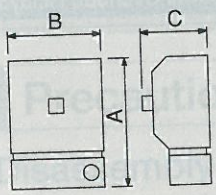


MS-T Series

Mitsubishi Magnetic Contactors and Magnetic Starters

Magnetic Starters

●MSO-T series (non-Reversing)
●MSO-2xT series (Reversing)

Model name			MSO-T10	MSO-T12	MSO-T20	MSO-T21	MSO-T25
	Non-Reversing		MSO-2×T10	MSO-2×T12	MSO-2×T20	MSO-2×T21	MSO-2×T25
Rated capacity (kW) Category AC-3	220 to 240VAC		2.5	3.5	4.5	5.5	7.5
	380 to 440VAC		4	5.5	7.5	11	15
	500VAC		4	5.5	7.5	11	15
Heater rating (designation) of standard Thermal Overload Relays (A)			0.12 0.17 0.24 0.35 0.5 0.7 0.9 1.3 1.7 2.1 2.5 3.6 5 6.6 9	0.12 0.17 0.24 0.35 0.5 0.7 0.9 1.3 1.7 2.1 2.5 3.6 5 6.6 9 11	0.12 0.17 0.24 0.35 0.5 0.7 0.9 1.3 1.7 2.1 2.5 3.6 5 6.6 9 11 15	0.24 0.35 0.5 0.7 0.9 1.3 1.7 2.1 2.5 3.6 5 6.6 9 11 15 22	0.24 0.35 0.5 0.7 0.9 1.3 1.7 2.1 2.5 3.6 5 6.6 9 11 15 22
Operation coil rating			Refer to pages 13 and 14				
Auxiliary contact arrangement	Non-Reversing	Standard	1a	1a1b	1a1b	2a2b	2a2b
		Special	1b	2a	2a	—	—
	Reversing	Standard	1a×2+2b	1a1b×2+2b	1a1b×2+2b	2a2b×2	2a2b×2
		Special	1b×2+2b	2a×2+2b	2a×2+2b	—	—
	Non-Reversing	A	115	115	115	128	128
		B	45	45	45	63	63
		C	79	79	79	82	82
	Reversing	A	125	125	125	128	128
		B	90	97	97	136	136
		C	79	79	79	82	82
IEC 35mm rail mounting type			←	←	←	←	←
Option	Front clip-on auxiliary contact block mounting type		←	←	←	←	←
	Side clip-on auxiliary contact block mounting type		←	←	←	←	←
	Surge absorber mounting type		←	←	←	←	←

●Thermal Overload Relays that can be combined with Magnetic Contactors

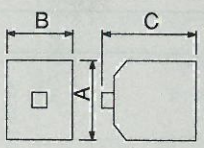
Thermal Overload Relays type names and heater types that can be combined with Magnetic Contactors

Magnetic Contactors frame	Thermal Overload Relays type name that can be combined	Heater designation (adjustable range of stabilized current) (A)
T10, T12, T20	TH-T18	0.12(0.1 to 0.16) 0.17(0.14 to 0.22) 0.24 (0.2 to 0.32) 0.35(0.28 to 0.42) 0.5(0.4 to 0.6) 0.7(0.55 to 0.85) 0.9(0.7 to 1.1) 1.3(1 to 1.6) 1.7(1.4 to 2) 2.1(1.7 to 2.5) 2.5(2 to 3) 3.6(2.8 to 4.4) 5(4 to 6) 6.6(5.2 to 8) 9(7 to 11) 11(9 to 13)* 15(12 to 18)*
T21, T25	TH-T25	0.24(0.2 to 0.32) 0.35(0.28 to 0.42) 0.5(0.4 to 0.6) 0.7(0.55 to 0.85) 0.9(0.7 to 1.1) 1.3(1 to 1.6) 1.7(1.4 to 2) 2.1(1.7 to 2.5) 2.5(2 to 3) 3.6(2.8 to 4.4) 5(4 to 6) 6.6(5.2 to 8) 9(7 to 11) 11(9 to 13) 15(12 to 18) 22(18 to 26)*

Note 1: Select the value closer to the heater designation if the stabilized current has two values.
Note 2: Heater designation marked with * has Magnetic Starters frames that cannot be applied. For information on the applicable Magnetic Starters frames, refer to the "Heater rati (designation) of standard Thermal Overload Relays" field in the above table.

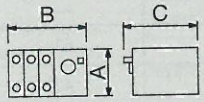
Magnetic Contactors

●S-T series (non-Reversing)
●S-2xT series (Reversing)

Model name			Non-Reversing	S-T10	S-T12	S-T20	S-T21	S-T25	S-T32
			Reversing	S-2×T10	S-2×T12	S-2×T20	S-2×T21	S-2×T25	S-2×T32
Rated operational current (A) Category AC-3			220 to 240VAC	11	13	18	25	30	32
			380 to 440VAC	9	12	18	23	30	32
			500 VAC	7	9	17	17	24	24
Conventional free air thermal current Ith (A)				20	20	20	32	32	32
Operation coil rating				Refer to pages 13 and 14					
Auxiliary contact arrangement	Non-Reversing		Standard	1a	1a1b	1a1b	2a2b	2a2b	—
			Special	1b	2a	2a	—	—	—
	Reversing		Standard	1a×2+2b	1a1b×2+2b	1a1b×2+2b	2a2bx2	2a2bx2	—
			Special	1b×2+2b	2b×2+2b	2b×2+2b	—	—	—
		Non-Reversing	A	75	75	75	81	81	81
			B	36	43	43	63	63	43
			C	78	78	78	81	81	81
		Reversing	A	85	85	85	81	81	81
			B	82	97	97	136	136	96
			C	78	78	78	81	81	111
IEC 35mm rail mounting type				←→					
Option	Front clip-on auxiliary contact block mounting type			←→					
	Side clip-on auxiliary contact block mounting type			←→					
	Surge absorber mounting type			←→					

Thermal Overload Relays

●TH-T series

Model name		TH-T18	TH-T25
Application		MSO-T10 -T12 -T20	MSO-T21 -T25
Standard heater rating (designation) (A)		0.12, 0.17, 0.24, 0.35, 0.5, 0.7, 0.9,1.3, 1.7, 2.1, 2.5, 3.6, 5, 6.6, 9, 11, 15	0.24, 0.35, 0.5, 0.7, 0.9, 1.3, 1.7, 2.1, 2.5, 3.6, 5, 6.6, 9, 11, 15, 22
Contact arrangement		1a1b	1a1b
	A	55	51
	B	45	63
	C	76.5	79

●Heater types

Heater types of TH type Thermal Overload Relays

For Magnetic Starters		For single mounting		Heater designation (adjustable range of stabilized current) (A)
2-element	3-element	2-element	3-element	
T18	T18KP	— Note 1	— Note 1	0.12(0.1 to 0.16) 0.17(0.14 to 0.22) 0.24 (0.2 to 0.32) 0.35(0.28 to 0.42) 0.5(0.4 to 0.6) 0.7(0.55 to 0.85 0.9(0.7 to 1.1) 1.3 (1 to 1.6) 1.7(1.4 to 2) 2.1(1.7 to 2.5) 2.5(2 to 3) 3.6(2.8 to 4.4) 5(4 to 6) 6.6(5.2 to 8 9(7 to 11) 11(9 to 13) 15(12 to 18)
T25	T25KP	T25 Note 1	T25KP Note 1	0.24(0.2 to 0.32) 0.35(0.28 to 0.42) 0.5(0.4 to 0.6) 0.7(0.55 to 0.85) 0.9(0.7 to 1.1) 1.3(1 to 1.6) 1.7(1.4 to 2) 2.1(1.7 to 2.5) 2.5(2 to 3) 3.6(2.8 to 4.4) 5(4 to 6) 6.6(5.2 to 8) 9(7 to 11) 11(9 to 13) 15(12 to 18) 22(18 to 26)

Note 1: Combining UT-HZ18 To be released in the future allows the T18 frame to be used singly (screw mounting or IEC 35 mm rail mounting).
Combining UN-RM20 allows the T25 frame for single mounting to have the IEC 35mm rail mounted.