

2.1 Model List

Frame			T10	T12	T20	T21	T25	T32	T35	T50		
Applicable standard			JIS C8201-4-1, IEC60947-4-1, EN60947-4-1, GB14048.4									
Model Name	Magnetic Contactors (Without Thermal Overload Relay, Open Type)	Non-Reversing	S-T10	S-T12	S-T20	S-T21	S-T25	S-T32	S-T35	S-T50		
		Reversing	S-2 x T10	S-2 x T12	S-2 x T20	S-2 x T21	S-2 x T25	S-2 x T32	S-2 x T35	S-2 x T50		
	Magnetic Starters (With standard 2-element, With Thermal Overload Relay)	Enclosed Type	Non-Reversing	MS-T10	MS-T12	—	MS-T21	—	—	MS-T35	MS-T50	
			Reversing	—	—	—	MS-2 x T21	—	—	MS-2 x T35	MS-2 x T50	
		Open Type	Non-Reversing	MSO-T10	MSO-T12	MSO-T20	MSO-T21	MSO-T25	—	MSO-T35	MSO-T50	
			Reversing	MSO-2 x T10	MSO-2 x T12	MSO-2 x T20	MSO-2 x T21	MSO-2 x T25	—	MSO-2 x T35	MSO-2 x T50	
	Combined Thermal Overload Relays			TH-T18			TH-T25		—	TH-T25 / T50	TH-T25 / T50	
	Magnetic Starters		Non-Reversing	MSO-T10KP	MSO-T12KP	MSO-T20KP	MSO-T21KP	MSO-T25KP	—	MSO-T35KP	MSO-T50KP	
With 3-element type Thermal Overload Relays		Reversing	MSO-2 x T10KP	MSO-2 x T12KP	MSO-2 x T20KP	MSO-2 x T21KP	MSO-2 x T25KP	—	MSO-2 x T35KP	MSO-2 x T50KP		
Combined Thermal Overload Relays			TH-T18KP			TH-T25KP		—	TH-T25 / T50KP	TH-T25 / T50KP		
Rated Insulation Voltage [V]			690									
Rated Impulse Withstand Voltage [kV]			6									
Rated Frequency [Hz]			50/60									
Pollution Degree			3									
Main contact rating	Rated operational current / power Category AC-3 (Note 1) (Three-phase squirrel-cage motor load standard responsibility) (Note 2) [kW/A]	AC220 to 240V	2.5/11 [2.2/11]	3.5/13 [2.7/13]	4.5/18 [3.7/18]	5.5/25 [4/20]	7.5/30 [26] [5.5/26]	7.5/32 [7.5/32]	11/40 [7.5/35]	15/55 [50] [11/50]		
		AC380 to 440V	4/9 [2.7/7]	5.5/12 [4/9]	7.5/18 [7.5/18]	11/23 [7.5/20]	15/30 [26] [11/25]	15/32 [15/32]	18.5/40 [15/32]	22/50 [22/48]		
		AC500V	4/7 [2.7/6]	5.5/9 [5.5/9]	7.5/17 [7.5/17]	11/17 [7.5/17]	15/24 [11/20]	15/24 [11/20]	18.5/32 [15/26]	25/38 [22/38]		
	Rated operational current / power Category AC-4 (Three-phase squirrel-cage motor load inching responsibility) [kW/A]	AC220 to 240V	1.5/8	2.2/11	3.7/18		4.5/20	5.5/26	5.5/26	7.5/35		
		AC380 to 440V	2.2/6	4/9	5.5/13		7.5/17	11/24	11/24	15/32		
		AC500V	2.7/6	5.5/9	5.5/10		7.5/12	7.5/13	11/17	15/24		
	Rated operational current / power Category AC-1 (Resistance, heater load)	AC100 to 240V	20			32			60		80	
		AC380 to 440V	11	13		32			60		80	
Conventional Free Air Thermal Current Ith [A]		20			32			60		80		
Auxiliary contact rating	Contact Arrangement	Standard Accessory (Note 7)	Non-Reversing	1a	1a1b	2a2b		—	2a2b	2a2b		
			Reversing (Note 8, Note 10)	1a x 2 + 2b	1a1b x 2 + 2b	2a2b x 2		2a2b x 2	2a2b x 2	2a2b x 2		
		Special accessory	Non-Reversing	1b	2a	—	—	—	—	—		
			Reversing (Note 4, Note 6)	1a x 2 + 2b	2a x 2 + 2b	—	—	—	—	—		
	Max. number of additional options (Note 10)	Non-Reversing	1 for UT-AX2/4, 2 for UT-AX11									
		Reversing (Note 8, Note 10)	2 for any UT-AX2/4/11					—	2 for any UT-AX2/4/11			
	Rated Operating Current (Category AC-15: Alternating current coil load) [A]		AC120V	6	6	6	6	6	6	6	6	
			AC240V	3	3	3	3	3	3	3	3	
Rated Operational Current (Category DC-13 : Direct current coil load)		DC24V	3									
		DC110V	0.6									
Conventional Free Air Thermal Current Ith [A]			10	10	10	10	10	10	10	10		
Performance	Mechanical Durability [x 10000]		1000									
	Electrical Durability (Note 5) [Ten thousand times]		Category AC-3			200 (Note 5, 6)						
			Category AC-4			3 (Note 5)						
			Category AC-1			50						
Switching Frequency [Times/Hour]		Category AC-3			1800					1200		
		Category AC-4			300							
		Category AC-1			1200							
Characteristic	Coil consumption (Note7) [VA]		Sealed			7		4.5		10		
			Inrush			45		75		55	110	
Power Consumption (Note 7) [W]		2.2			2.4		2.4		1.8	3.8	3.8	
Outside Dimensions	Magnetic Contactors (without Thermal Overload Relays) (Width x Height x Depth) [mm]		Non-Reversing	36 x 75 x 78		44 x 75 x 78		63 x 81 x 81		43 x 81 x 81		75 x 89 x 91
			Reversing	82 x 85 x 78		98 x 85 x 78		136 x 81 x 81		96 x 81 x 111		160 x 114 x 97
	Open Type Magnetic Starters (Width x Height x Depth) [mm]		Non-Reversing	46 x 115 x 79								
			Reversing	90.5 x 125 x 79		98.5 x 125 x 79		136 x 138 x 82		—		75 x 157.5 x 91
	Enclosed Magnetic Starters (Width x Height x Depth) [mm]		Non-Reversing	76 x 165 x 97.5		—		104 x 176 x 110		—		135 x 231 x 126
			Reversing	—		—		220 x 192 x 115		—		300 x 247 x 130
IEC 35mm rail mounting			Possible (excluding Enclosed Magnetic Starters)									
Installable Optional Unit: Model Names (Note 12)	Additional Auxiliary Contact Units		(Contact Arrangement 1a1b)		UT-AX2/AX11							
			(Contact Arrangement 2a2b)		UT-AX4							
			With Low-Level Signal Contact		—							
			(Varistor) (Note 4)		UT-SA21							
			(Varistor + Display LED)		UT-SA22							
			(CR)		UT-SA23							
			(Varistor + CR)		UT-SA25							
	DC-AC Interface		Triac Output		UT-SY21							
			Contact Output		UT-SY22							
	Live Part Protection Cover		For Magnetic Starters		Non-Reversing		—					
					Reversing		—					
			For Magnetic Contactors		Non-Reversing		—					
				Reversing		—						
Terminal Cover		For Magnetic Starters (Non-Reversing)		(Standard Equipment)								
		For Magnetic Contactors (Non-Reversing)		(Standard Equipment)								
Mechanical Interlock Units			UT-ML11			UN-ML21						

- Note 1. The figure in the square brackets indicates the rated current shown on the rating plate of the product at which the category AC-3 opening/closing durability is 2,000,000 times for T10 to T65 (1,000,000 times for the T20 380V, T80 and T100). Refer to the electric durability curve for the life performance.
- Note 2. The value between parentheses for the rated operating current is for the magnetic contactor (without thermal overload relay), while the value between parentheses for the motor capacity applies to an enclosed type magnetic starter.
- Note 3. AC operated types T10 to T50, DC operated types T12 to T50 can be manufactured with coil surge absorber (□-□SA type). The UT-SA21 type can be mounted.
- Note 4. T65 to N800 types have an integrated coil surge absorber rendering a coil surge absorber unit for prevention of coil switching surges unnecessary.
- Note 5. 1 million times for T20 class AC-3 380 V or more types for the rating in parentheses and 15,000 times for class AC-4 types. 15 thousand times for T35 to N800 class AC-4 380 V or more types.
- Note 6. Values are for the ratings in parentheses. The electrical durability for the current values not in parentheses varies inversely with the rough square of the current.