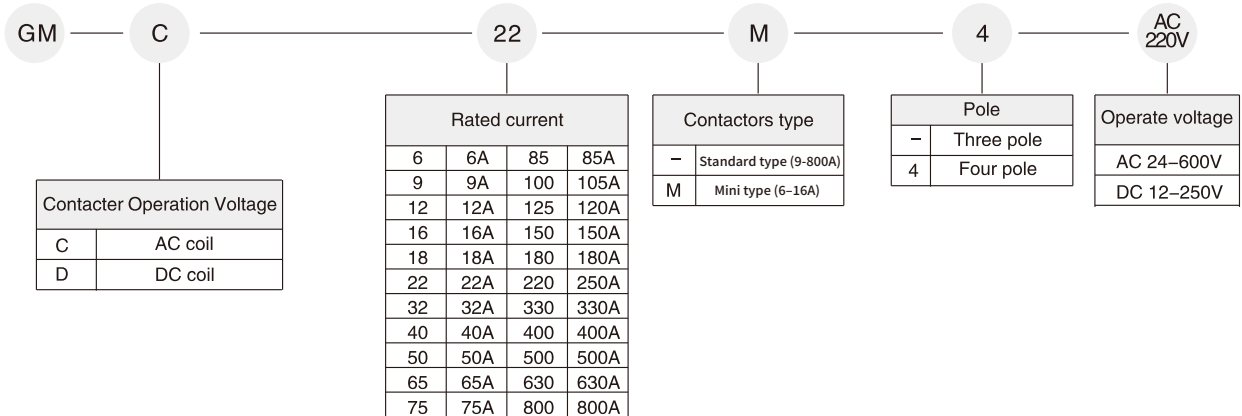
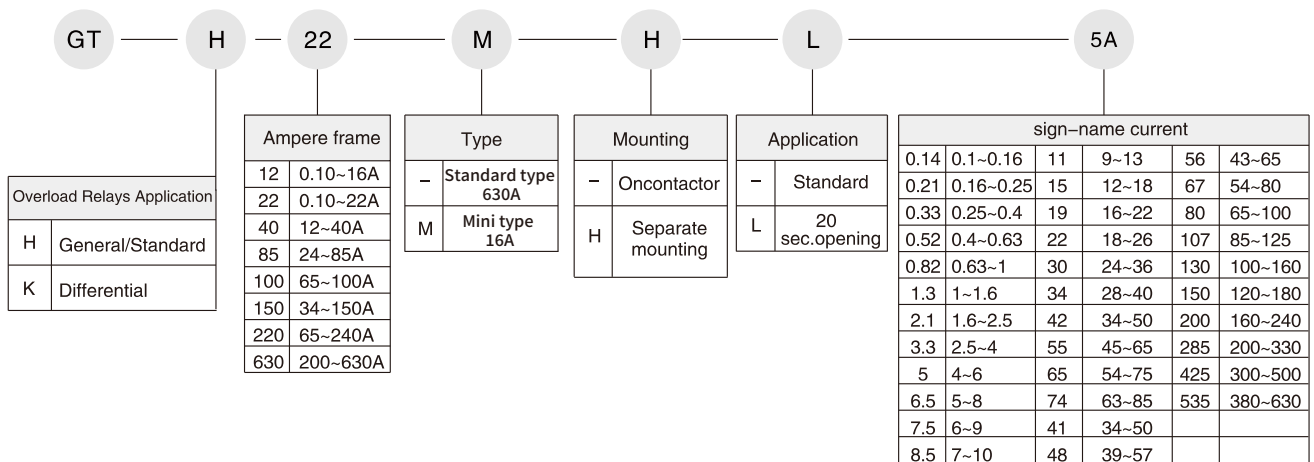


AC contactor

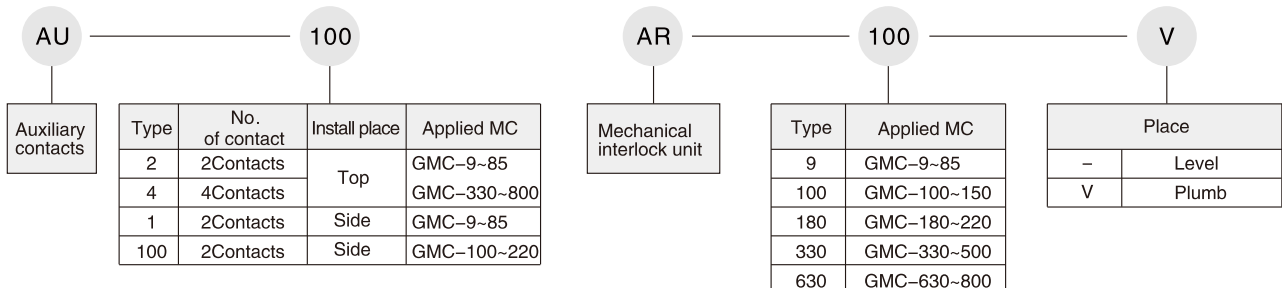


Thermal Overload Relays



Auxiliary contacts

Mechanical interlock unit



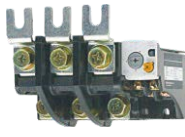
Fast select table (GMC-9~85)

Model			GMC-9	GMC-12	GMC-18	GMC-22
Three pole contactors						
AC coil			GMC-9	GMC-12	GMC-18	GMC-22
DC coil			GMD-9	GMD-12	GMD-18	GMD-22
IEC-60947 CE	AC1 Load		25A	25A	40A	40A
	AC3 Load	200~240V	2.5KW 11A	3.5KW13A	4.5KW18A	5.5KW 22A
		380~440V	4KW 9A	5.5KW12A	7.5KW18A	11KW 22A
		500~550V	4KW 7A	7.5KW12A	7.5KW13A	15KW 22A
		690V	4KW 5A	7.5KW 9A	7.5KW 9A	15KW 18A
UL508 UL cUL	Continuous current (Ith)		20A	25A	30A	32A
	Single phase Motor	115V	0.5HP	0.5HP	1HP	2HP
		230V	1Hp	2Hp	3Hp	3Hp
	Three phases Motor	200V	2HP	3HP	5HP	7.5HP
		230V	2HP	3HP	5HP	7.5HP
		460V	5HP	7.5HP	10HP	10HP
		575V	7.5HP	10HP	15HP	15HP
NEMA size		00	00	0	0	
Aux. Contacts			 Top mounting of 2-pole	 Top mounting of 4-pole	 Side mounting of 2-pole	
Four pole contactors						
AC coil			GMC-9/4	GMC-12/4	GMC-18/4	GMC-22/4
DC coil			GMD-9/4	GMD-12/4	GMD-18/4	GMD-22/4
AC1(A)			20	20	25	32
Overload relay						
Bimetal GTH type			 GTH-22	Rated current(A) 0.1-0.16 : 4-6 0.16-0.25 : 5-8 0.25-0.4 : 6-9 0.4-0.63 : 7-10 0.63-1 : 9-13 1-1.6 : 12-18 1.6-2.5 : 16-22 2.5-4 :	 Independent mounting unit	
Class 10A	Phase-failure protection type		GTH-22			
	Standard type		GTH-22/3			
Class 20A	Delay breaking type		GTH-22/L			

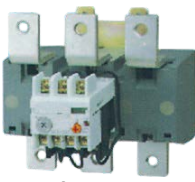
Fast select table (GMC-9~85)

GMC-32	GMC-40	GMC-50	GMC-65	GMC-75	GMC-85
					
GMC-32	GMC-40	GMC-50	GMC-65	GMC-75	GMC-85
GMD-32	GMD-40	GMD-50	GMD-65	GMD-75	GMD-85
50A	60A	80A	100A	110A	135A
7.5KW 32A	11KW 40A	15KW 55A	18.5KW 65A	22KW 75A	25KW 85A
15KW 32A	18.5KW 40A	22KW 50A	30KW 65A	37KW 75A	45KW 85A
18.5KW 28A	22KW 32A	30KW 43A	33KW 60A	37KW 64A	45KW 75A
18.5KW 20A	22KW 23A	30KW 28A	33KW 35A	37KW 42A	45KW 45A
45A	50A	70A	80A	90A	100A
2HP	3HP	3HP	5HP	5HP	7.5HP
5Hp	5Hp	7.5Hp	10Hp	15Hp	15Hp
7.5HP	10HP	10HP	15HP	20HP	25HP
10HP	10HP	15HP	20HP	25HP	30HP
20HP	25HP	30HP	40HP	50HP	50HP
20HP	25HP	30HP	40HP	50HP	50HP
1	1	2	2	2	3
 Top mounting of 2-pole  Top mounting of 4-pole  Side mounting of 2-pole					
					
GMC-32/4	GMC-40/4	GMC-50/4	GMC-65/4	GMC-75/4	GMC-85/4
GMD-32/4	GMD-40/4	GMD-50/4	GMD-65/4	GMD-75/4	GMD-85/4
50	60	80	100	110	135
 Rated current(A) 4-6 : 12-18 5-8 : 16-22 6-9 : 18-26 7-10 : 24-36 9-13 : 28-40		 Independent mounting unit		 Rated current(A) 7-10 : 28-40 9-13 : 34-50 12-18 : 45-65 16-22 : 54-75 18-26 : 63-85	
GTH-40		GTH-85		独立安装单元 Independent mounting unit	
GTH-40		GTH-85			
GTH-40/3		GTH-85/3			
GTH-40/L		GTH-85/L			

Fast select table (GMC-100~400)

Model			GMC-100		GMC-125		GMC-150	
Three pole contactors								
AC coil			GMC-100		GMC-125		GMC-150	
DC coil			GMD-100		GMD-125		GMD-150	
IEC-60947 CE	AC1 Load		150A		150A		200A	
		200~240V	30KW	105A	37KW	125A	45KW	150A
		380~440V	55KW	105A	60KW	120A	75KW	150A
		500~550V	55KW	85A	60KW	90A	90KW	140A
		690V	55KW	65A	60KW	70A	90KW	100A
UL508 	Continuous current (Ith)		160A		160A		210A	
	Single phase Motor	115V	7.5HP		10HP		15HP	
		230V	15HP		20HP		25HP	
	Three phases Motor	200V	30HP		40HP		40HP	
		230V	30HP		40HP		50HP	
		460V	60HP		75HP		100HP	
		575V	60HP		75HP		100HP	
NEMA size		3		3		4		
Aux. Contacts			 AU-100 1NO+1NC, Side mounting					
Four pole contactors								
AC coil			GMC-100/4		GMC-125/4		GMC-150/4	
DC coil			GMD-100/4		GMD-125/4		GMD-150/4	
AC1(A)			150		155		200	
Overload relay								
Bimetal GTH type			 GTH-100				 GTH-150	
Class 10A	Phase-failure protection type		GTH-100				GTH-150	
	Standard type		GTH-100/3				GTH-150/3	
Class 20A	Delay breaking type		GTH-100/L				GTH-150/L	

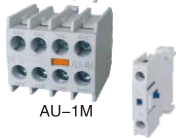
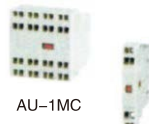
Fast select table (GMC-100~400)

GMC-180		GMC-220		GMC-330		GMC-400	
							
GMC-180		GMC-220		GMC-330		GMC-400	
GMD-180		GMD-220		GMD-330		GMD-400	
230A		260A		400A		500A	
55KW	180A	75KW	250A	100KW	330A	110KW	400A
90KW	180A	132KW	250A	200KW	330A	250KW	400A
110KW	180A	132KW	200A	200KW	310A	257KW	400A
110KW	120A	132KW	150A	200KW	200A	280KW	305A
230A		275A		400A		500A	
15HP		15HP					
30HP		40HP					
60HP		60HP		100HP		125HP	
60HP		75HP		100HP		150HP	
125HP		150HP		200HP		300HP	
125HP		150HP		200HP		300HP	
4		4		5		5	
 AU-100 1NO+1NC, Side mounting				 Side mounting of 2-pole		 Side mounting of 4-pole	
							
GMC-180/4		GMC-220/4		GMC-330/4		GMC-400/4	
GMD-180/4		GMD-220/4		GMD-330/4		GMD-400/4	
230		260		400		500	
 Rated current(A) 65-100 85-125 100-150 120-180 160-240 GTH-220				 Rated current(A) 200-330 300-500 380-630 GTH-630			
GTH-220				GTH-630			
GTH-220/3				GTH-630/3			
GTH-220/L				-			

Fast select table (GMC-500~800A)

Model			GMC-500		GMC-630		GMC-800	
Three pole contactors								
AC coil			GMC-500		GMC-630		GMC-800	
DC coil			GMD-500		GMD-630		GMD-800	
IEC-60947 CE	AC1 Load		700A		1000A		1600A	
	AC3 Load	200~240V	147KW	500A	200KW	630A	220KW	800A
		380~440V	295KW	500A	400KW	630A	450KW	800A
		500~550V	355KW	450A	400KW	600A	450KW	650A
		690V	335KW	355A	450KW	460A	475KW	500A
UL508 	Continuous current (Ith)		700A		1000A		1600A	
	Single phase Motor	115V						
		230V						
	Three phases Motor	200V	140HP		150HP		200HP	
		230V	170HP		200HP		250HP	
		460V	350HP		400HP		500HP	
575V		350HP		400HP		500HP		
NEMA size			6		6		7	
Aux. Contacts			 Side mounting of 2-pole  Side mounting of 4-pole					
Four pole contactors								
AC coil			GMC-500/4		GMC-630/4		GMC-800/4	
DC coil			GMD-500/4		GMD-630/4		GMD-800/4	
AC1(A)			700		1000		1600	
Electronic overload relay								
Bimetal GTH type			 Rated current(A) 200-330 300-500 380-630 GTH-630				 GTH-800	
Class 10A	Phase-failure protection type		GTH-630				GTH-800	
	Standard type		GTH-630/3				GTH-800/3	
Class 20A	Delay breaking type		GTH-630/L				GTH-800/L	

Fast select table (GMC-6M~16M)

Model			GMC-6M	GMC-9M	GMC-12M	GMC-16M
Mini contactor						
			Screw clamp connection types	Fast-on connection types	Cage clamp connection types	Solder pin connection types
AC coil			GMC-6M	GMC-9M	GMC-12M	GMC-16M
DC coil			GMD-6M	GMD-9M	GMD-12M	GMD-16M
IEC-60947 CE	AC1 Load		20		20	
	AC3 Load	200~240V	1.5KW 7A	2.2KW 9A	3KW 12A	4KW 15A
		380~440V	2.2KW 6A	4KW 9A	5.5KW 12A	7.5KW 16A
		500~550V	3KW 5A	3.7KW 6A	4KW 7A	5.5KW 9A
		690V	3KW 4A	4KW 5A	4KW 5A	4KW 5A
UL508 	Continuous current (Ith)		20A		30A	
	Singlephases Motor	115V	0.5HP		1HP	
		230V	1HP		3HP	
	Three phases Motor	200V	2HP		5HP	
		230V	2HP		5HP	
		460V	5HP		10HP	
		575V	7.5HP		15HP	
NEMA size			00	00	00	00
Aux. Contacts			Screw clamp connection types	Fast-on connection types	Cage clamp connection types	Solder pin connection types
			AU-2M 	AU-2MF 	AU-2MC 	
			AU-4M 	AU-4MF 	AU-4MC 	
Bimetal GTH type						
			GTH-12M			
Class 10A	Phase-failure protection type		GTH-12M			
	Standard type		GTH-12M/3			

AC coil

For motor control

3 pairs of main contacts and 1 pair of auxiliary contacts

Coil voltage: AC



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Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
6A	1.5KW	2.2KW	3KW	3KW	20A	1NO or 1NC	GMC-6M
	7A	6A	5A	4A			
9A	2.2KW	4KW	3.7KW	4KW	20A	1NO or 1NC	GMC-9M
	9A	9A	6A	5A			
12A	3KW	5.5KW	4KW	4KW	20A	1NO or 1NC	GMC-12M
	12A	12A	7A	5A			
16A	4KW	7.5KW	5.5KW	4KW	20A	1NO or 1NC	GMC-16M
	15A	16A	9A	5A			

AC coil, AC 50/60Hz

24, 36, 42, 48, 110, 115, 120, 127, 200/208, 220, 220/230, 230/240, 256, 277, 380/400, 400, 440,

480, 500, 550V AC

Characteristics (440VAC)

Rated current		6A	9A	12A	16A
Short circuit current (Max)	380V	60	90	120	160
	660V	72	108	144	180
Breaking current (Max)	380V	48	72	96	128
	660V	60	90	120	150
Operating cycles per hour	AC-3	1800	1800	1800	1800
	AC-4	300	300	300	300
Electrical Life time (10,000 timez)	AC-3	100	100	100	100
	AC-4	20	20	20	20
Machanical Life time (10,000 timez)		1200	1200	1200	1200
Aux. Contacts	Standard configuration	1NO	1NO	1NO	1NO
	Top munting	AU-2M/4M	AU-2M/4M	AU-2M/4M	AU-2M/4M
Panel installation		Guide screw	Guide screw	Guide screw	Guide screw

Characteristics of the coil

Coil Voltage	AC
Coil consumption(W)	2
Pick-up	32VA
Maintain	6VA
Selectios of pick-up voltage	80~110
Selectios of drop-out voltage	30~40
Pick-up times	10~20
Droup-out times	35~45

DC coil

For motor control

3 pairs of main contacts and 1 pair of auxiliary contacts

Coil voltage: DC



Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
6A	1.5KW	2.2KW	3KW	3KW	20A	1NO or 1NC	GMD-6M
	7A	6A	5A	4A			
9A	2.2KW	4KW	3.7KW	4KW	20A	1NO or 1NC	GMD-9M
	9A	9A	6A	5A			
12A	3KW	5.5KW	4KW	4KW	20A	1NO or 1NC	GMD-12M
	12A	12A	7A	5A			
16A	4KW	7.5KW	5.5KW	4KW	20A	1NO or 1NC	GMD-16M
	15A	16A	9A	5A			

DC coil

Standard type: 12, 20, 24, 36, 42, 48, 60, 72, 110, 120, 125, 220, 240, 250V DC

Low-loss type: 12, 20, 24, 48, 72, 110, 120V DC(Low)

Wide-voltage type : 12, 20, 24, 48, 72, 110, 120V DC(Wide)

Characteristics (440VAC)

Rated current		6A	9A	12A	16A
Short circuit current (Max)	380V	60	90	120	160
	660V	72	108	144	180
Breaking current (Max)	380V	48	72	96	128
	660V	60	90	120	150
Operating cycles per hour	AC-3	1800	1800	1800	1800
	AC-4	300	300	300	300
Electrical Life time (10,000 times)	AC-3	100	100	100	100
	AC-4	20	20	20	20
Mechanical Life time (10,000 times)		1200	1200	1200	1200
Aux. Contacts	Standard configuration	1NO	1NO	1NO	1NO
	Top mounting	AU-2M/4M	AU-2M/4M	AU-2M/4M	AU-2M/4M
Panel installation		Guide screw	Guide screw	Guide screw	Guide screw

Characteristics of the coil

Coil Voltage	DC		
	Standard	Low-loss	Wide-voltage
Coil consumption(VA)	3	1.2	2
Pick-up	3W	1.2W	2W
Maintain	3W	1.2W	2W
Selectios of pick-up voltage	80~110	80~125	70~125
Selectios of droup-out voltage	10~30	10~30	10~30
Pick-up times	40~50	40~50	40~50
Droup-out times	35~45	35~45	35~45

Characteristics

- One frame with four rated current classes
- 3 pairs of main contacts
- Design of anti-electric shock cover
- Installation of guide rail or screw
- Small size: 44mm width
- 1NO+1NC auxiliary contacts are of standard designed
- The accessory can be mounted on the top or at side.
- Be connected with the thermal overload relay directly



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Three pole contactors(AC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
9A	2.5KW	4KW	4KW	4KW	25A	1NO +1NC	GMC-9
	11A	9A	7A	5A			
12A	3.5KW	5.5KW	7.5KW	7.5KW	25A	1NO +1NC	GMC-12
	13A	12A	12A	9A			
18A	4.5KW	7.5KW	7.5KW	7.5KW	40A	1NO +1NC	GMC-18
	18A	18A	13A	9A			
22A	5.5KW	11KW	15KW	15KW	40A	1NO +1NC	GMC-22
	22A	22A	22A	18A			

Coil voltage, AC50/60Hz

50Hz: 24, 42, 48, 100, 110, 220, 240, 380, 400, 415, 440, 500, 550V

60Hz: 24, 48, 110, 120, 208, 220, 240, 277, 380, 440, 480, 600V

Three pole contactors(DC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
9A	2.5KW	4KW	4KW	4KW	25A	1NO +1NC	GMD-9
	11A	9A	7A	5A			
12A	3.5KW	5.5KW	7.5KW	7.5KW	25A	1NO +1NC	GMD-12
	13A	12A	12A	9A			
18A	4.5KW	7.5KW	7.5KW	7.5KW	40A	1NO +1NC	GMD-18
	18A	18A	13A	9A			
22A	5.5KW	11KW	15KW	15KW	40A	1NO +1NC	GMD-22
	22A	22A	22A	18A			

Coil voltage, DC: 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Installation and connection

Installation	Fixed by 35mm guide rail or screw (M4)	
Connection	Main contact	Screw(M4) crimping terminal Wire dia:1.25~5.5mm ² / φ1.6~2.6
	Auxiliary contact/coil	Screw(M3.5) crimping terminal

Characteristics

- one frame with two rated current classes
- 3 pairs of main contacts
- Design of anti-electric shock cover
- Fixed by guide rail or screw
- Small size: 68mm width
- 1NO+1NC auxiliary contacts are of standard designed
- The accessory can be mounted on the top or at side
- Be connected with the thermal overload relay directly



Three pole contactors(AC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
32A	7.5KW	15KW	18.5KW	18.5KW	50A	1NO +1NC	GMC-32
	32A	32A	28A	20A			
40A	11KW	18.5KW	22KW	22KW	60A	1NO +1NC	GMC-40
	40A	40A	32A	23A			

Coil voltage, AC50/60Hz:

50Hz: 24, 42, 48, 100, 110, 220, 240, 380, 400, 415, 440, 500, 550V

60Hz: 24, 48, 110, 120, 208, 220, 240, 277, 380, 440, 480, 600V

Three pole contactors(DC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
32A	7.5KW	15KW	18.5KW	18.5KW	50A	1NO +1NC	GMD-32
	32A	32A	28A	20A			
40A	11KW	18.5KW	22KW	22KW	60A	1NO +1NC	GMD-40
	40A	40A	32A	23A			

Coil voltage, DC:

12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Installation and connection

Installation	Fixed by 35mm guide rail or screw (M4)	
Connection	Main contact	Screw(M4) crimping terminal Wire dia: 2-14mm ² / ϕ 1.6~3.6
	Auxiliary contact/coil	Screw(M3.5) crimping terminal

Characteristics

- one frame with four rated current classes
- 3 pairs of main contacts
- Design of anti-electric shock cover
- Fixed by guide rail or screw
- 1NO+1NC auxiliary contacts are of standard designed
- The accessory can be mounted on the top or at side
- Be connected with the thermal overload relay directly



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Three pole contactors(AC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
50A	15kW	22kW	30kW	30kW	80A	1NO +1NC	GMC-50
	55A	50A	43A	28A			
65A	18.5kW	30kW	33kW	33kW	100A	1NO +1NC	GMC-65
	65A	65A	60A	35A			
75A	22kW	37kW	37kW	37kW	110A	1NO +1NC	GMC-75
	75A	75A	64A	42A			
85A	25kW	45kW	45kW	45kW	135A	1NO +1NC	GMC-85
	85A	85A	75A	45A			

Coil voltage, AC50/60Hz

50Hz: 24, 42, 48, 100, 110, 220, 240, 380, 400, 415, 440, 500, 550V

60Hz: 24, 48, 110, 120, 208, 220, 240, 277, 380, 440, 480, 600V

Three pole contactors(DC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
50A	15kW	22kW	30kW	30kW	80A	1NO +1NC	GMD-50
	55A	50A	43A	28A			
65A	18.5kW	30kW	33kW	33kW	100A	1NO +1NC	GMD-65
	65A	65A	60A	35A			
75A	22kW	37kW	37kW	37kW	110A	1NO +1NC	GMD-75
	75A	75A	64A	42A			
85A	25kW	45kW	45kW	45kW	135A	1NO +1NC	GMD-85
	85A	85A	75A	45A			

Coil voltage, DC: 12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Installation and connection

Installation	Fixed by 35mm guide rail or screw (M4)		
Connection	Main contact	50A Frame	Screw(M6) crimping terminal
			Wire dia:2~21mm ²
		65/75/85A Frame	Screw crimping terminal
			Wire dia:2~38mm ²
	Auxiliary contact/coil		Screw(M3.5) crimping terminal

Characteristics

- 3 pairs of main contacts
- AC/DC common coil
- Wide coil voltage
- Screw mounting
- 2NO+2NC auxiliary contacts are of standard designed
- The accessory can be mounted on the top or at side
- Be connected with the thermal overload relay directly



Three pole contactors(AC coil)

Rated current	AC3(IEC60947)				AC1 Ith	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
100A	30kW	55kW	55kW	55kW	150A	2NO +2NC	GMC-100
	105A	105A	85A	65A			
125A	37kW	60kW	60kW	60kW	150A	2NO +2NC	GMC-125
	125A	120A	90A	70A			
150A	45kW	75kW	90kW	90kW	200A	2NO +2NC	GMC-150
	150A	150A	140A	100A			

Coil voltage AC/DC

Nominal voltage	AC50/60Hz	DC
24V	24~25V	24V
48V	48~50V	48V
100/200V	100~240V	100~220V
300V	265~347V	-
400V	380~450V	-
500V	440~575V	-

Installation and connection

Installation	100/125A Frame		Fixed(M4)screw
	150A Frame		Fixed(M5)screw
Connection	Main contact	100/125A Frame	Fixed(M8) terminal
			Wire dia: 2~60mm ²
	150A Frame		Fixed(M8) terminal
			Wire dia: 2~100mm ²
	Auxiliary contact/coil		Screw(M4)crimping terminal

Characteristics

- 3 pairs of main contacts
- AC/DC common coil
- Wide coil voltage
- Screw mounting
- The accessory can be mounted on the top or at side
- Be connected with the thermal overload relay directly



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Three pole contactors(AC coil)

Rated current	AC3(IEC60947)				AC1 lth	Aux. Contacts	Type
	220~240V	380~440V	500~550V	690V			
180A	55kW	90kW	110kW	110kW	230A	2NO + 2NC	GMC-180
	180A	180A	180A	120A			
220A	75kW	132kW	132kW	132kW	260A	2NO + 2NC	GMC-220
	250A	250A	200A	150A			

Coil voltage AC/DC

Nominal voltage	AC50/60Hz	DC
24V	24-25V	24V
48V	48-50V	48V
100/200V	100-240V	100-220V
300V	265-347V	-
400V	380-450V	-
500V	440-575V	-

Three pole contactors (AC Coil)

Rated current	AC3(IEC60947)				AC1 lth	Type
	220~240V	380~440V	500~550V	690V		
330A	100kW	200kW	200kW	200kW	400A	GMC-330
	330A	330A	310A	200A		
400A	110kW	250kW	257kW	280kW	500A	GMC-400
	400A	400A	400A	305A		

Installation and connection

Installation	180/220A Frame		Fixed(M6)screw	
	330/400A Frame		Fixed(M8)screw	
Connection	Main contact	180/220A Frame	Fixed(M10) terminal	
			Wire dia: 2~150mm ²	
	330/400A Frame		Fixed(M12) terminal	
			Wire dia: 2~200mm ²	
	Auxiliary contact/coil		Screw(M4)crimping terminal	

Characteristics

- 3 pairs of main contacts
- AC/DC common coil
- Wide coil voltage
- Screw mounting
- The accessory can be mounted on the top or at side



Three pole contactors(AC coil)

Rated current	AC3(IEC60947)				AC1 lth	Type
	220~240V	380~440V	500~550V	690V		
500A	147kW	295kW	355kW	335kW	700A	GMC-500
	500A	500A	450A	355A		
630A	200kW	400kW	400kW	450kW	1000A	GMC-630
	630A	630A	600A	460A		
800A	220kW	450kW	450kW	475kW	1600A	GMC-800
	800A	800A	650A	500A		

Coil voltage AC/DC

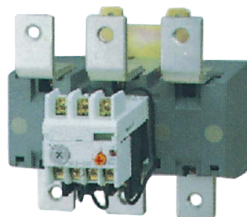
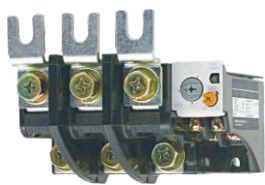
Nominal voltage	AC50/60Hz	DC
100V	100-127V	100-110V
200V	200-240V	200-220V
300V	265-347V	-
400V	380-450V	-
500V	440-575V	-

Installation and connection

Installation	500/630/800A Frame		Fixed by screw (M10)
Connection	Main contact	500/630/800A Frame	Screw(M16) terminal
			Wire dia:80~325mm ²
	Auxiliary contact/coil		Screw(M4)crimping terminal


Selection table(Class 10A)

Three poles (four poles) Max.power of motor						GTH-22	GTH-40	GTH-85	GTH-100	GTH-150	GTH-220	GTH-630
220V	380V	415V	440V	550V	660V							
						0.1-0.16						
						0.16-0.25						
					0.37,0.5	0.25-0.4						
				0.37,0.5	0.55,0.75	0.4-0.63						
	0.37,0.5		0.55,0.75	0.75,1	1.1,1.5	0.63-1						
0.37,0.5	0.75,1	1.1,1.5	1.1,1.5	1.1,1.5	1.5,2	1-1.6						
0.75,1	1.5,2	1.5,2	1.5,2	2.2,3	3,4	1.6-2.5						
1.1,1.5	2.2,3	2.2,3	2.2,3	3,4	4,5.5	2.5-4	4-6					
1.5,2	3,4	3.7,5	3.7,5	4,5.5	5.5,7.5	4-6	5-8					
		4,5.5	4,5.5			5-8	6-9					
2.2,3	4,4.5	4,5.5	4,5.5	5.5,7.5	7.5,10	6-9	7-10	7-10				
3,4	5.5,7.5	5.5,7.5	5.5,7.5	7.5,10	10,13.5	7-10	9-13	9-13				
4,5.5	7.5,10	9,12	9,12	10,13.5	15,20	9-13	12-18	12-18				
5.5,7.5	11,15	11,15	11,15			12-18	16-22	16-22				
5.5,7.5	11,15	11,15	11,15	15,20	18.5,25	16-22	18-26	18-26				
7.5,10	15,20	15,20	15,20	18.5,25	22,30		24-36	24-36				
	15,20			18.5,25			28-40	28-40				
11,15	22,30	25,35	25,35	30,40	37,50			34-50	34-50	34-50		
15,20	25,35	30,40	30,40	37,50	45,60			45-65	39-57	39-57		
18.5,25	30,40	37,50	37,50	45,60	55,75			54-75	43-65	43-65		
22,30	37,50	45,60	45,60	55,75	63,85			63-85	54-80	54-80		
25,35	51,70	55,75	59,80	63,85	90,125				65-100	65-100	65-100	
30,40	59,80	59,80	63,85	80,110	110,150				85-125	85-125	85-125	
45,60	80,100	80,110	90,125	100,135	129,175					100-150	100-160	
55, 75	90, 125	100, 135	110, 150	110, 150	160, 220						120-180	
63, 85	110, 150	129, 175	140, 190	160, 220	200, 270						160-240	
80,110	150,205	160,220	160,220	200,270	257, 350							200-330
110,150	185,250	200,270	220,300	257,350	335, 455							300-500
180,245	315,430	355,480	375,510	425,580	500, 680							380-630
Contactor used with thermal overload relay						GMC-9	GMC-32	GMC-50	GMC-100	GMC-150	GMC-180	GMC-330
						GMC-12	GMC-40	GMC-65	GMC-125		GMC-220	GMC-400
						GMC-18		GMC-75				GMC-500
						GMC-22		GMC-85				GMC-630


Selection table(Class 20A)

Three poles (four poles) Max.power of motor						GTH- 22/L	GTH- 40/L	GTH- 85/L	GTH- 100/L	GTH- 150/L	GTH- 220/L	GTH- 630/L
220V	380V	415V	440V	550V	660V							
0.37,0.5	0.75,1	1.1,1.5	1.1,1.5	1.1,1.5	1.5,2	0.1-0.16						
0.75,1	1.5,2	1.5,2	1.5,2	2.2,3	3,4	1.6-2.5						
1.1,1.5	2.2,3	2.2,3	2.2,3	3,4	4.5,5	2.5-4	4-6					
1.5,2	3,4	3.7,5	3.7,5	4.5,5	5.5,7.5	4-6	5-8					
		4.5,5	4.5,5			5-8	6-9					
2.2,3	4.4,5	4.5,5	4.5,5	5.5,7.5	7.5,10	6-9	7-10	7-10				
3,4	5.5,7.5	5.5,7.5	5.5,7.5	7.5,10	10,13.5	7-10	9-13	9-13				
4.5,5	7.5,10	9,12	9,12	10,13.5	15,20	9-13	12-18	12-18				
5.5,7.5	11,15	11,15	11,15			12-18	16-22	16-22				
5.5,7.5	11,15	11,15	11,15	15,20	18.5,25	16-22	18-26	18-26				
7.5,10	15,20	15,20	15,20	18.5,25	22,30		24-36	24-36				
	15,20			18.5,25			28-40	28-40				
11,15	22,30	25,35	25,35	30,40	37,50			34-50	34-50	34-50		
15,20	25,35	30,40	30,40	37,50	45,60			45-65	39-57	39-57		
18.5,25	30,40	37,50	37,50	45,60	55,75			54-75	43-65	43-65		
22,30	37,50	45,60	45,60	55,75	63,85			63-85	54-80	54-80		
25,35	51,70	55,75	59,80	63,85	90,125				65-100	65-100	65-100	
30,40	59,80	59,80	63,85	80,110	110,150				85-125	85-125	85-125	
45,60	80,100	80,110	90,125	100,135	129,175					100-150	100-160	
55,75	90,125	100,135	110,150	110,150	160,220						120-180	
63,85	110,150	129,175	140,190	160,220	200,270						160-240	
80,110	150,205	160,220	160,220	200,270	257,350							200-330
110,150	185,250	200,270	220,300	257,350	335,455							300-500
180,245	315,430	355,480	375,510	425,580	500,680							380-630
Contactor used with thermal overload relay						GMC-9 GMC-12 GMC-18 GMC-22	GMC-32 GMC-40	GMC-50 GMC-65 GMC-75 GMC-85	GMC-100 GMC-125	GMC-150	GMC-180 GMC-220	GMC-330 GMC-400 GMC-500 GMC-630

Characteristics

- Be mounted with GMC-9,12,18,22 contactor directly
- Be mounted by guide rail or screw through mounting support (AZ-22H)
- Small size: 44mm width
- 1NO+1NC tripping contact
- Class 10A tripping standard
- Phase-failure protection type: GTK
- Standard type: GTH
- Applicable ambient temperature -5~40°C
- Manual/ automatic reset
- Design of trip free
- Bimetal element type

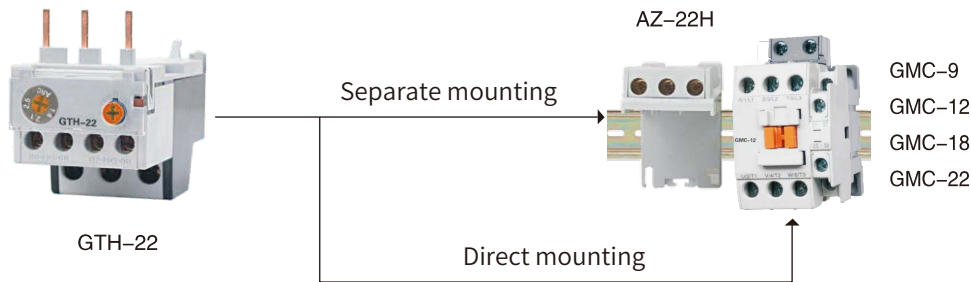


GTH-22

Current range	Phase-failure protection type	Standard type
0.1-0.16	GTH-22 • 0.16	GTH-22/3 • 0.16
0.16-0.25	GTH-22 • 0.25	GTH-22/3 • 0.25
0.25-0.4	GTH-22 • 0.4	GTH-22/3 • 0.4
0.4-0.63	GTH-22 • 0.63	GTH-22/3 • 0.63
0.63-1	GTH-22 • 1	GTH-22/3 • 1
1-1.6	GTH-22 • 1.6	GTH-22/3 • 1.6
1.6-2.5	GTH-22 • 2.5	GTH-22/3 • 2.5
2.5-4	GTH-22 • 4	GTH-22/3 • 4
4-6	GTH-22 • 6	GTH-22/3 • 6
5-8	GTH-22 • 8	GTH-22/3 • 8
6-9	GTH-22 • 9	GTH-22/3 • 9
7-10	GTH-22 • 10	GTH-22/3 • 10
9-13	GTH-22 • 13	GTH-22/3 • 13
12-18	GTH-22 • 18	GTH-22/3 • 18
16-22	GTH-22 • 22	GTH-22/3 • 22

Connection

Main terminal (load)	Screw(M4) crimping terminal
Auxiliary contact	Wire dia: 1.25-5.5mm ² /1.6-2.6
	Screw(M3.5) crimping terminal



Characteristics

- Be mounted with GMC-32, 40 contactor directly
- Be mounted by guide rail or screw through mounting support (AZ-40H)
- Small size: 53mm width
- 1NO+1NC tripping contact
- Class 10A tripping standard
- Phase-failure protection type: GTK
- Standard type: GTH
- Applicable ambient temperature -5~40℃
- Manual/ automatic reset
- Design of trip free
- Bimetal element type

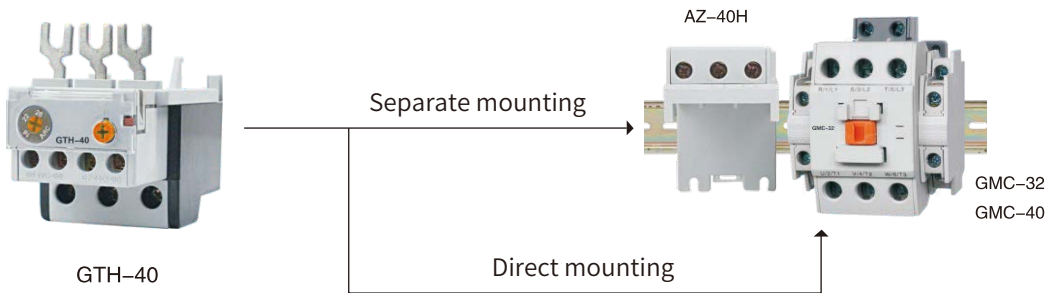


GTH-40

Current range	Phase-failure protection type	Standard type
4-6	GTH-40 • 6	GTH-40/3 • 6
5-8	GTH-40 • 8	GTH-40/3 • 8
6-9	GTH-40 • 9	GTH-40/3 • 9
7-10	GTH-40 • 10	GTH-40/3 • 10
9-13	GTH-40 • 13	GTH-40/3 • 13
12-18	GTH-40 • 18	GTH-40/3 • 18
16-22	GTH-40 • 22	GTH-40/3 • 22
18-26	GTH-40 • 26	GTH-40/3 • 26
24-36	GTH-40 • 36	GTH-40/3 • 36
28-40	GTH-40 • 40	GTH-40/3 • 40

Connection

Main terminal (load)	Screw(M4) crimping terminal
Auxiliary contact	Wire dia: 2-14mm ² /1.6-3.6
	Screw(M3.5) crimping terminal



Characteristics

- Be mounted with GMC-50,65,75,85 contactor directly
- Be mounted by guide rail or screw through mounting support (AZ-85H)
- Small size: 70mm width
- 1NO+1NC tripping contact
- Class 10A tripping standard
- Phase-failure protection type: GTK
- Standard type: GTH
- Applicable ambient temperature -5~40℃
- Manual/ automatic reset
- Design of trip free
- Bimetal element type

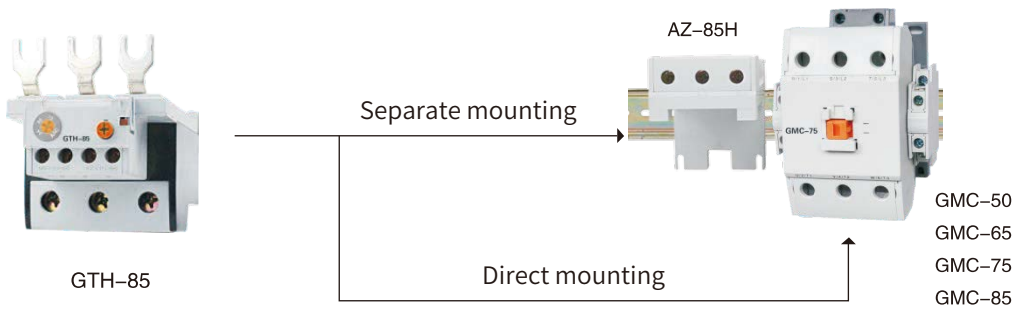


GTH-85

Current range	Phase-failure protection type	Standard type
7-10	GTH-85 • 10	GTH-85/3 • 10
9-13	GTH-85 • 13	GTH-85/3 • 13
12-18	GTH-85 • 18	GTH-85/3 • 18
16-22	GTH-85 • 22	GTH-85/3 • 22
18-26	GTH-85 • 26	GTH-85/3 • 26
24-36	GTH-85 • 36	GTH-85/3 • 36
28-40	GTH-85 • 40	GTH-85/3 • 40
34-50	GTH-85 • 50	GTH-85/3 • 50
45-65	GTH-85 • 65	GTH-85/3 • 65
54-75	GTH-85 • 75	GTH-85/3 • 75
63-85	GTH-85 • 85	GTH-85/3 • 85

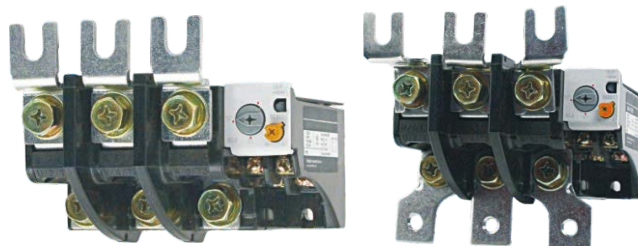
Connection

Main terminal (load)	Below 50A	Screw(M6) crimping terminal
		Wire dia: 2~22mm ²
	Above 65A	Screw(M8) crimping terminal
		Wire dia: 2~38mm ²
Auxiliary contact		Screw (M3.5) crimping terminal



Characteristics

- Be mounted with contactor directly through base plate
- GTH-100 and GMC-100,125 contactor (100,125AF)
- GTH-150 and GMC-150 contactor (150AF)
- 1NO+1NC tripping contact
- Class 10A tripping standard
- Phase-failure protection type: GTK
- Standard type: GTH
- Applicable ambient temperature -5~40°C
- Manual/ automatic reset
- Design of trip free
- Bimetal element type



GTH-100

GTH-150

100AF

Current range	Phase-failure protection type	Standard type
34-50	GTH-100 • 50	GTH-100/3 • 50
39-57	GTH-100 • 57	GTH-100/3 • 57
43-65	GTH-100 • 65	GTH-100/3 • 65
54-80	GTH-100 • 80	GTH-100/3 • 80
65-100	GTH-100 • 100	GTH-100/3 • 100
85-125	GTH-100 • 125	GTH-100/3 • 125

150AF

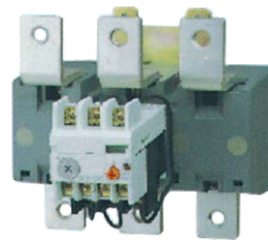
Current range	Phase-failure protection type	Standard type
34-50	GTH-150 • 50	GTH-150/3 • 50
39-57	GTH-150 • 57	GTH-150/3 • 57
43-65	GTH-150 • 65	GTH-150/3 • 65
54-80	GTH-150 • 80	GTH-150/3 • 80
65-100	GTH-150 • 100	GTH-150/3 • 100
85-125	GTH-150 • 125	GTH-150/3 • 125
100-150	GTH-150 • 150	GTH-150/3 • 150

Connection

Main terminal (load)	Screw(M8) crimping terminal
Auxiliary contact	Wire dia: 2~100mm ²
	Screw(M4) crimping terminal

Characteristics of thermal bimetal

- Be connected with contactor directly
- GTH-220 and GMC-180,220 contactor (180,220AF)
- 1NO+1NC tripping contact
- Class 10A tripping standard
- Phase-failure protection type: GTK
- Standard type: GTH
- Applicable ambient temperature -5~40°C
- Manual/ automatic reset
- Design of trip free
- Bimetal element type
- CT action type



GTH-220



GTH-630

220AF

Current range	Phase-failure protection type	Standard type
65-100	GTH-220 • 100	GTH-220/3 • 100
85-125	GTH-220 • 125	GTH-220/3 • 125
100-160	GTH-220 • 160	GTH-220/3 • 160
120-180	GTH-220 • 180	GTH-220/3 • 180
160-240	GTH-220 • 240	GTH-220/3 • 240

Connection

Main terminal (load)	GTH-220	Screw(M10) crimping terminal
		Wire dia: 2~150mm ²
Auxiliary contact		Screw(M3.5) crimping terminal

Characteristics of electronic

- Be connected with contactor directly
- GTH-630 and GMC-330,400,500,630 contactor
- 1NO+1NC tripping contact
- Phase-failure protection type: GTK
- Standard type: GTH
- Applicable ambient temperature -5~40°C

630AF

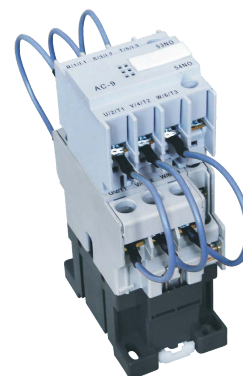
Current range	Phase-failure protection type	Standard type
220-330	GTH-630 • 330	GTH-630/3 • 330
300-500	GTH-630 • 500	GTH-630/3 • 500
380-630	GTH-630 • 630	GTH-630/3 • 630

Connection

Main terminal (load)	Screw(M16) crimping terminal
	Wire dia: 80~325mm ²
Auxiliary contact	Screw(M3.5) crimping terminal

Characteristics

- When switchover capacitor contactor switches in, the capacitor must discharge before charging.(Max.terminal residual voltage).
- The rated current of gG type fuse must be 1.5–2 times of that of circuit to effectively avoid short circuit.
- Switchover capacitor unit shall be connected with contactor by using impedance line.

**Description**

Switchover capacitor can switch over 3-phase single-or multiple-stage capacitor bank.
In conformity with IEC–69047–4941, UL and CSA.

Operating parameter

Operating frequency (cycles/hour)	GMC–9C, 12C, 18C, 22C, 32C, 40C	2X40 Cycles/hour
	GMC–50C, 65C, 75C, 85C	100 Cycles/hour
Electrical life (times)	GMC–9C, 12C, 18C, 22C, 32C, 40C	200,000 Cycles
	GMC–50C, 65C, 75C, 85C	100,000 Cycles

Rated parameter

Model	Max.power of motor (kvar)			Rated current(A)	Delayapplicable
	220–240V	400–440V	550–600V		
GMC–9C	5	9.7	14	14	AC–9
GMC–12C	6.5	12.5	18	18	AC–9
GMC–18C	8.5	16.7	24	24	AC–9
GMC–22C	10	18	26	26	AC–9
GMC–32C	15	25	36	36	AC–9
GMC–40C	20	33.3	48	48	AC–9
GMC–50C	22	40	58	58	AC–50
GMC–65C	25	45.7	66	66	AC–50
GMC–75C	29.7	54	78	78	AC–50
GMC–85C	35	60	92	92	AC–50

When the operating times is less than an hour, the mean temperature of environment shall be limited around 45°C according to IEC70 and 831



Side on type

Model	Pole	Contact configuration	Combined contactors
AU-1	2	1NO1NC	GMC-9~GMC-85
AU-100	4	1NO1NC	GMC-100~GMC-220

Head on type

Type	Pole	Contact configuration	Combined contactors
AU-2	2	2NO, 1NO1NC	GMC-9~GMC-85
AU-4	4	4NO, 3NO1NC, 2NO2NC, 1NO3NC, 4NC	

Ratings

Model		Rated current(A)																Thermal current
		AC 15 duty				DC 13 duty				AC 12 duty				DC 12 duty				
		110V	220V	440V	550V	24V	48V	110V	220V	110V	220V	440V	550V	24V	48V	110V	220V	
Head on	AU-2	6	3	1.5	1.2	3	1.5	0.55	0.27	10	8	5	5	5	3	2.5	1	16
	AU-4	6	3	1.5	1.2	3	1.5	0.55	0.27	10	8	5	5	5	3	2.5	1	16
Side on	AU-1	6	5	3	3	3	1.5	0.55	0.27	10	8	5	5	5	3	2.5	1	16
	AU-100	6	5	3	3	6	3	1.2	0.2	10	10	5	5	5	3	1.5	0.25	16

Performance

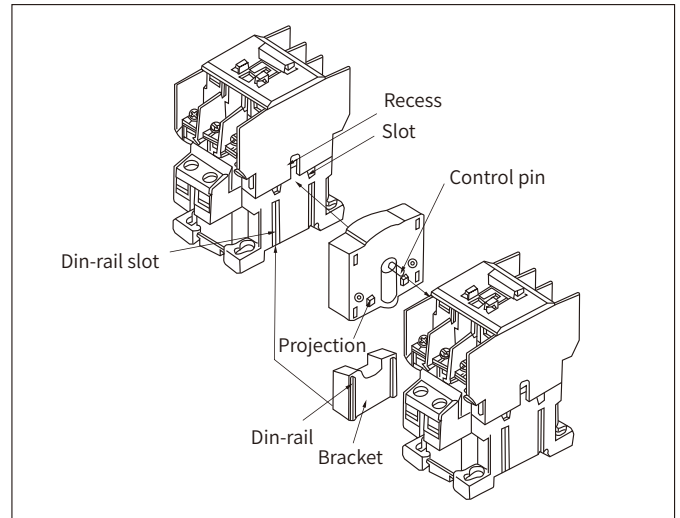
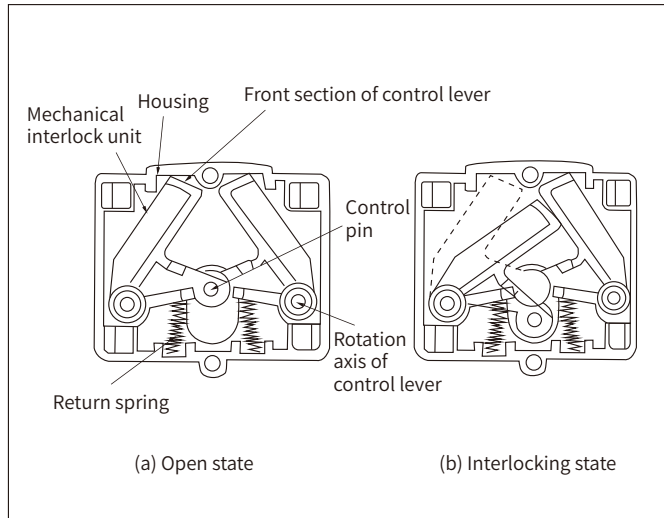
Model	Frequency (times/hour)	Mechanical (10000 times)	Electrical life (10000 times)				
			AC-15 category		AC-12 category		DC13,12 category
			220V	440V	220V	440V	24~220V
AU-2	1800	2000	50	50	25	25	50
AU-4	1800	2000	50	50	25	25	50
AU-1	1800	2500	50	50	25	25	50
AU-100	1800	1000	50	50	25	25	50

Mechanical latch Unit

Model	Suitlt for contactor	
AR-9 Horizontal Type	GMC-9~85	GMC-9/4~85/4
AR-100 Horizontal Type	GMC-100~150	-
AR-180 Horizontal Type	GMC-180~220	GMC-100/4~220/4
AR-330(3) 3-Pole Horizontal Type	GMC-330~500	GMC-330/4~500/4
AR-630(3) 3-Pole Horizontal Type	GMC-630~800	GMC-630/4~800/4
AR-100V Vertical Type	GMC-100~150	
AR-180V Vertical Type	GMC-180~220	

Reversing accessories

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Structure and operation

• Structure

GMC(S1)–9R~85R are Din–rail mounting type The mechanical interlock unit is commonly used in GMC(S)–9R–85R

Operation

• Open state

when the both sides of the contactors are “OFF” , lever maintains “OPEN” state by rebounding springs.

• Interlocking

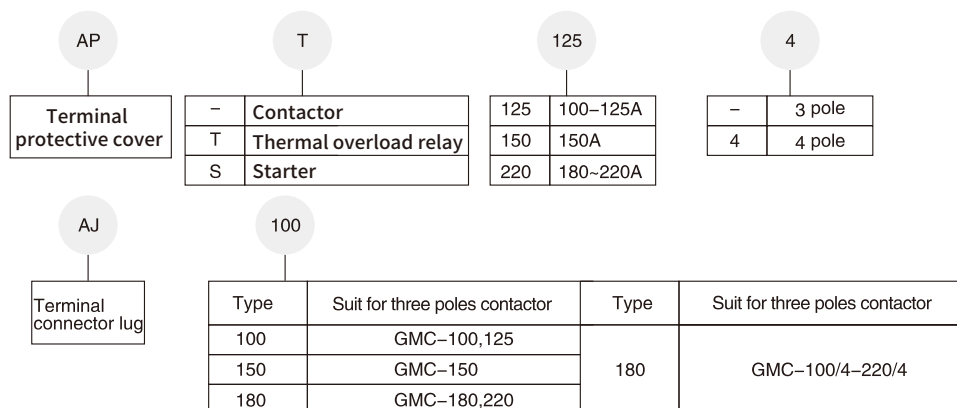
When a contactor is energized. As the lever pin comes down by the crossbar, interlock lever revolves the axis of rotation, and the heads of two levers are interlocked.

• Releasing

If one of the two contactors is removed, crossbar comes up by the power of kick out spring, and then interlock lever goes up by the cross bar, and added with the power of rebounding springs, the interlock lever gets pushed up to the open position.

• Handling

The electrical interlock should be commonly connected to the “NC” contacts of the two contactors. Do not install horizontally.



Type	Element	Operational voltage(V)	Element type selection	Suit for contactor
AS-11	Varistor	AC/DC 24~48V	varistor 120V	GMC-9~GMC-800
AS-12		AC/DC 100~125V	varistor 270V	
AS-13		AC/DC 200~240V	varistor 470V	
AS-14		AC 380~440V	varistor 1000V	
AS-1	CR + Varistor	AC24~48V	varistor 120V 0.1μ F,100Ω	GMC-9~GMC-85
AS-2		AC100~125V	varistor 270V 0.1μ F,100Ω	
AS-3		AC200~240V	varistor 470V 0.1μ F,100Ω	
AS-4		DC24~48V	varistor 120V 0.47μ F,100Ω	GMD-9~GMD-85
AS-5		DC100~125V	varistor 270V 0.47μ F,100Ω	
AS-6		DC200~220V	varistor 470V 0.47μ F,100Ω	

*CR=capacitor+resistor

Characterisitcs

Rationing	Performance	Surge waveform S
No-surge unit	When the coil power off, surge voltage will emerge, which may cause error action and damage the coil.	
Varistor	Varistor connected with the coil in parller will effectively reduce the surge voltage peak value.	
CR+Varistor	Both surge peak value and high frequency wave will drop after addition of CR.	

Master terminal protective cover or terminal cover of contractor

Model	Suit for three poles contactor
AP125	GMC-100~125
AP150	GMC-150
AP220	GMC-180~220
AP220/4	GMC-100~220 (Suit for four poles contactor)

Master terminal protective cover or terminal cover of thermal overload relay

Model	Applicable thermal overload relay
APT125	GTH-125
APT150	GTH-150

Delayed Unit

Type	Delay	Time	Auxiliary contact	Suit for contactor
UT-0N	Making delay	0.1~3 sec	1NO 1NC	GMC-9~GMC-85
UT-1N		0.1~30 sec		
UT-2N		10~180 sec		
UT-0F	Breaking delay	0.1~3 sec		
UT-1F		0.1~30 sec		
UT-2F		10~180 sec		



Parameter			Model	Air delay contact
Rated insulation voltage(V)				660
Rated working voltage(V)				660
Preset heating current(A)				10
Rated operating current (Inductive load)	AC	110V	5	
		220V	3	
	DC	110V	0.5	
		220V	0.3	
Min. Load				0.6VA(6V/10mAC above)
Max. operating frequency				10800h
Life	Mechanical			10 million times above
	Electric			1.2 million times
Conforms Standard				GB-14048.4
Altitude				Not exceed 2000m
Ambient temperature°C				-25~+55
Installing condition				Can be ±30° from the vertical plane
Wiring terminal can be connected with conductor				1(or)2 flexible (or hard) cords 1.5mm²-2.5mm²
Insulation resistance MΩ				10
Resistance voltage (AC)				2500V:1min
Keeping temperature				-60~+80
Relative humidity				45%-85%
Time delay repetitive error				(±3%)
Time delay stabilized error				(±20%)
Temperature error				(±0.3°C)
Reset time				0.5s below

Technical specifications

Type	Rated voltage	Rated current	Short.breaking current		Operating cycles per hour(AC3 duty)	Life time(unit:10,000 time)		Performance indicate
			Short circuit	Breaking		Mechanical	Electrical	
GMC-9	220	11	132	110	1800	2500	250	AC3.1.0-0
	440	9	108	90				
GMC-12	220	13	156	130	1800	2500	250	AC3.1.0-0
	440	12	144	120				
GMC-18	220	18	216	180	1800	2500	250	AC3.1.0-0
	440	18	216	180				
GMC-22	220	22	264	220	1800	2500	250	AC3.1.0-0
	440	22	264	220				
GMC-32	220	32	385	320	1800	1500	200	AC3.1.0-0
	440	32	385	320				
GMC-40	220	40	480	400	1800	1500	200	AC3.1.0-0
	440	40	480	400				
GMC-50	220	55	660	550	1200	1000	200	AC3.1.0-0
	440	50	600	500				
GMC-65	220	65	780	650	1200	1000	200	AC3.1.0-0
	440	65	780	650				
GMC-75	220	75	900	750	1200	1000	200	AC3.1.0-0
	440	75	900	750				
GMC-85	220	80	960	800	1200	1000	200	AC3.1.0-0
	440	80	960	800				
GMC-100	220	105	1050	1050	1200	500	100	AC3.1.0-0
	440	105	1050	1050				
GMC-125	220	125	1250	1250	1200	500	100	AC3.1.0-0
	440	120	1200	1200				
GMC-150	220	150	1500	1500	1200	500	100	AC3.1.0-0
	440	150	1500	1500				
GMC-180	220	180	1800	1800	1200	500	100	AC3.1.0-0
	440	180	1800	1800				
GMC-220	220	250	2200	2200	1200	500	100	AC3.1.0-0
	440	250	2200	2200				
GMC-330	220	330	3300	3300	600	300	50	AC3.1.0-0
	440	330	3300	3300				
GMC-400	220	400	4000	4000	600	100	30	AC3.1.1-1
	440	400	4000	4000				
GMC-500	220	500	5000	5000	600	100	30	AC3.1.1-1
	440	500	5000	5000				
GMC-630	220	630	6300	6300	600	100	20	AC3.1.1-1
	440	630	6300	6300				
GMC-800	220	800	8000	8000	600	100	20	AC3.1.1-1
	440	800	8000	8000				

Model	Selection of cable			Screw size		TiGTHening torque(Nm)	
	AWG/MCM	Sectionl area(mm ²)		Contactor terminal	Coil terminal	Major circuit	Aux.contacts
		Min	Max				
GMC-9	10AWG	1.5	4	M4	M3.5	2.3	2.3
GMC-12	10AWG	1.5	4	M4	M3.5	2.3	2.3
GMC-18	8AWG	1.5	6	M4	M3.5	4	2.3
GMC-22	8AWG	2.5	10	M4	M3.5	4	2.3
GMC-32	6AWG	4	16	M5	M3.5	4	2.3
GMC-40	6AWG	4	16	M5	M3.5	4	2.3
GMC-50	4AWG	6	25	M6	M3.5	5	2.3
GMC-65	2AWG	10	35	M8	M3.5	5	2.3
GMC-75	2AWG	10	35	M8	M3.5	5	2.3
GMC-85	0AWG	10	50	M8	M4	5	2.3
GMC-100	00AWG	25	70	M8	M4	9	2.3
GMC-125	00AWG	25	70	M8	M4	9	2.3
GMC-150	0000AWG	35	95	M8	M4	9	2.3
GMC-180	250AWG	50	120	M10	M4	15	2.3
GMC-220	300AWG	70	150	M10	M4	15	2.3
GMC-330	500AWG	90	240	M12	M4	23	2.3
GMC-400	NO2 30 × 5	150		M16	M4	23	2.3
GMC-500	NO2 40 × 5	200		M16	M4	45	2.3
GMC-630	NO2 50 × 5	240		M16	M4	57	2.3
GMC-800	No2 60 × 5	240		M16	M4	57	2.3

Technical specifications

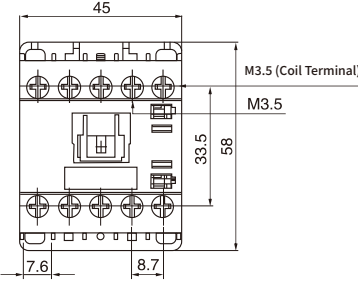
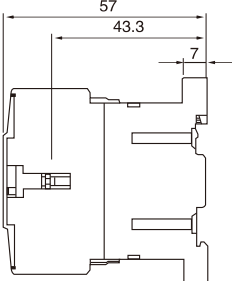
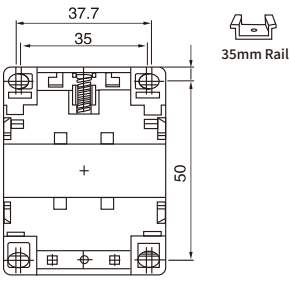
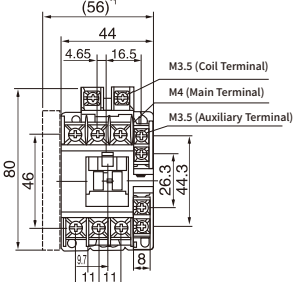
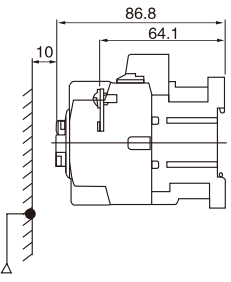
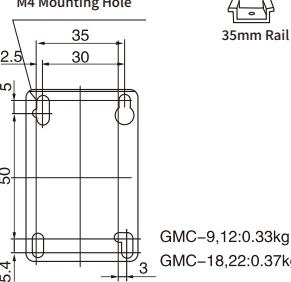
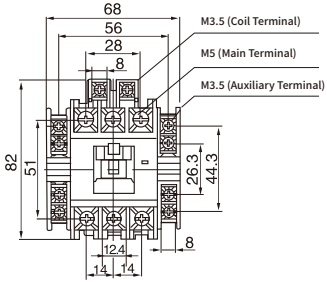
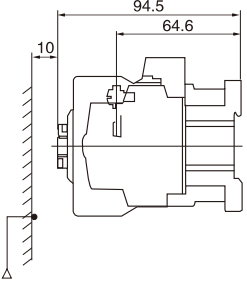
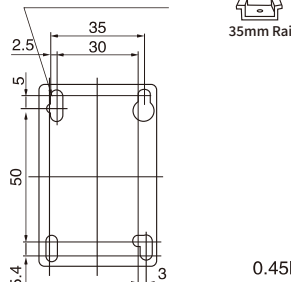
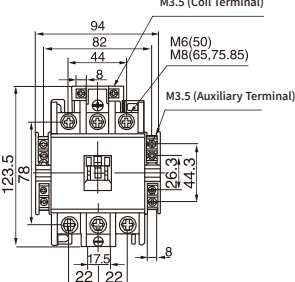
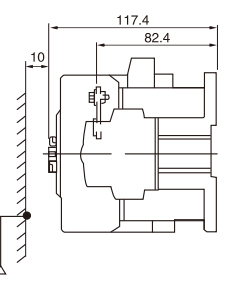
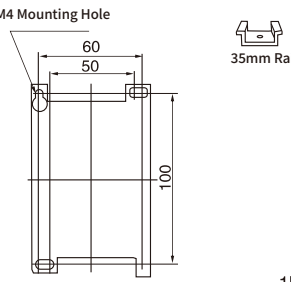
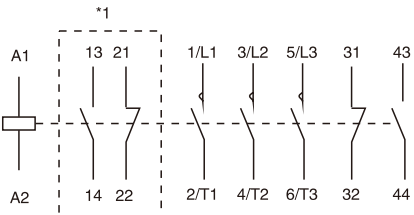
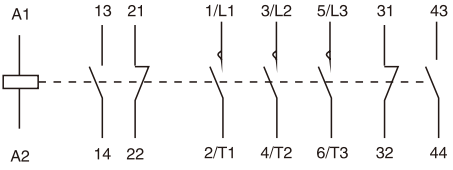
Model	Selection	Selection of cable		TiGTHening torqe(Nm)	Screw size
		AWG/MCM	Sectional area (mm ²)		
GTH-12M	0.10~0.16	18AWG	1.5	2.0	M3.5
	0.16~0.25	18AWG	1.5	2.0	M3.5
	0.25~0.4	18AWG	1.5	2.0	M3.5
	0.4~0.63	18AWG	1.5	2.0	M3.5
	0.63~1	18AWG	1.5	2.0	M3.5
	1~1.6	18AWG	1.5	2.0	M3.5
	1.6~2.5	18AWG	1.5	2.0	M3.5
	2.5~4	18AWG	1.5	2.0	M3.5
	4~6	18AWG	1.5	2.0	M3.5
	5~8	16AWG	1.5	2.0	M3.5
	6~9	16AWG	1.5	2.0	M3.5
	7~10	16AWG	1.5	2.0	M3.5
	9~13	14AWG	1.5~2.5	2.0	M3.5
	12~16	14AWG	1.5~2.5	2.0	M3.5
GTH-22	0.10~0.16	18AWG	1.5	2.3	M4
	0.16~0.25	18AWG	1.5	2.3	M4
	0.25~0.4	18AWG	1.5	2.3	M4
	0.4~0.63	18AWG	1.5	2.3	M4
	0.63~1	18AWG	1.5	2.3	M4
	1~1.6	18AWG	1.5	2.3	M4
	1.6~2.5	18AWG	1.5	2.3	M4
	2.5~4	18AWG	1.5	2.3	M4
	4~6	18AWG	1.5	2.3	M4
	5~8	16AWG	1.5	2.3	M4
	6~9	16AWG	1.5	2.3	M4
	7~10	16AWG	1.5	2.3	M4
	9~13	14AWG	1.5~2.5	2.3	M4
	12~18	12AWG	2.5	2.3	M4
	16~22	10AWG	2.5~4.0	2.3	M4
GTH-40	4~6	18AWG	1.5	4	M5
	5~8	16AWG	1.5	4	M5
	6~9	16AWG	1.5	4	M5
	7~10	16AWG	1.5	4	M5
	9~13	14AWG	1.5~2.5	4	M5
	12~18	12AWG	2.5	4	M5
	16~22	10AWG	2.5~4.0	4	M5
	18~26	10AWG	2.5~6.0	4	M5
	24~36	10AWG	4.0~10	4	M5
	28~40	10AWG	6.0~10	4	M5

Technical specifications

Model	Selection	Selection of cable		TiGThening torge(Nm)	Screw size
		AWG/MCM	Sectional area (mm ²)		
GTH-85	7~10	16AWG	1.5	5.1	M6
	9~13	14AWG	1.5~2.5	5.1	M6
	12~18	12AWG	2.5	5.1	M6
	16~22	10AWG	2.5~4.0	5.1	M6
	18~26	10AWG	2.5~6.6	5.1	M6
	24~36	10AWG	4.0~10	5.1	M6
	28~40	10AWG	6.0~10	5.1	M6
	34~50	6AWG	10~16	5.1	M6
	45~65	4AWG	10~25	5.1	M8
	54~75	4AWG	16~25	5.1	M8
	63~85	3AWG	16~35	5.1	M8
GTH-100	34~50	6AWG	10~16	9	M8
	39~57	6AWG	10~16	9	M8
	43~65	4AWG	10~25	9	M8
	54~80	4AWG	16~25	9	M8
	65~100	2AWG	25~35	9	M8
	85~125	1AWG	35~50	9	M8
GTH-150	39~57	6AWG	10~16	9	M8
	43~65	4AWG	10~25	9	M8
	54~80	4AWG	16~25	9	M8
	65~100	2AWG	25~35	9	M8
	85~125	1AWG	35~50	9	M8
	100~150	00AWG	35~70	9	M8
GTH-220	65~100	2AWG	25~35	15	M10
	85~125	1AWG	35~50	15	M10
	100~160	00AWG	35~70	15	M10
	120~180	000AWG	50~95	15	M10
	160~240	250AWG	70~120	15	M10
GTH-630	200~330	400AWG	95~185	23	M12
	300~500	N ^o 2 40 × 5	150~185	57	M16
	380~630	N ^o 2 40 × 5	150~185	57	M16

Model	Cold	Hot
GTH-22		
GTH-40		
GTH-85		
GTH-100(150)		
GTH-220		

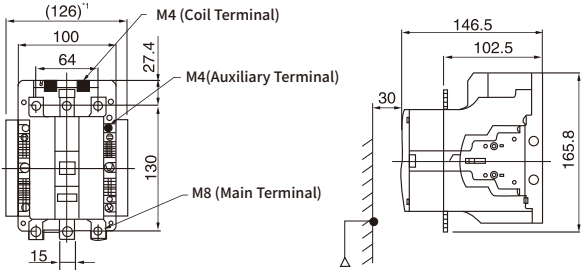
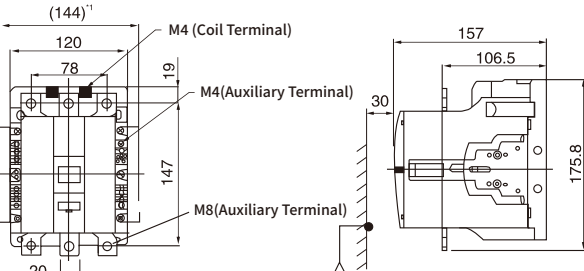
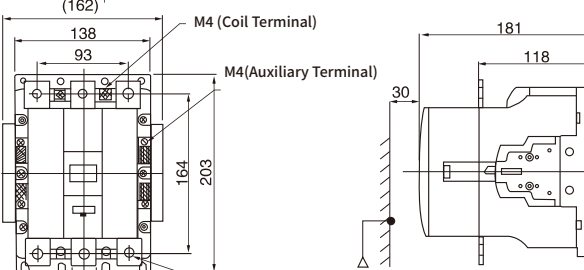
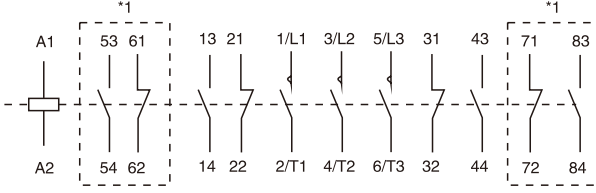
Mounting dimensions & External

Model	External dimensions (mm)		Install size
GMC-6M GMC-9M GMC-12M GMC-16M			 0.17kg
GMC-9 GMC-12 GMC-18 GMC-22			 GMC-9,12:0.33kg GMC-18,22:0.37kg
GMC-32 GMC-40			 0.45kg
GMC-50 GMC-65 GMC-75 GMC-85			 1kg
Contacts form	GMC-9~22		GMC-32~40
			

Mounting dimensions & External

Model	External dimensions (mm)		Install size
GMD-6M GMD-9M GMD-12M GMD-16M			
GMD-9 GMD-12 GMD-18			
GMD-32 GMD-40			
GMD-50 GMD-65 GMD-75 GMD-85			
Contacts form	GMD-9~22		GMD-32~85
			GMD-50~85
Note: *1. Auxiliary contacts 2a, 2b			

Mounting dimensions & External

Model	External dimensions (mm)	Install size
GMC-100 GMC-125		2.9kg
GMC-150		3.4kg
GMC-180 GMC-220		5.4kg
GMC-100~220		
Contacts form	 Note: *1. Auxiliary contacts 2a, 2b	

Thermal Overload Relay

GTH-22~85

Model	External dimensions (mm)	Contacts form
GTH-22		0.11kg
GTH-40		0.17kg
GTH-85		0.3kg

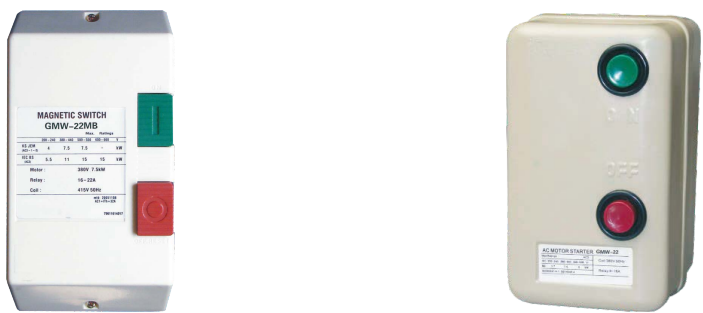
Din Rail Thermal Overload Relay

Model	External dimensions (mm)	Contacts form
AZ-22H		44kg
AZ-40H		72kg
AZ-85H		144g

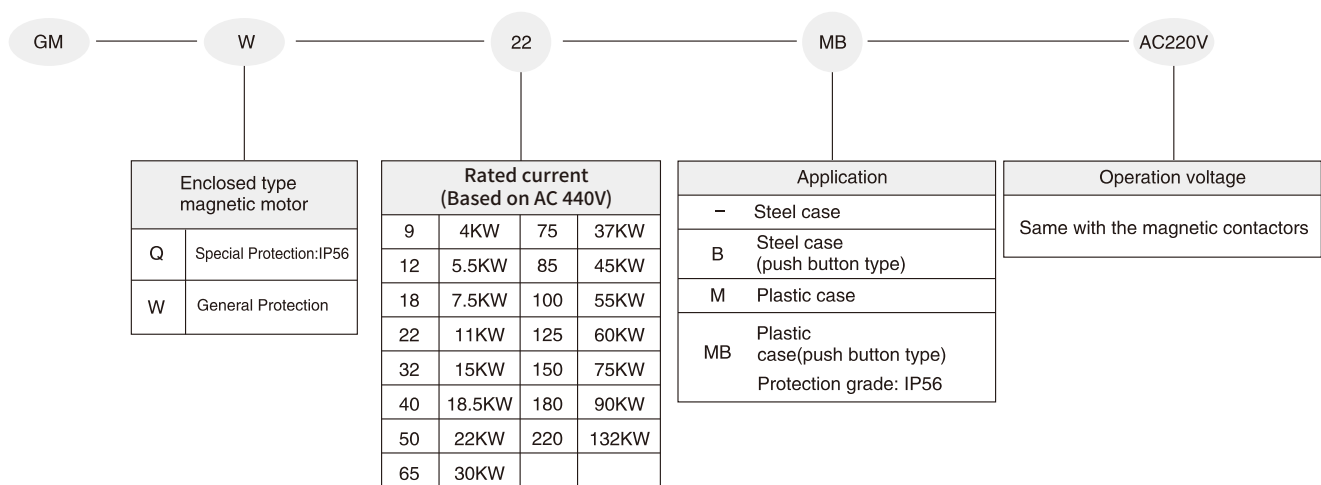
Thermal Overload Relay

GTH-100~630

Model	External dimensions (mm)	Contacts form
GTH-100		0.48kg
GTH-150		0.6kg
GTH-220		2.5kg
GTH-630		



Type designation



Rated ultimte

Model	Rated ultimte(KW)					Rated current(A)			AC1 Type
	Single-phase moter		Three-phase motor AC3 Type			Three-phase motor AC3 Type			
	110V	220V	200V~220V	380V~440V	500V~550V	200V~220V	380V~440V	500V~550V	A
GMW-9MB	0.4	0.8	2.5	4	4	11	9	7	25
GMW-12MB	0.5	1	3.5	5.5	7.5	13	12	12	25
GMW-18MB	0.75	1.5	4.5	7.5	7.5	18	18	13	40
GMW-22MB	0.9	1.8	5.5	11	15	22	22	22	40
GMW-32MB	1.2	—	7.5	15	18.5	32	32	28	50
GMW-40MB	1.7	—	11	18.5	22	40	40	32	60
GMW-50B	—	—	15	22	30	55	50	43	80
GMW-65B	—	—	18.5	30	33	65	65	60	100
GMW-75B	—	—	22	37	37	75	75	64	110
GMW-85B	—	—	25	45	45	85	85	75	135