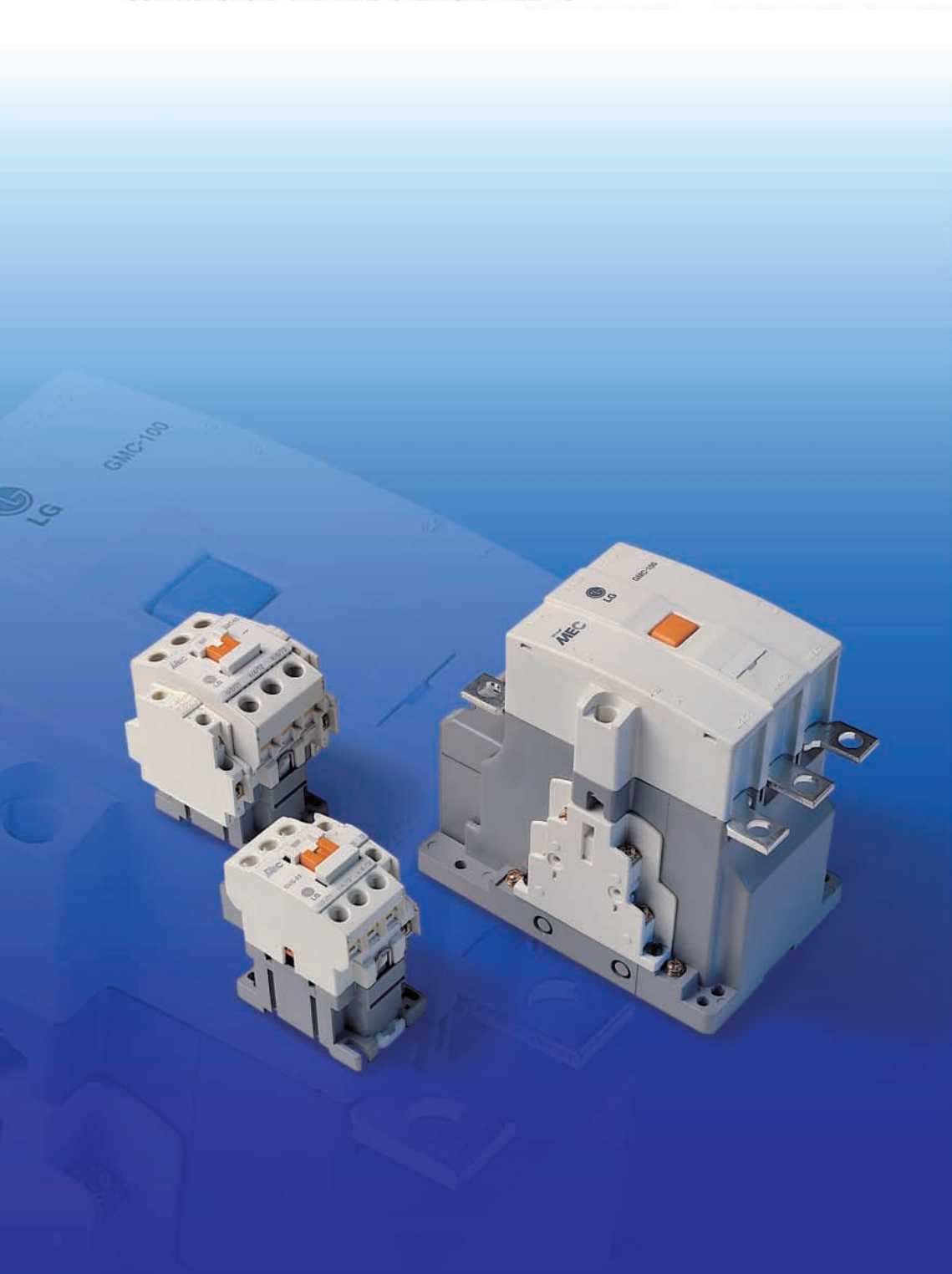




CONTACTORS & THERMAL OVERLOAD RELAYS



LG Industrial Systems

REFERENCE

Contactors

GM		C		22	R	50Hz AC220V
GM		Magnetic Contactors				
Type						
C	AC coil					
D	DC coil					
W		Enclosed starter				
Rated current (AC3 440V)						
9	40	100	300			
12	50	125	400			
18	65	150	600			
22	75	180	800			
32	85	220				
Application						
-	General / Standard					
R	Reversing					
Enclosed type Magnetic switches						
-	Without push button					
B	With push button					
Enclosed type Magnetic switches (Mold)						
M	Without push button					
MB	With push button					
Operational voltage (AC) Frequency						

T1

Thermal Overload Relays (Differential)

GTH	Non-differential		GT-	22	-	12...18		
GTK	Differential							
Type								
Type	Applied contactor	Rated current						
22	GMC - 9, 12, 18, 22	0,1 ...22A						
40	GMC - 32, 40	4 ...40A						
85	GMC - 50, 65, 75, 85	7 ...85A						
100	GMC - 100, 125	34 ...125A						
150	GMC - 150	34 ...150A						
220	GMC - 180, 220	70 ...240A						
400	GMC - 300, 400	85 ...400A						
600	GMC - 600, 800	200 ...800A						
Type de mounting								
-	Direct mounting							
H	Separate mounting							
			Ratings					
Type	GTH-22	GTH-40	GTH-85	GTH-100	GTH-150	GTH-220	GTH-400	GTH-600
Rated Current(A)	0,1...0,16	4...6	7...10	34...50	34...50	65...100	85...125	220...300
	0,16...0,25	5...8	9...13	39...57	39...57	85...125	100...160	260...400
	0,25...0,4	6...9	12...18	43...65	43...65	100...160	120...180	400...600
	0,4...0,63	7...10	16...22	54...80	54...80	120...180	160...240	520...800
	0,63...1	9...13	18...26	65...100	65...100	160...240	220...300	
	1...1,6	12...18	24...36	85...125	85...125	260...400		
	1,6...2,5	16...22	28...40		100...150			
	2,5...4	18...26	34...50					
	4...6	24...36	45...65					
	5...8	28...40	54...75					
	6...9		63...85					
	7...10							
	9...13							
	12...18							
	16...22							

T2

Surge Absorber Unit

AS	1
AS	Surge absorber unit
CR +Varistor GMC - 9 ... 85	
1	Tensiones 24...48 VAC
2	Tensiones 100...125 VAC
3	Tensiones 200...240 VAC
4	Tensiones 24...48 VDC
5	Tensiones 100...125 VDC
6	Tensiones 200...240 VDC
Varistor GMC - 9 ...800	
11	Tensiones 24...48 VAC/DC
12	Tensiones 100...125 VAC/DC
13	Tensiones 200...240 VAC/DC
14	Tensiones 380...440 VDC/DC

T3

Separate Mounting Unit

AZ	22H
AZ	Separate mounting unit
Type	
22H	Applied with GTK - 22
40H	Applied with GTK - 40
85H	Applied with GTK - 85

T4

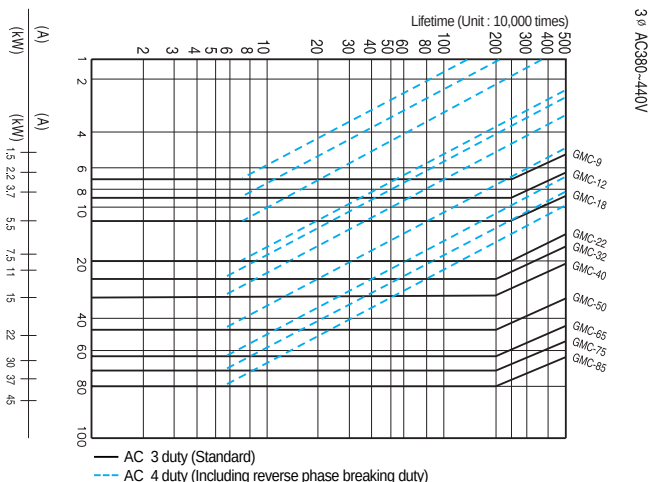
Mechanical Interlock Unit

AR	9
AR	Mechanical interlock unit
Type	
9	Applied with GMC 9 ...85
100	Applied with GMC 100 ...150
180	Applied with GMC 180 ...400

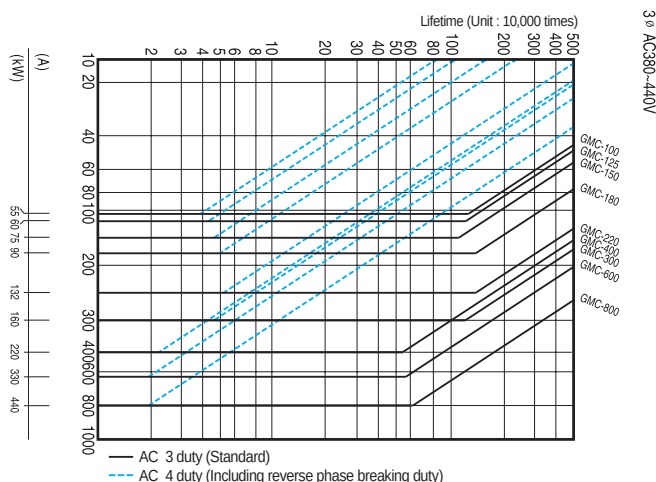
T5

THE ELECTRICAL LIFETIME

GMC- 9 - 85



GMC- 100 - 800



ACCESSORIES

Mechanical Interlock Unit



Type	Applied contactors
AR - 9	GMC(D) - 9 ~ GMC(D) - 85
AR - 100	GMC - 100 ~ GMC - 150
AR - 180	GMC - 180 ~ GMC - 400

Insulation Barriert Unit



Type	Applied contactors	No.
AI - 100	GMC - 100, 125, 150	4
AI - 180	GMC - 180, 220, 300, 400	
AI - 600	GMC - 600, 800	

Surge Absorber Unit



Type	Element	Operation Voltage	Element Spec.	Applied Contactors
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	AC 24 ~ 48V	Varistor 120V 0,1μF 100 Ω	GMC - 9 ~ GMC - 85
AS -2		AC 100 ~ 125V	Varistor 270V 0,1μF 100 Ω	
AS -3		AC 200 ~ 240V	Varistor 470V 0,1μF 100 Ω	
AS -4		DC 24 ~ 48V	Varistor 120V 0,47μF 100 Ω	
AS -5		DC 100 ~ 125V	Varistor 270V 0,47μF 100 Ω	
AS -6		DC 200 ~ 220V	Varistor 470V 0,47μF 100 Ω	

Enclosed type Magnetic Switches



Type		Rated Power (kW)					Rated Current (A)			AC1 duty
Without PB	Push button type	1phase motor		AC 3 duty			AC 3 duty			A
		110V	220V	200 ~ 220V	380 ~ 440V	500 ~ 550V	200 ~ 220V	380 ~ 440V	500 ~ 550V	
GMW - 9M	GMW - 9MB	0.4	0.8	2.5	4	4	11	9	7	20
GMW - 12M	GMW - 12MB	0.5	1	3.5	5.5	7.5	13	12	12	20
GMW - 18M	GMW - 18MB	0.75	1.5	4.5	7.5	7.5	18	18	13	25
GMW - 22M	GMW - 22MB	0.9	1.8	5.5	11	15	22	22	22	32

Enclosed type Magnetic Switches



Type	Rated Power (kW)					Rated Current (A)			AC 1 duty
	1phase motor		AC 3 duty			AC 3 duty			A
	110V	220V	200 ~ 220V	380 ~ 440V	500 ~ 550V	200 ~ 220V	380 ~ 440V	500 ~ 550V	
GMW - 9B	0.4	0.8	2.5	4	4	11	9	7	20
GMW - 12B	0.5	1	3.5	5.5	7.5	13	12	12	20
GMW - 18B	0.75	1.5	4.5	7.5	7.5	18	18	13	25
GMW - 22B	0.9	1.8	5.5	11	15	22	22	22	32
GMW - 32B	1.2	-	7.5	15	18.5	32	32	28	50
GMW - 40B	1.7	-	11	18.5	22	40	40	32	60
GMW - 50B	-	-	15	22	30	55	50	43	80
GMW - 65B	-	-	18.5	30	37	65	65	60	100
GMW - 75B	-	-	22	37	45	75	75	64	110
GMW - 85B	-	-	25	45	45	85	85	75	135

Type

GMC - 9

GMC - 12

GMC - 18

GMC - 22



CONTACTORS & THERMAL OVERLOAD RELAYS



Ratings

IEC-60947	AC1	AC3
200~240V		
380~440V		
500~550V		
690V		

Table T1

20A	20A	25A	32A
2.5kW 11A	3.5kW 13A	4.5kW 18A	5.5kW 22A
4kW 9A	5.5kW 12A	7.5kW 18A	11kW 22A
4kW 7A	7.5kW 12A	7.5kW 13A	15kW 22A
4kW 5A	7.5kW 9A	7.5kW 9A	15kW 18A

Continuous current Ith

UL

Motor AC	Single phase	115V
		230V
	Three phase	200V
		230V
		460V
		575V

Table T1

20A	25A	30A	32A
0.5 HP	0.5 HP	1 HP	2 HP
1 HP	2 HP	3 HP	3 HP
2 HP	3 HP	5 HP	7 HP
2 HP	3 HP	5 HP	7.5 HP
5 HP	7.5 HP	10 HP	10 HP
7.5 HP	10 HP	15 HP	15 HP

Aux. Contact



Coil current (mA)

AC 220V, 50Hz
AC 110V, 50Hz

36
73

Operating time (ms)

Closing	AC220V, 60Hz
	AC110V, 60Hz
Opening	AC220V, 60Hz
	AC110V, 60Hz

10~17
11~18
6~9
6~9

Ratings of the operation coil

AC coil	AC 60Hz
	AC 50Hz
DC coil	DC
	AC 50Hz / 60Hz

GMC0940

24VAC	48VAC	110VAC	120VAC	208VAC	220VAC	240VAC	277VAC	380VAC	440VAC	480VAC	600VAC
24VAC	42VAC	48VAC	100VAC	110VAC	220VAC	240VAC	380VAC	400VAC	415VAC	440VAC	550VAC
12VDC	24VDC	48VDC	100VDC	110VDC	125VDC	200VDC	220VDC	250VDC			

Thermal overload relays

GTK-22



Selection [A]

0.1 ... 0.16	2.5 ... 4
0.16 ... 0.25	4 ... 6
0.25 ... 0.4	5 ... 8
0.4 ... 0.63	6 ... 9
0.63 ... 1	7 ... 10
1 ... 1.6	9 ... 13
1.6 ... 2.5	12 ... 18
	16 ... 22

Separate mounting unit AZ-22H



Rail Din

Table T2

Reversing Contactors

AC
DC

GMC - 9R

GMC - 12R

GMC - 18R

GMC - 22R

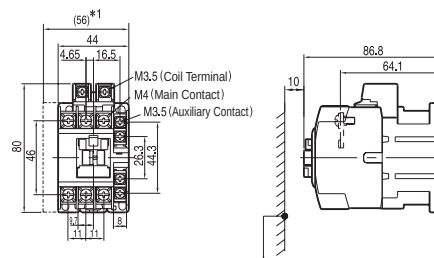
GMD - 9R

GMD - 12R

GMD - 18R

GMD - 22R

Dimension (mm)



GMC - 32

GMC - 40

GMC - 50

GMC - 65

GMC - 75

GMC - 85



50A 7.5kW 32A 15kW 35 A 18.5kW 28A 18.5kW 21A	60A 11kW 40A 18.5kW 40A 22kW 32A 22kW 25A	80A 15kW 55A 22kW 50A 30kW 43A 30kW 33A	100A 18.5kW 65A 30kW 65A 37kW 60A 37kW 47A	110A 22kW 75A 37kW 75A 45kW 64A 45kW 47A	135A 25kW 85A 45kW 85A 45kW 75A 45kW 52A
45A 2 HP 5 HP 7.5 HP 10 HP 20 HP 20 HP	50A 3 HP 5 HP 10 HP 10 HP 25 HP 25 HP	70A 3 HP 7.5 HP 10 HP 15 HP 30 HP 30 HP	80A 5 HP 10 HP 15 HP 20 HP 40 HP 40 HP	90A 5 HP 15 HP 20 HP 25 HP 50 HP 50 HP	100A 7.5 HP 15 HP 25 HP 30 HP 60 HP 60 HP

AU-1
1NO + 1NC

AU-2
2NO
2NC
1NO + 1NC

AU-4
4NO
4NC
3NO + 1NC
1NO + 3NC
2NO + 2NC

36				68								
73				154								
11 ~ 19				16 ~ 25								
13 ~ 20				16 ~ 25								
6 ~ 10				8 ~ 15								
6 ~ 9				9 ~ 16								
GMCO940					GMCO5085							
24VAC	48VAC	110VAC	120VAC	208VAC	220VAC	240VAC	277VAC	380VAC	440VAC	480VAC	600VAC	
24VAC	42VAC	48VAC	100VAC	110VAC	220VAC	240VAC	380VAC	400VAC	415VAC	440VAC	500VAC	550VAC
12VDC	24VDC	48VDC	100VDC	110VDC	125VDC	200VDC	220VDC	250VDC				

GTK-40
Selection [A]
4 ... 6 12 ... 18
5 ... 8 16 ... 22
6 ... 9 18 ... 26
7 ...10 24 ... 36
9 ...13 28 ... 40

AL : 95.5
PR : 70.8
AN : 53

Separate mounting unit
Rail Din

AZ-40H

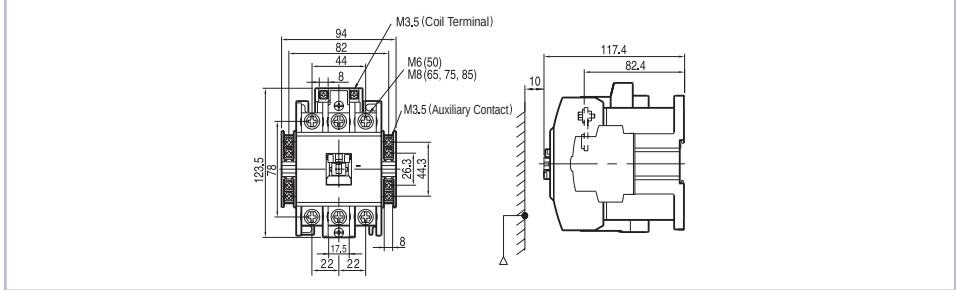
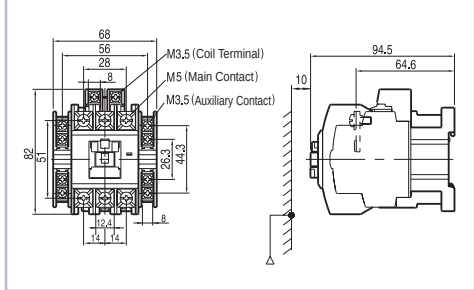
GTK-85
Selection [A]
7 ... 10 28 ... 40
9 ... 13 34 ... 50
12 ... 18 45 ... 65
16 ... 22 54 ... 75
18 ... 26 63 ... 85
24 ... 36

AL : 101.5
PR : 81.4
AN : 70

Separate mounting unit
AZ-85H

Rail Din

GMC - 32R	GMC - 40R	GMC - 50R	GMC - 65R	GMC - 75R	GMC - 85R
GMD - 32R	GMD - 40R	GMD - 50R	GMD - 65R	GMD - 75R	GMD - 85R



GMC - 100

GMC - 125

GMC - 150

GMC - 180

GMC - 220



150A	150A	200A	230A	260A
30kW 105A	37kW 125A	45kW 150A	55kW 180A	75kW 250A
55kW 105A	60kW 120A	75kW 150A	90kW 180A	132kW 250A
55kW 85A	60kW 90A	90kW 140A	110kW 180A	132kW 200A
55kW 65A	60kW 70A	90kW 100A	110kW 120A	132kW 150A
160A	160A	210A	230A	275A
7.5 HP	10 HP	15 HP	15 HP	15 HP
15 HP	20 HP	25 HP	30 HP	40 HP
30 HP	40 HP	40 HP	60 HP	60 HP
30 HP	40 HP	50 HP	60 HP	75 HP
60 HP	75 HP	100 HP	125 HP	150 HP
60 HP	75 HP	100 HP	125 HP	150 HP

AU-100
1NO
1NC

56	56	53
89	111	83
30 ~ 34	37 ~ 41	45
46 ~ 50	56 ~ 60	60
63 ~ 67	47 ~ 52	45
49 ~ 53	44 ~ 48	41

GMC0100150			GMC0180220		
24VDC	48VDC	100 ~ 220VDC			
24VAC	48VAC	100 ~ 200VAC	300VAC	400VAC	500VAC
24 ~ 25VAC	48 ~ 50VAC	100 ~ 240VAC	265 ~ 347VAC	380 ~ 450VAC	440 ~ 575VAC

GTK-100

Selection [A]
34 ... 50
39 ... 57
43 ... 65
54 ... 80
65 ... 100
85 ... 125

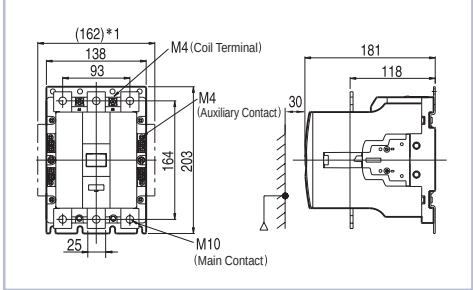
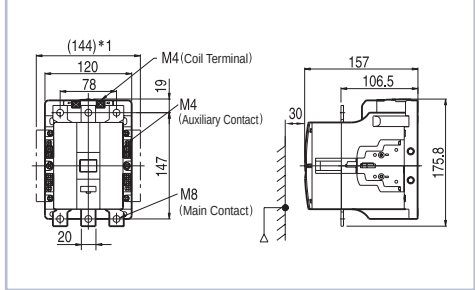
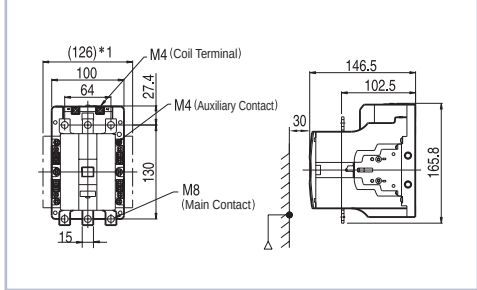
GTK-150

Selection [A]
34 ... 50
39 ... 57
43 ... 65
54 ... 80
65 ... 100
85 ... 125
100 ... 150

GTK-220

Selection [A]
65 ... 100
85 ... 125
100 ... 160
120 ... 180
160 ... 240

GMC - 100R	GMC - 125R	GMC - 150R	GMC - 180R	GMC - 220R
GMD - 100R	GMD - 125R	GMD - 150R	GMD - 180R	GMD - 220R



GMC - 300



GMC - 400

GMC - 600

GMC - 800



350A

90kW 300A
160kW 300A
160kW 250A
200kW 220A

420A

125kW 400A
220kW 400A
225kW 350A
250kW 300A

660A

190kW 630A
330kW 630A
330kW 500A
330kW 420A

800A

220kW 800A
440kW 800A
500kW 720A
500kW 630A

350A

-

100 HP
100 HP
200 HP
200 HP

450A

-

125 HP
150 HP
300 HP
300 HP

660A

-

150 HP
200 HP
400 HP
400 HP

840A

-

200 HP
250 HP
500 HP
500 HP



AU-100

1NO
1NC

64

128

45 ~ 50

64 ~ 68

48 ~ 52

43 ~ 47

GMCO300400

100 ~ 220VDC

100 ~ 200VAC

300VAC

400VAC

500VAC

100 ~ 240VAC

265 ~ 347VAC

380 ~ 450VAC

440 ~ 575VAC

132

155

66 ~ 69

66 ~ 70

55

45 ~ 49

GMCO600800

100 ~ 110VDC 200 ~ 220VDC

100VAC

200VAC

300VAC

400VAC

500VAC

100 ~ 127VAC

200 ~ 240VAC

265 ~ 347VAC

380 ~ 450VAC

440 ~ 575VAC

GTK-400



Selection [A]

85 ... 125
100 ... 160
120 ... 180
160 ... 240
220 ... 300
260 ... 400

GTK-600



Selection [A]

200 ... 300
260 ... 400
400 ... 600
520 ... 800

AL : 188
PR : 171
AN : 151

AL : 193
PR : 200
AN : 255

GMC - 300R

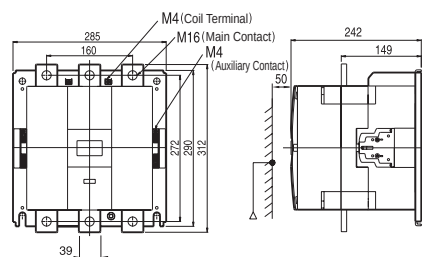
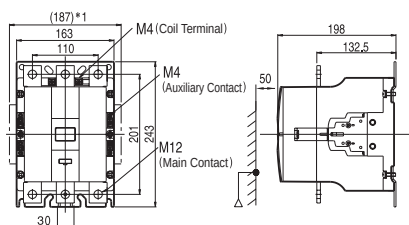
GMD - 300R

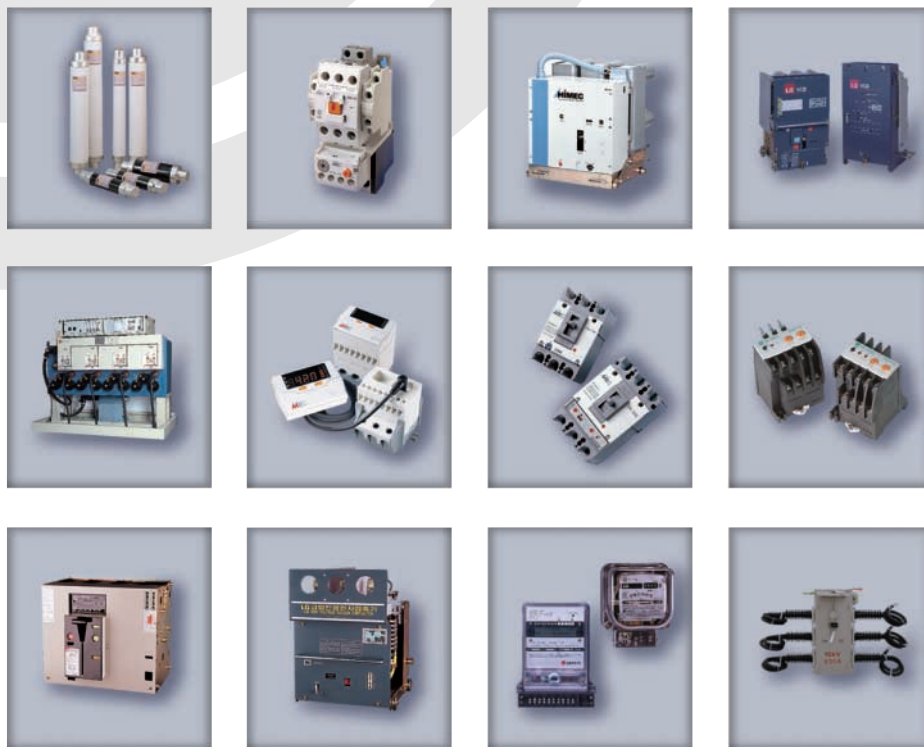
GMC - 400R

GMD - 400R

GMC - 600R

GMC - 800R





 **LG Industrial Systems Co., Ltd.**

Miami Breaker, Inc. □

7060 NW 52nd Street, Miami FL 33166 □

Phone : (786) 336 5780 / (800) 941 1112 □

Fax : (786) 336 5790 / (888) 941 1112