

Tesol *Technical Solution*

MC/TOR

Contactors and Overload Relays



Tesol *Technical Solution*
MC/TOR
Contactors and Overload Relays

Providing Customers with Optimized Technical Solutions Where Electricity is Involved.

LSIS's contactors and overload relays are intended to control electrical operation and shutdown as well as to protect devices and equipment at home and industrial sites.





Tesol

LSIS's new brand to offer you
with best Technical Solutions.

Contents

1. Characteristics of tesol contactors and overload relays	04
2. Type numbering system	05
3. Specification	06
3-1. Table of specifications	
3-2. Magnetic contactor	
3-3. Thermal Overload Relay (TOR)	
4. Accessories (Auxiliary equipment)	18
• Exploded view of accessories	
• Auxiliary contact Unit (UAT-1)	
5. Dimension	20
6. Installation and operation environment	22
• Installation precautions	
• Environment	
• Applied wire/Cable & fastening torque	
• Operating coil rating & characteristics	

1. Characteristics of tesol contactors and overload relays



MCT-100AF
MCT-75, MCT-85, MCT-100



MCT-65AF
MCT-50, MCT-65



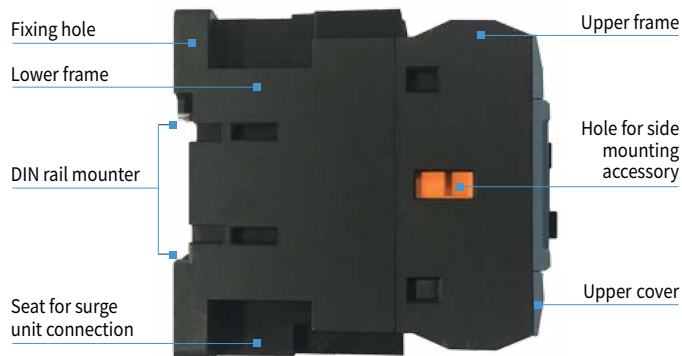
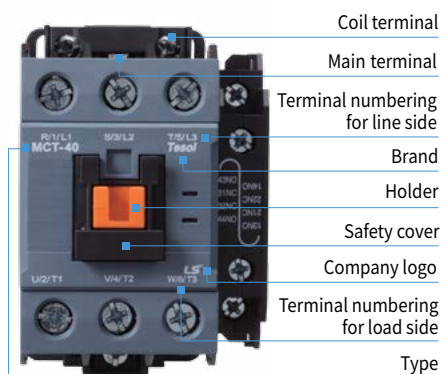
MCT-40AF
MCT-40



MCT-32AF
MCT-9, MCT-12, MCT-18,
MCT-25, MCT-32

- Composed of 4 frames and 11 ratings
- 32AF auxiliary contact 1a, 1b or 1a1b optional
- Compatible with Metasol series accessories
- Din rail and screw can be installed
- Reasonable durability and price

Exterior name of contactors and overload relays



2. Type numbering system

Contactor

MCT	—	9	AC220V	50/60Hz	1a
Tesol series MC		Rated current	Coil voltage	Coil frequency	Auxiliary contact
		9 9A	AC24 AC24V	50/60 50/60Hz	1a 1a
		12 12A	AC36 AC36V		1b 1b
		⋮	⋮		1a1b 1a1b
		100 100A	AC480 AC480V		



Thermal Overload Relay

MTT	—	32	0.14A
Tesol series TOR		Rated current	Setting current
		32 Max 32A	0.14A 0.1~0.16A
		40 Max 40A	⋮
		65 Max 65A	⋮
		85 Max 85A	74A 63~85A



Auxiliary contact unit

UAT-1	—	11
Tesol series auxiliary contact unit		Contact composition
		11 1a+1b
		10 1a
		01 1b

* UAT-1 is standard and shipped on the right side.



3. Specification

3-1. Table of specifications

MCT type

Magnetic Contactors



Frame size			32AF									
Type			MCT-9		MCT-12		MCT-18		MCT-25		MCT-32	
Screw clamp terminal			●		●		●		●		●	
Number of pole			3pole									
Rated operational voltage (Ue)			690V									
Rated insulation voltage (Ui)			690V									
Rated frequency (f)			50/60Hz									
Rated impulse withstand voltage (Uimp)			6kV									
Maximum operating rate in operating cycles per hour (AC3)			1,800 operations per hour									
Durability			1,000									
Mechanical			150		150		130		130		100	
Electric												
Rated (IEC)			kW	A	kW	A	kW	A	kW	A	kW	A
	AC-1	Through-current	-	25	-	25	-	32	-	40	-	45
	AC-3	200/240V	2.5	11	3.5	13	4.5	18	5.5	25	7.5	32
		380/440V	4	9	5.5	12	7.5	18	11	25	15	32
		500/550V	4	7	7.5	12	7.5	13	15	20	18.5	28
		690V	4	6	7.5	9	7.5	9	15	18	18.5	20
Rated short-time withstand current (IEC 60947)	1s	A	250		280		300		400		550	
	10s	A	110		120		154		186		220	
	30s	A	70		80		100		130		150	
	1min	A	61		61		84		90		100	
	3min	A	45		50		60		60		70	
	10min	A	30		30		40		50		55	
	≥15min	A	25		25		32		45		45	
Size and weight	Weight	kg	0.35									
	Size (W x H x D)	mm	45 x 77 x 88.5									
Auxiliary	Standard		1a or 1b or 1a1b									
	Additional installation	Side mount	UAT-1									
		Front mount	UA-2, UA-4									



MTT type

Thermal Overload Relays

Frame size			32AF									
Type	Screw clamp terminal		MTT-32									
			●									
Rated operational voltage (Ue)			440V									
Rated insulation voltage (Ui)			690V									
Rated impulse withstand voltage (Uimp)			6kV									
Trip class			10A									
Setting rated			0.1 ~ 32A									
Size and weight	Weight		0.12									
	Size (W x H x D)		44 x 67 x 88									



40AF		65AF				100AF					
MCT-40		MCT-50		MCT-65		MCT-75		MCT-85		MCT-100	
●		●		●		●		●		●	
3pole		3pole				3pole					
690V		690V				690V					
1000V		1000V				1000V					
50/60Hz		50/60Hz				50/60Hz					
8kV		8kV				8kV					
1,800 operations per hour		1,200 operations per hour				1,200 operations per hour					
800		500				500					
100		100		100		100		100		100	
kW	A	kW	A	kW	A	kW	A	kW	A	kW	A
-	60	-	70	-	80	-	100	-	110	-	125
11	40	15	55	18.5	65	22	75	25	85	30	105
18.5	40	22	50	30	65	37	75	45	85	55	105
22	32	30	43	33	60	37	64	45	75	55	85
22	23	30	28	33	35	37	42	45	45	55	65
700		1000		1050		1100		1200		1320	
300		550		700		750		800		900	
160		330		380		400		450		500	
100		250		270		300		350		400	
70		150		200		220		270		270	
65		90		120		140		170		180	
60		70		80		100		110		125	
0.48		0.8				1.53					
57 x 70 x 95		67 x 82.5 x 101				82 x 84.5 x 101					
1a1b		1a1b				1a1b					
UAT-1		UAT-1				UAT-1					
UA-2, UA-4		UA-2, UA-4				UA-2, UA-4					



40AF		65AF		100AF	
MTT-40		MTT-65		MTT-85	
●		●		●	
440V		440V		440V	
690V		690V		690V	
6kV		6kV		6kV	
10A		10A		10A	
16 ~ 40A		24 ~ 65A		34 ~ 85A	
0.2		0.3		0.32	
53 x 70 x 95		70 x 82.5 x 101		70 x 84.5 x 101	
				MT-95	
				●	
				690V	
				690V	
				6kV	
				10A, 20	
				7~100A	
				0.48/0.5	
				70 x 97 x 110	

3. Specification

3-2. Magnetic Contactor(32AF)

- Contact composition: 3-pole main contact / Auxiliary contact: 1a or 1b or 1a1b
- Life (AC3): 15 million times (Mechanical), 2.5 million times (Electrical)
- Control power : AC 50/60Hz
- Terminal structure: Screw type
- Mounting: For both Screw/DIN rail (35mm)
- Degree of protection: IP20

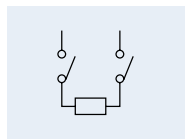


Rating

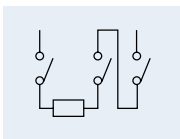
Contactor type			MCT-9		MCT-12		MCT-18		MCT-25		MCT-32		
			kW	A	kW	A	kW	A	kW	A	kW	A	
Three phase squirrel cage motor	AC3	200/240V	2.5	11	3.5	13	4.5	18	5.5	25	7.5	32	
		380/440V	4	9	5.5	12	7.5	18	11	25	15	32	
		500/550V	4	7	7.5	12	7.5	13	15	20	18.5	28	
		690V	4	6	7.5	9	7.5	9	15	18	18.5	20	
Resistance/Noninductive load	AC1		-	25	-	25	-	32	-	45	-	45	
DC1 (L/R=1ms) Resistance/ Noninductive load	2-pole in series	24V	-	10	-	12	-	18	-	20	-	25	
		48V	-	10	-	12	-	18	-	20	-	25	
		110V	-	6	-	10	-	13	-	15	-	25	
	3-pole in series	24V	-	10	-	12	-	18	-	20	-	25	
		48V	-	10	-	12	-	18	-	20	-	25	
		100V	-	8	-	12	-	18	-	20	-	25	
	DC2, 4 (L/R=15ms) DC motor load	2-pole in series	24V	-	8	-	12	-	12	-	20	-	25
			48V	-	4	-	6	-	6	-	15	-	20
			110V	-	2.5	-	4	-	4	-	8	-	10
3-pole in series		24V	-	8	-	12	-	12	-	20	-	25	
		48V	-	6	-	10	-	10	-	20	-	25	
		100V	-	4	-	8	-	8	-	15	-	20	
Directly mountable overload relay			MTT-32										
Conductor size (Solid, Stranded) (The max. number of conducts: 2)	AWG	16~10		16~8		14~8		14~8		12~8			
	mm²	1.5~4		1.5~10		2.5~10		2.5~10		2.5~10			
Conductor type			65/75°C Cu-wire only										

Coil voltage

AC	50/60Hz	24, 36, 42, 48, 100, 110, 208, 220, 230, 240, 277, 380, 400, 415, 440, 480V
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2pole for DC contact



3pole for DC contact

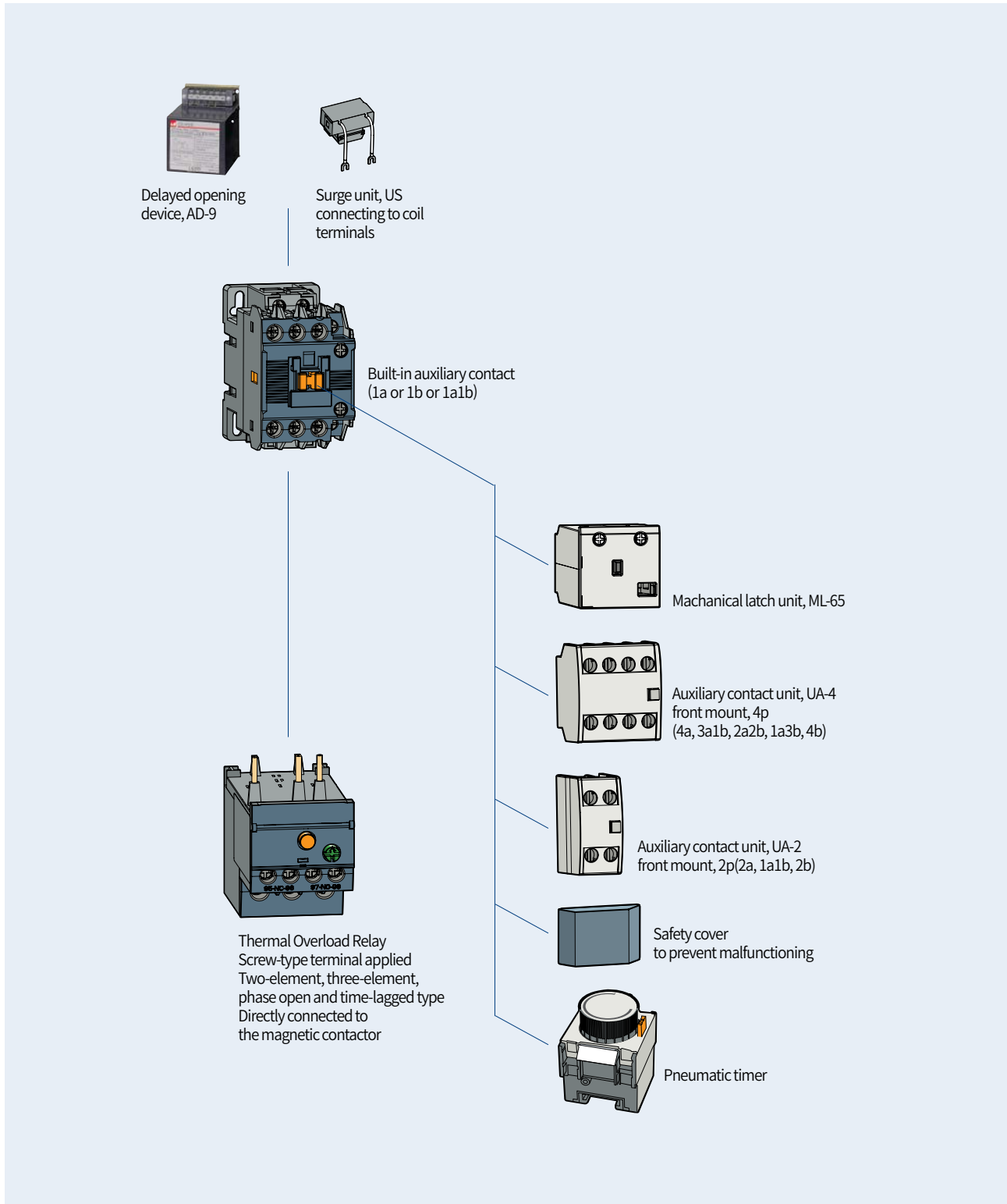
Certification

CE (IEC)

CCC



Exploded view of accessories



* Accessories are compatible with those of Metasol series.

3. Specification

3-2. Magnetic Contactor(40AF)

- Contact composition: 3-pole main contact / Auxiliary contact: 1a1b
- Life (AC3): 8 million times (Mechanical), 1 million times (Electrical)
- Control power : AC 50/60Hz
- Terminal structure: Screw type
- Mounting: For both Screw/DIN rail (35mm)
- Degree of protection: IP20

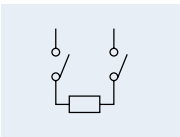


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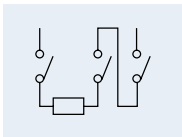
Contactor type			MCT-40		
			kW	A	
Three phase squirrel cage motor	AC3	200/240V	11	40	
		380/440V	18.5	40	
		500/550V	22	32	
		690V	22	23	
Resistance/Noninductive load	AC1		-	60	
DC1 (L/R=1ms) Resistance/ Noninductive load	2-pole in series	24V	-	35	
		48V	-	35	
		110V	-	25	
	3-pole in series	24V	-	35	
		48V	-	35	
		100V	-	35	
	DC2, 4 (L/R=15ms) DC motor load	2-pole in series	24V	-	35
			48V	-	20
110V			-	10	
	3-pole in series	24V	-	35	
		48V	-	30	
		100V	-	20	
Directly mountable overload relay			MTT-40		
Conductor size (Solid, Stranded) (The max. number of conducts: 2)		AWG mm ²	8~6		
			10~16		
Conductor type			65/75°C Cu-wire only		

Coil voltage

AC	50/60Hz	24, 36, 42, 48, 100, 110, 208, 220, 230, 240, 277, 380, 400, 415, 440, 480V
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2pole for DC contact

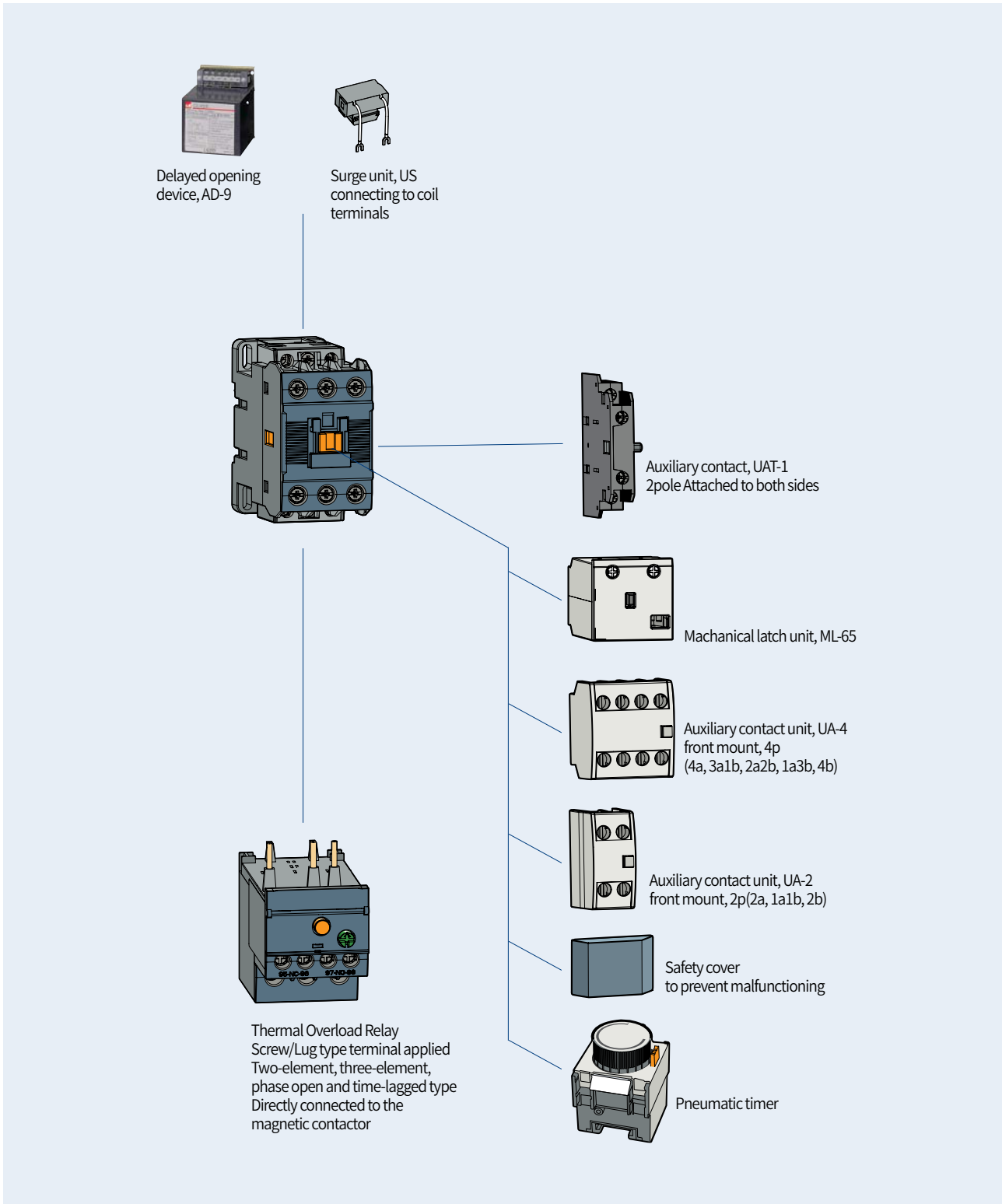


3pole for DC contact

Certification
CE (IEC)
CCC



Exploded view of accessories



* Accessories other than UAT-1, APT-40 are compatible with those of Metasol series.

3. Specification

3-2 . Magnetic Contactor(65AF)

- Contact composition: 3-pole main contact / Auxiliary contact: 1a1b
- Life (AC3): 8 million times (Mechanical), 1 million times (Electrical)
- Control power : AC 50/60Hz
- Terminal structure: Screw type
- Mounting: For both Screw/DIN rail (35mm)
- Degree of protection: IP20

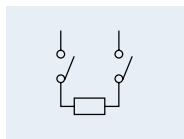


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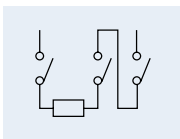
Contactor type			MCT-50		MCT-65			
			kW	A	kW	A		
Three phase squirrel cage motor	AC3	200/240V	15	55	18.5	65		
		380/440V	22	50	30	65		
		500/550V	30	43	33	60		
		690V	30	28	33	35		
Resistance/Noninductive load	AC1		-	70	-	80		
DC1 (L/R=1ms) Resistance/ Noninductive load	2-pole in series	24V	-	50	-	50		
		48V	-	40	-	40		
		110V	-	35	-	35		
		24V	-	50	-	65		
	3-pole in series	48V	-	50	-	65		
		100V	-	50	-	65		
		DC2, 4 (L/R=15ms) DC motor load	2-pole in series	24V	-	45	-	45
				48V	-	25	-	25
110V	-			15	-	15		
3-pole in series	24V		-	50	-	50		
	48V	-	35	-	35			
	100V	-	30	-	30			
Directly mountable overload relay			MTT-65					
Conductor size (Solid, Stranded) (The max. number of conducts: 2)	AWG mm²	10~4			8~3			
		6~25			10~35			
Conductor type			65/75°C Cu-wire Only					

Coil voltage

AC	50/60Hz	24, 36, 42, 48, 100, 110, 208, 220, 230, 240, 277, 380, 400, 415, 440, 480V
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2pole for DC contact



3pole for DC contact

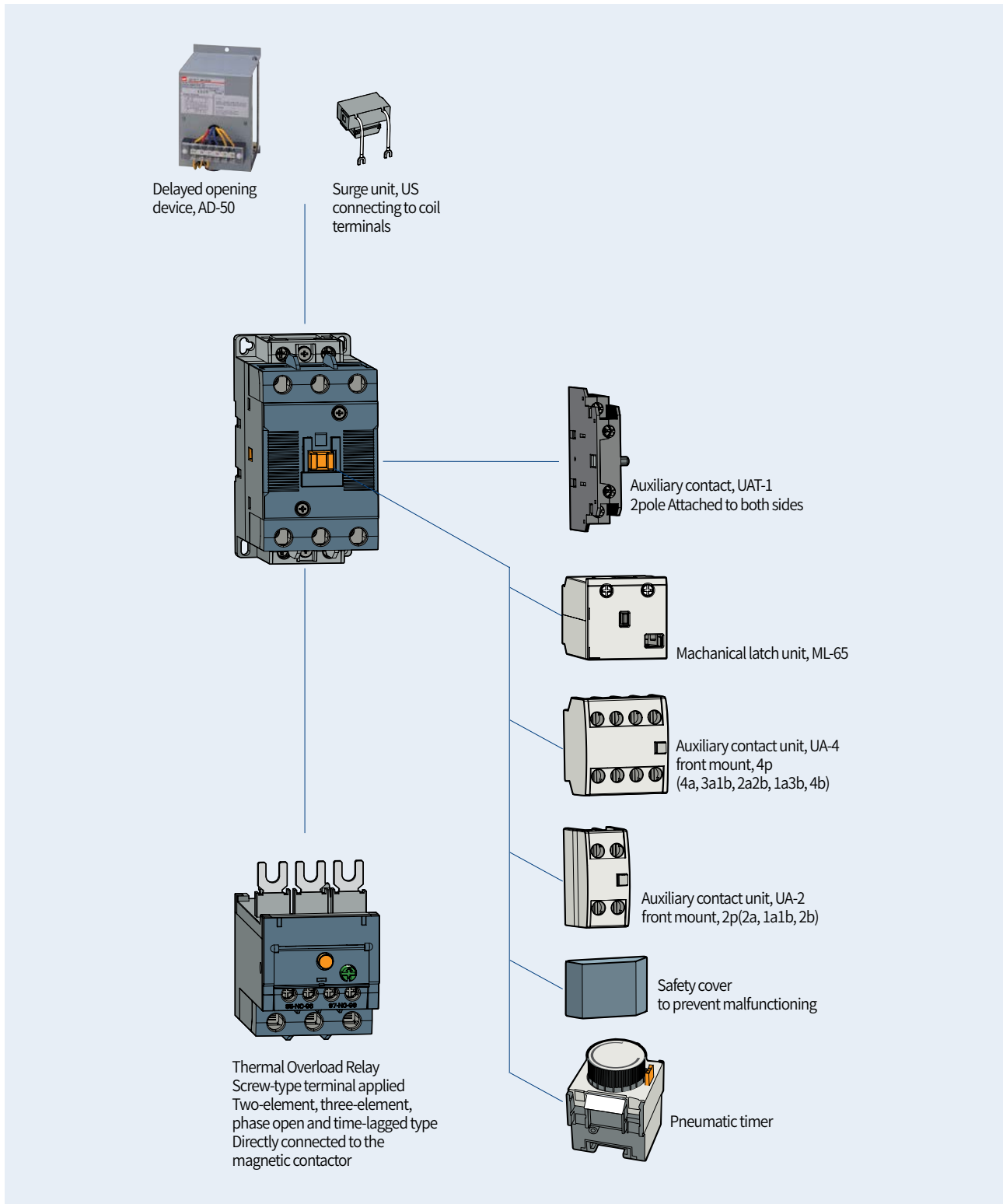
Certification

CE (IEC)

CCC



Exploded view of accessories



* Accessories other than UAT-1, APT-65 are compatible with those of Metasol series.

3. Specification

3-2. Magnetic Contactor(100AF)

- Contact composition: 3-pole main contact / Auxiliary contact: 1a1b
- Life (AC3): 8 million times (Mechanical), 1 million times (Electrical)
- Control power : AC 50/60Hz
- Terminal structure: Screw type
- Mounting: For both Screw/DIN rail (35mm)
- Degree of protection: IP20

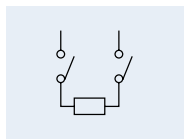


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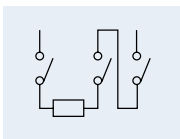
Contactor type			MCT-75		MCT-85		MCT-100			
			kW	A	kW	A	kW	A		
Three phase squirrel cage motor	AC3	200/240V	22	75	25	85	30	105		
		380/440V	37	75	45	85	55	105		
		500/550V	37	64	45	75	55	85		
		690V	37	42	45	45	55	65		
Resistance/Noninductive load	AC1		-	100	-	110	-	125		
DC1 (L/R=1ms) Resistance/ Noninductive load	2-pole in series	24V	-	75	-	80	-	100		
		48V	-	65	-	65	-	100		
		110V	-	50	-	50	-	80		
		24V	-	75	-	80	-	100		
	3-pole in series	48V	-	75	-	80	-	100		
		100V	-	75	-	80	-	100		
		DC2, 4 (L/R=15ms) DC motor load	24V	-	65	-	65	-	100	
			48V	-	40	-	40	-	60	
110V	-		20	-	20	-	40			
24V	-		80	-	80	-	100			
	3-pole in series	48V	-	60	-	60	-	90		
		100V	-	50	-	50	-	80		
		Directly mountable overload relay					MCT-85			MT-95
Conductor size (Solid, Stranded)		AWG	8~2			8~0			8~00	
(The max. number of conducts: 2)		mm²	10~35			10~50			10~70	
Conductor type			65/75°C Cu-wire Only							

Coil voltage

AC	50/60Hz	24, 36, 42, 48, 100, 110, 220, 230, 240, 277, 380, 400, 415, 440V
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2pole for DC contact



3pole for DC contact

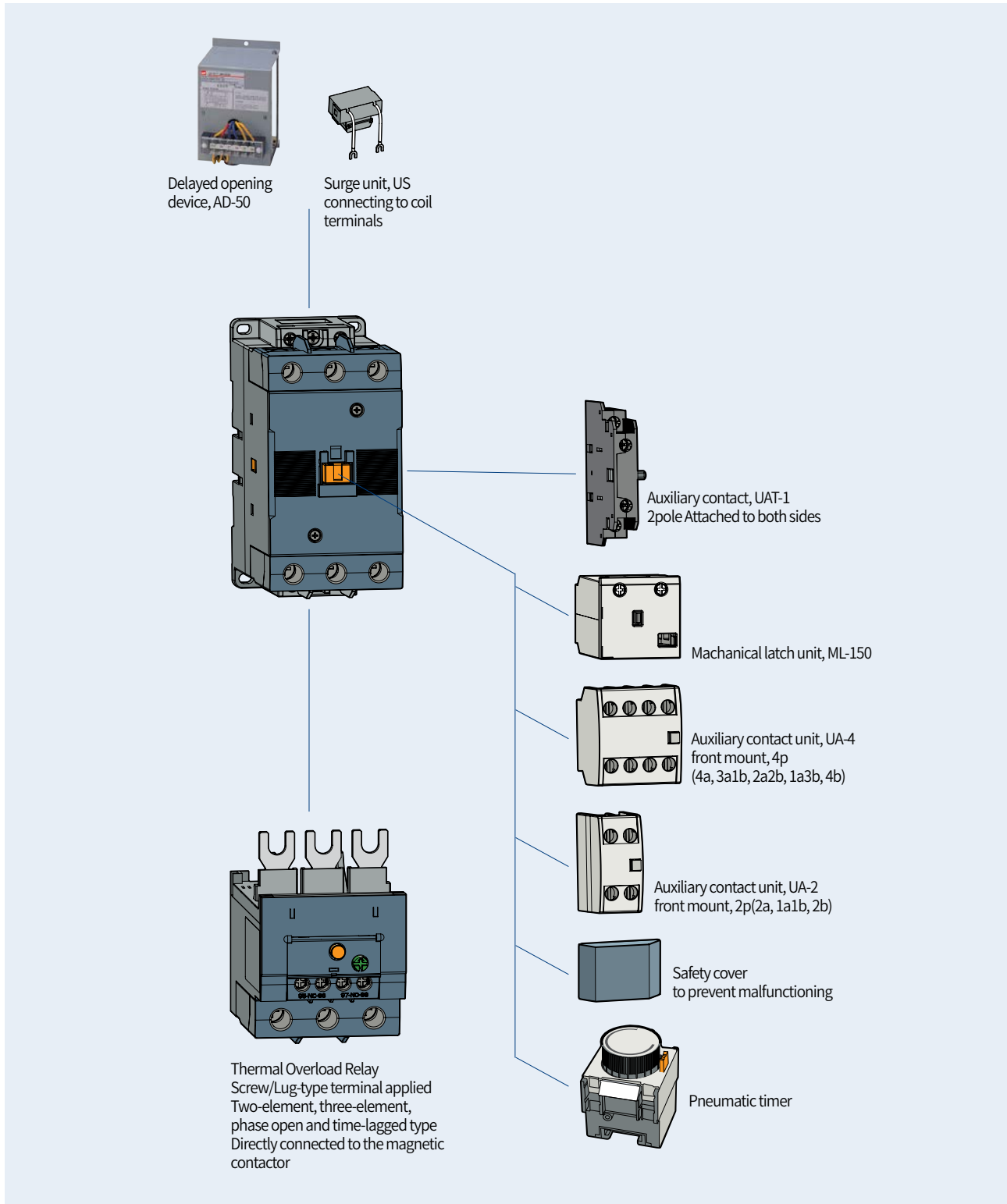
Certification

CE (IEC)

CCC



Exploded view of accessories



* Accessories other than UAT-1, APT-100 are compatible with those of Metasol series.

3. Specification

3-3. Thermal Overload Relay



MTT type

Thermal Overload Relays

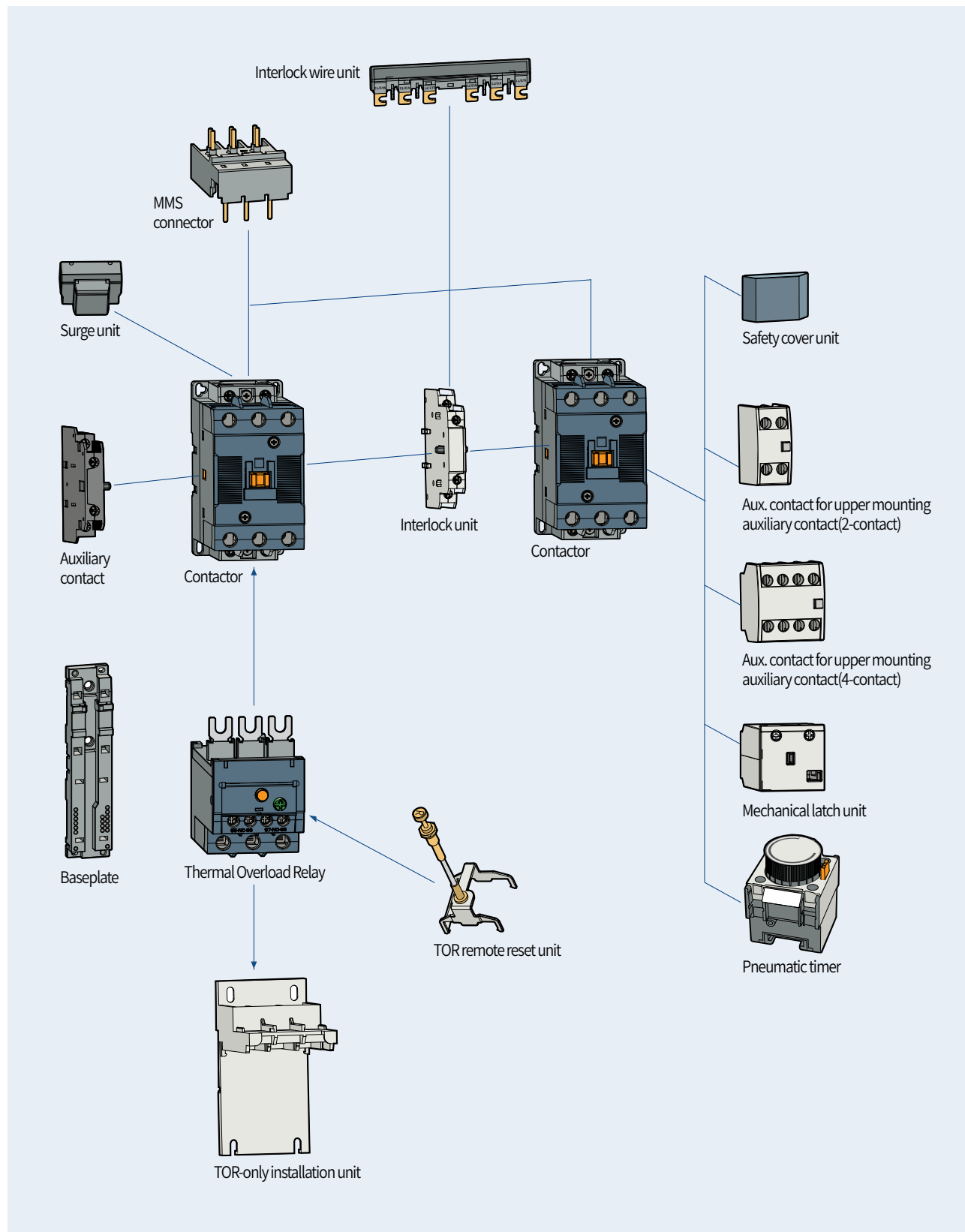
Type			MTT-32			
Standard			IEC 60947-4-1, GB/T 14048.4			
Certification			CCC, CE			
Rated operating voltage (Ue)			440V			
Rated insulation voltage (Ui)			690V			
Rated frequency			50/60Hz			
Degree of protection, IP			IP 20			
Ambient temperature		Storage	-30 ~ +65 °C			
		Usage	-5 ~ 40 °C			
Installation location			Attached vertical to the panel			
Vibration resistance			5G			
Insulation strength			6kV			
Rated impulse withstand voltage (Uimp)			6kV			
Characteristics of auxiliary contacts						
Contact composition			1a1b(1NO+1NC)			
Rated through current			4A			
Rated operating current			-			
Rating		AC-15	110V	2.5A		
			220V	2A		
			550V	1A		
Trip class			Class 10A			
Setting range			0.1~32A			
Connection Cable/Wire		Spec.	1mm²			
Screw fixing connector		Model	60/75°C Copper wire			
Advantages			- Assembled with MCT-9, 12, 18, 25 and 32 contactors - Mounted with guides or screws using a separate mounting bracket - Compact size; 44mm wide - Open phase protection type - Manual/Automatic reset - Bimetal type			
List number			Current range(A)	Open phase protection type	Current range(A)	Open phase protection type
			0.1~0.16	MTT- 32 / 0.14A	5~8	MTT- 32 / 6.5A
			0.16~0.25	MTT- 32 / 0.21A	6~9	MTT- 32 / 7.5A
			0.25~0.4	MTT- 32 / 0.33A	7~10	MTT- 32 / 8.5A
			0.4~0.63	MTT- 32 / 0.52A	9~13	MTT- 32 / 11A
			0.63~1	MTT- 32 / 0.82A	12~18	MTT- 32 / 15A
			1~1.6	MTT- 32 / 1.3A	16~22	MTT- 32 / 19A
			1.6~2.5	MTT- 32 / 2.1A	18~25	MTT- 32 / 21.5A
			2.5~4	MTT- 32 / 3.3A	22~32	MTT- 32 / 27A
			4~6	MTT- 32 / 5A		
Wiring information						
			Main terminal (Load)	Screw (M4) connection-type terminal		
				Wire diameter : 1.0~6.0mm²		
			Auxiliary contact	Screw (M3.5) connection-type terminal		



MTT-40		MTT-65		MTT-85		MT-95	
IEC 60947-4-1, GB/T 14048.4		IEC 60947-4-1, GB/T 14048.4		IEC 60947-4-1, GB/T 14048.4		IEC60947-4-1,GB/T 14048.4	
CCC, CE		CCC, CE		CCC, CE		UL, CCC, CE	
440V		440V		440V		690V	
690V		690V		690V		690V	
50/60Hz		50/60Hz		50/60Hz		50/60Hz	
IP 20		IP 20		IP 20		IP 20	
-30 ~ +65 °C		-30 ~ +65 °C		-30 ~ +65 °C		-30 ~ +65 °C	
-5 ~ 40 °C		-5 ~ 40 °C		-5 ~ 40 °C		-25 ~ 60 °C(MT Refer to Graph)	
Attached vertical to the panel		Attached vertical to the panel		Attached vertical to the panel		Attached vertical to the panel	
5G		5G		5G		6G	
6kV		6kV		6kV		6kV	
6kV		6kV		6kV		6kV	
1a1b(1NO+1NC)		1a1b(1NO+1NC)		1a1b(1NO+1NC)		1a1b(1NO+1NC)	
4A		4A		4A		5A	
-		-		-		C600, R300	
2.5A		2.5A		2.5A		1.5A(120V)	
2A		2A		2A		0.75A(240V)	
1A		1A		1A		0.3A(600V)	
Class 10A		Class 10A		Class 10A		Class 10A, 20	
16~40A		24~65A		34~85A		7~100A	
1mm ²		1mm ²		1mm ²		1mm ²	
60/75°C Copper wire		60/75°C Copper wire		660/75°C Copper wire		60/75°C Copper wire	
- Assembled with MCT-40 contactor - Compact size; 53mm wide - Open phase protection type - Manual/Automatic reset - Bimetal type		- Assembled with MCT-50, 65 contactor - Compact size; 53mm wide - Open phase protection type - Manual/Automatic reset - Bimetal type		- Assembled with MCT-75, 85 contactor - Compact size; 53mm wide - Open phase protection type - Manual/Automatic reset - Bimetal type		- Assembled with MCT-100 contactor - Open phase protection type - Manual/Automatic reset - Bimetal type	
Current range(A)	Open phase protection type	Current range(A)	Open phase protection type	Current range(A)	Open phase protection type	Current range(A)	Open phase protection type
16~22	MTT- 40 / 19A	24~36	MTT- 65 / 30A	34~50	MTT- 85 / 42A	7~10A	MT-95/8.5A
18~26	MTT- 40 / 22A	28~40	MTT- 65 / 34A	45~65	MTT-85 / 55A	9~13A	MT-95/11A
24~36	MTT- 40 / 30A	34~50	MTT- 65 / 42A	54~75	MTT- 85 / 65A	12~18A	MT-95/15A
28~40	MTT- 40 / 34A	45~65	MTT- 65 / 55A	63~85	MTT- 85 / 74A	16~22A	MT-95/19A
						18~25A	MT-95/21.5A
						24~36A	MT-95/30A
						28~40A	MT-95/34A
						34~50A	MT-95/42A
						45~65A	MT-95/54A
						54~75A	MT-95/65A
						63~85A	MT-95/74A
						70~95A	MT-95/83A
						80~100A	MT-95/90A
Main terminal (Load)	Screw (M5) connection-type terminal Wire diameter : 2.5~10mm ²	Main terminal (Load)	Screw (M6) connection-type terminal Wire diameter : 4~16mm ²	Main terminal (Load)	Less than 55A Screw (M6) connection-type terminal Wire diameter : 10~16mm ² 65A or more Screw (M8) connection-type terminal Wire diameter : 10~25mm ²	Main terminal (Load)	Screw (M8) connection-type terminal Wire diameter : 1~35mm ²
Auxiliary contact	Screw (M3.5) connection-type terminal	Auxiliary contact	Screw (M3.5) connection-type terminal	Auxiliary contact	Screw (M3.5) connection-type terminal	Auxiliary contact	Screw (M3.5) connection-type terminal

4. Accessories

Exploded view of accessories

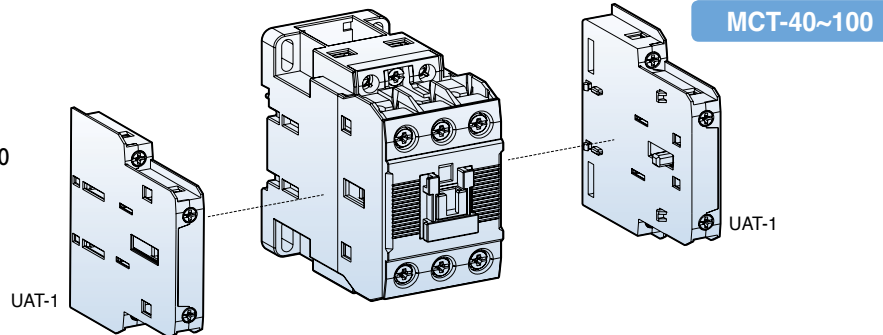


※ They are compatible with the Metasol series excluding the auxiliary contacts and base plate.

Auxiliary contact(UAT-1)

- 2-pole
- Attached to the contact side
- Applied to the following magnetic contactors: MCT-40~MCT-100

※ Aux. contacts attached to the front are compatible with those of Metasol series.
 ※ 32F is built in with the auxiliary contact.



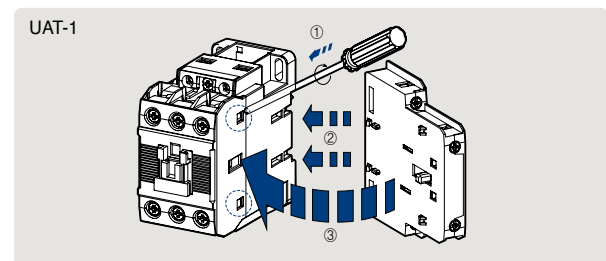
Rating

Type			UAT-1
Rated operating voltage (Ue)			600V
Rated insulation voltage (Ui)			1000V
Rated impulse withstand voltage (Uimp)			8kV
Rated frequency			50/60Hz
Minimum make/ Break capacity	Voltage		DC 24V
	Current		DC 10mA
Rated through current (Ith, AC12)			16A
Rated Current	AC15	120V	6A
		240V	3A
		380V	1.9A
		480V	1.5A
		500V	1.4A
		600V	1.2A
Short-time rated test current	1s		100A
	0.5s		125A
	0.1s		145A
Electrical life	AC15	220V	250,000 times
		440V	250,000 times
Rated making/Breaking frequency			1,800times/hour
Wire dimensions (Solid, Stranded) (The max. number of conducts : 2)		AWG	18~10
		mm²	1~2.5

Selection

Model	Appearance	No. of poles	Contact composition		Contact layout	Installation	Weight
			a(NO)	b(NC)			
UAT-1		2	1	1		on sides	53g

Installation method



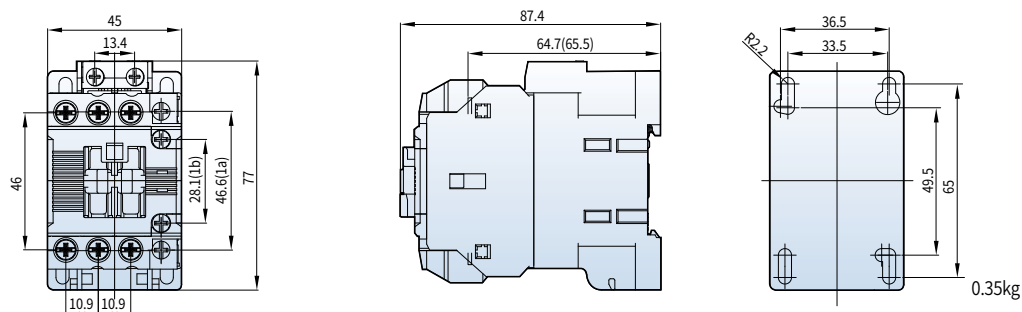
1. Before installing the auxiliary contact, remove the frame tap with “_” driver (circles drawn in the figure).
2. Make sure that it is closely in contact and be precise when connecting to the crossbar groove.
3. Lift it upward and detach outward.

5. Dimension

Outside view of magnetic contactor

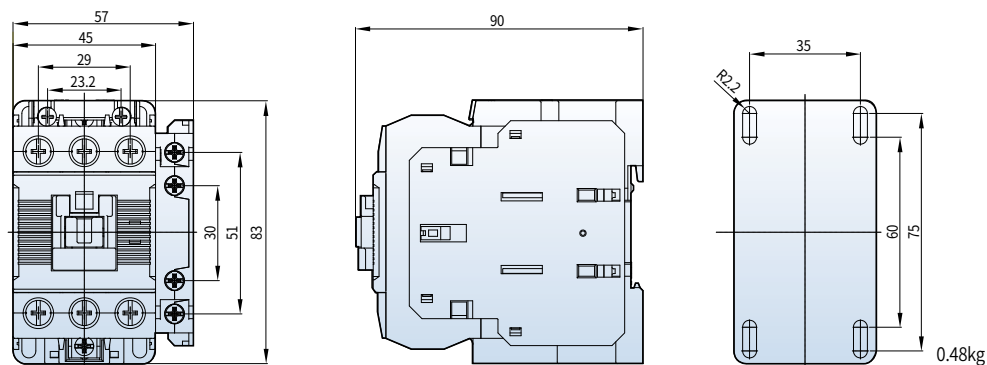
MCT-9~32

1a, 1b or 1a1b



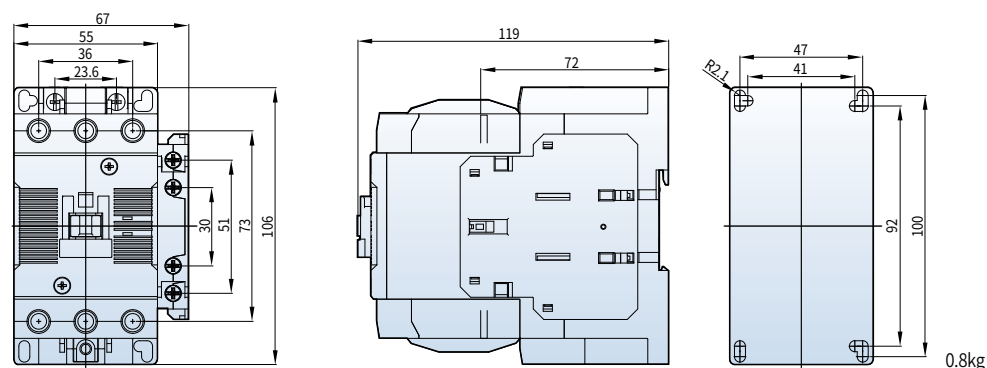
MCT-40

1a1b



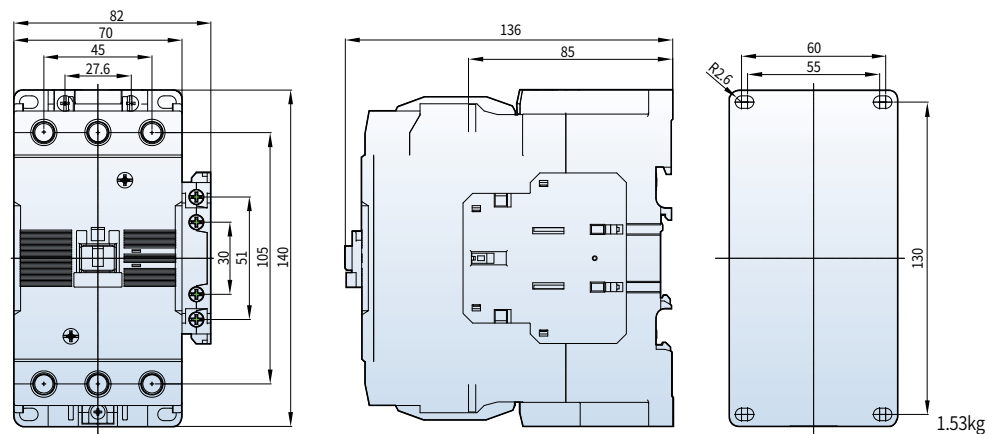
MCT-50~65

1a1b



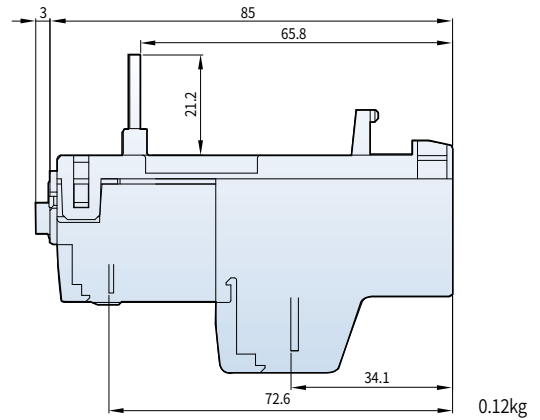
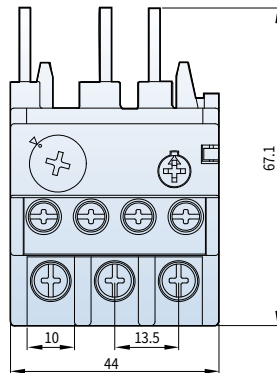
MCT-75~100

1a1b

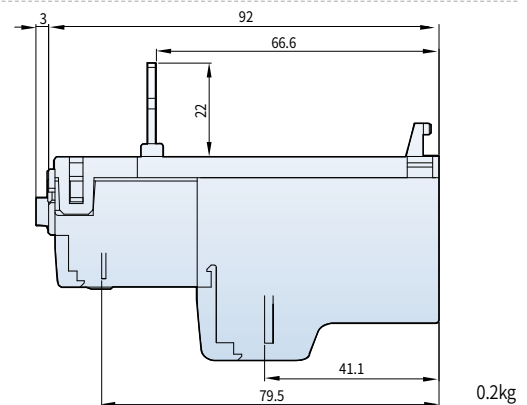
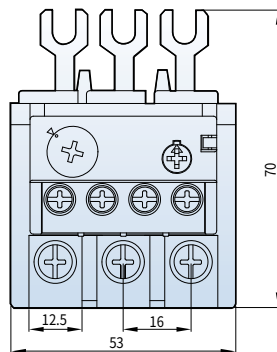


Outside view of thermal overload relay

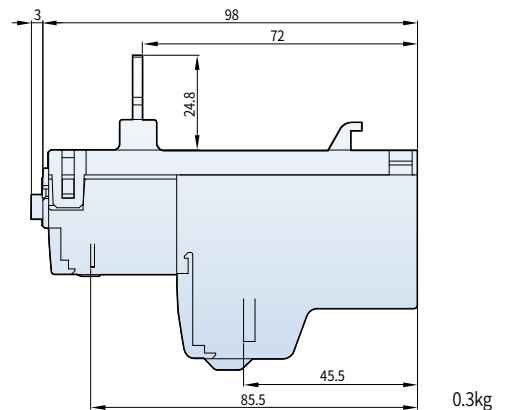
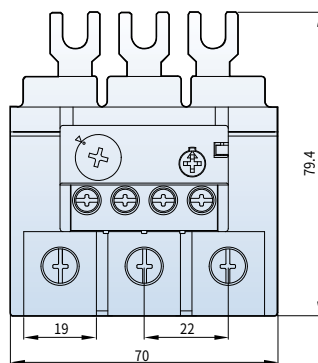
MTT-32



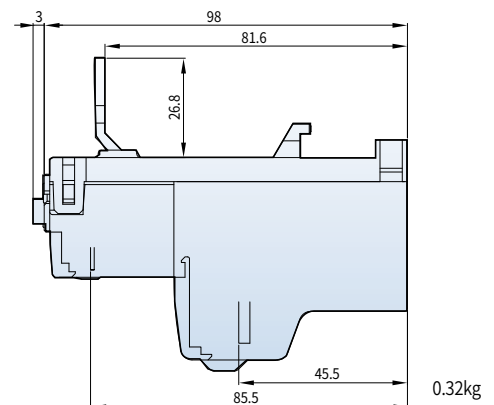
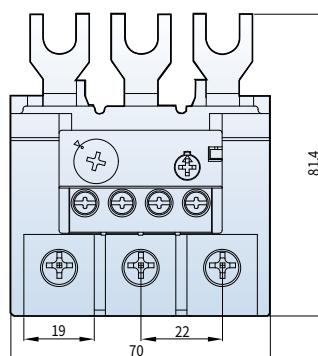
MTT-40



MTT-65



MTT-85



6. Installation and operation environment

Installation precautions

- Make sure that the installation location is dry without vibration.
- In general, it should be vertically-installed. But, it may be slant by 30°.
- Check whether the rated current, voltage and frequency match with those shown in the specification prior to its use.



Environment

Applied standard	IEC/EN 60947-1, IEC/EN 60947-4-1
Obtained certification	CE (IEC), CCC and etc.
Rated insulation voltage (Ui)	1000V (6A~22A : 690V, 32A~800A : 1000V)
Rated impulse withstand voltage (Uimp)	8kV (6A~22A : 6kV, 32A~800A : 8kV)
Degree of protection, IP	IP20 (Based on IEC60529)
Ambient temperature	Storage : -30°C ~ +65°C Operation : -25°C ~ +55°C (AC type), -25°C ~ +60°C (MT refer to graph)
Operating elevation	3,000m (8,900ft)
Installation angle	
Impulse withstand level (1/2 sine wave =11ms)	Open state : 8G Closed state : 10G
Vibration resistance level (Based on IEC 68-2-6) (5...300 Hz)	Open state : 2G Closed state : 4G
Flame resistance	Based on IEC60695-2-1 : 960°C

Applied wire/Cable & fastening torque

Wire type Frame		Main terminal size								Fastening torque		
			(AWG / mm²)						mm(max)	[lb-in]	[Nm]	[kgf·cm]
MCT-9~32		M4	18~10 / 1~6		18~10 / 1~6		18~10 / 1~6		9.6	20	2.25	23
			18~10 / 1~6		16~10 / 1~6		16~10 / 1~6					
			18~10 / 1~6		16~8 / 1.5~10		16~8 / 1.5~10					
			18~10 / 1~6		14~8 / 2.5~10		14~8 / 2.5~10					
MCT-40		M5	18~10 / 1~6		12~8 / 2.5~10		12~8 / 2.5~10		12.8	35	4	41
			18~10 / 1~6		8~6 / 10~16		8~6 / 10~16					
MCT-50~65		M6	-		10~4 / 6~25		10~4 / 6~25		14	35	4	41
			-		8~3 / 10~35		8~3 / 10~35					
MCT-75~100		M8	-		8~2 / 10~35		8~2 / 10~35		17	45	5.1	52
			-		8~1/0 / 10~50		8~1/0 / 10~50					
			-		8~2/0 / 10~70		8~2/0 / 10~70					

Operating coil rating & characteristics

Frame		32AF					40AF	65AF		100AF			
Model		MCT-9	MCT-12	MCT-18	MCT-25	MCT-32	MCT-40	MCT-50	MCT-65	MCT-75	MCT-85	MCT-100	
Rated operating voltage	[Uc]	24, 36, 42, 48, 100, 110, 208, 220, 230, 240, 277, 380, 400, 415, 440, 480 (However, 208V and 480V excluded in case of 100AF) Based on direct voltage supply, less than 85% of the rated voltage / more than 20% of the rated voltage Ex) Operating Voltage (220Vac): Less than 187V / Release voltage: More than 44V											
	50/60Hz [V]												
Coil characteristics Note 1) (Based on 20°C, 220Vac)	Operating voltage/ Release voltage												
	Closing	[VA]	≤90				≤115	≤160		≤290			
	Power consumption	[W]	≤3.5				≤3.5	≤3.8		≤6.1			
	Holding current(50/60Hz)	[I]	≤69/54				≤60/50	≤94/78		≤103/86			
	Operating time	Pull-in [ms]	15...30				15...30	15...30		15...30			
		Release [ms]	4...19				4...19	4...19		10...30			

Note 1) The power consumption of coil may vary by rating.



Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance.
Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.



- According to The WEEE Directive, please do not discard the device with your household waste.



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