Midi-Contactors

Specifications





				12AF		32AF		
				GC9	GC12	GC18	GC25	GC32
Type	Model			•	•	•	•	•
	Connection by screws clamp terminals			N/A	N/A	N/A	N/A	N/A
	Connection by lugs							
Number of poles						3		
Rated operational voltage, Ue						690V		
Rated insulation voltage, Ui								
	Conforming to IEC947-4-1					1000V		
	Conforming to UL, CSA					600V		
Rated impulse withstand voltage, Uimp						8kV		
Degree of pollution (IEC60529)						IP20		
Rated operational current Ie ($\theta \leq$ 55℃)								
AC Motors		Ue Max 690	[A]	25	25	40	40	50
	1-Phase	110~120V	[A]	9.8	13.8	16	24	26
		220~240V	[A]	10	12	17	17	28
	3-Phase	200~240V	[A]	7.5	10.6	16.7	24.2	24.2
		220~240V	[A]	9.6	15.2	22	28	28
		440~480V	[A]	7.6	11	11	21	27
		550~600V	[A]	9	11	17	22	27
Rated operational power ($\theta \leq$ 55℃)								
AC Motors	1-Phase	110~120V	[Hp]	0.5	0.75	1	2	2
		220~240V	[Hp]	1.5	2	3	3	5
	3-Phase	200~208V	[Hp]	2	3	5	7.5	7.5
		220~240V	[Hp]	3	5	7.5	10	10
		440~480V	[Hp]	5	7.5	10	15	25
		550~600V	[Hp]	7.5	10	15	20	25
Rated operational current (440V AC-3)			[A]	9	12	18	25	32
CSA Elevator Ratings 200~600V 3 Phase			**[A]**	Available in 2009	Available in 2009	**20**	**20**	**25**
According to IEC 947-4-1	Rated making capacity AC-3 (I/Ie)		[440V]	90	120	180	250	320
	Rated breaking capacity AC-3 (Ic/Ie)		[440V]	72	96	144	200	256
Mechanical durability in millions of operating cycles				15	15	15	15	15
Maximum operating rate In operating cycles per hour				1800	1800	1800	1800	1800
Mechanical durability in millions of operating cycles				8.07	8.07	8.07	8.07	8.07
Maximum operating rate In operating cycles per hour				7200	7200	7200	7200	7200
Electrical life for Ie/AC-3 Max in millions of operating cycles				2.5	2.5	2.5	2.5	2.5
Maximum operating rate in operating cycles per hour				1800	1800	1800	1800	1800
AC control coil voltage operated contactors								
	Weight		[kg]			0.45		
	Basic dimensions (W×H×D)		[mm]			45×83×93		
DC control coil voltage operated contactors								
	Weight		[kg]			0.63		
	Basic dimensions (W×H×D)		[mm]			45×83×118		

Midi-Contactors




63AF			
GC35	GC40	GC50	GC63
•	•	•	•
•	•	•	•
3			
690V			
1000V			
600V			
8kV			
IP20			
55	60	70	75
24	34	34	56
28	40	50	50
30.8	46.2	54.4	54.4
42	54	68	68
34	40	52	52
32	41	52	52
2	3	3	5
5	7.5	10	10
10	15	20	20
15	20	25	25
25	30	40	40
30	40	50	50
35	40	50	63
30	32.5	37.5	42
350	400	500	630
280	320	400	504
12	12	12	12
1200	1200	1200	1200
5.97	5.97	5.97	5.97
7200	7200	7200	7200
2	2	2	1.3
1200	1200	1200	1200
0.94			
55 × 106 × 122			
1.2			
55 × 106 × 160.5			




95AF			
GC65	GC75	GC85	GC95
•	•	•	•
•	•	•	•
3			
690V			
1000V			
600V			
8kV			
IP20			
100	110	135	140
56	56	80	100
68	68	68	88
74.8	74.8	88	88
80	80	104	104
65	65	77	96
62	62	77	77
5	5	7.5	10
15	15	15	20
25	25	30	30
30	30	40	60
50	50	60	75
60	60	75	75
65	75	85	95
55	60	70	75
650	750	850	950
520	600	680	760
12	12	12	12
1200	1200	1200	1200
5.97	5.97	5.97	5.97
7200	7200	7200	7200
2	2	2	2
1200	1200	1200	1200
1.82			
70 × 140 × 137			
2.7			
70 × 140 × 172.5			

3-pole contactors
for motor control up to 45kW at 440V in category AC-3

Control circuit voltage : AC or DC
Connection by screw clamp terminals


GC12S


GC32S


GC63S


GC95S

AC-3 operational power ratings 3-phase motors ($\theta \leq 55℃$)						Rated operational current at AC-3	Built-in auxiliary contacts		Type	Weight
200 240V	380 400V	415V	440V	500V	690V	440V	NO	NC	Connection by screw clamp terminals	AC control kg
kW	kW	kW	kW	kW	kW	A				
2.5	4	4	4	4	4	9	1	0*	GC9S	0.26
3.5	5.5	5.5	5.5	7.5	7.5	12	1	0*	GC12S	0.26
4.5	7.5	7.5	7.5	7.5	7.5	18	1	1	GC18S	0.45
5.5	11	11	11	15	15	25	1	1	GC25S	0.45
11	18.5	18.5	18.5	22	22	32	1	1	GC32S	0.45
7.5	15	15	15	18.5	18.5	35	2	2	GC35S	0.94
11	18.5	18.5	18.5	22	22	40	2	2	GC40S	0.94
15	22	22	22	30	30	50	2	2	GC50S	0.94
15	25	25	25	30	30	63	2	2	GC63S	0.94
18.5	30	30	30	33	33	65	2	2	GC65S	1.82
22	37	37	37	37	37	75	2	2	GC75S	1.82
25	45	45	45	45	45	85	2	2	GC85S	1.82
25	45	45	45	50	45	95	2	2	GC95S	1.82

Accessories

Auxiliary contact blocks and modules: see pages B-1-13 to B-1-17.

Mounting

Clip-on mounting on 35 mm ⊔ rail or screw fixing.
GC65 to GC95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage

- AC circuit 50/60Hz
  50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
  60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
  50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V

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

Overloads to suit contactors are on page B-2-2.

* 1NC version is also available

3-pole contactors
for control in utilization category AC-1, 25 to 140 A

Control circuit voltage : AC or DC
Connection by screw clamp terminals


GC12S


GC32S


GC63S


GC95S

AC-1 Non inductive loads maximum current ($\theta \leq 55°C$)	Number of poles	Built-in auxiliary contacts		Type	Weight
				Connection by screw clamp terminals	AC control
AC-1 (A)	NO	NO	NC		kg
25	3	1	0*	GC9S	0.26
25	3	1	0*	GC12S	0.26
40	3	1	1	GC18S	0.45
40	3	1	1	GC25S	0.45
50	3	1	1	GC32S	0.45
55	3	2	2	GC35S	0.94
60	3	2	2	GC40S	0.94
70	3	2	2	GC50S	0.94
75	3	2	2	GC63S	0.94
100	3	2	2	GC65S	1.82
110	3	2	2	GC75S	1.82
135	3	2	2	GC85S	1.82
140	3	2	2	GC95S	1.82

Accessories
Auxiliary contact blocks and modules: see pages B-1-13 to B-1-17.

Mounting
Clip-on mounting on 35 mm ⊔ rail or screw fixing.
GC65 to GC95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage
- AC circuit 50/60Hz
  50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
  60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
  50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V
- DC circuit
  12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Overloads to suit contactors are on page B-2-2.

* 1NC version is also available

3-pole contactors
for motor control up to 45kW at 440V in category AC-3

Control circuit voltage : AC or DC
Connection by lugs



GC63L



GC95L

AC-3 operational power ratings 3-phase motors ($\theta \leq 55°C$)						Rated operational current at AC-3	Built-in auxiliary contacts		Type	Weight
									Connection by lugs terminals	AC control
200 240V	380 400V	415V	440V	500V	690V	440V	NO	NC		kg
kW	kW	kW	kW	kW	kW	A				
7.5	15	15	15	18.5	18.5	35	2	2	GC35L	0.94
11	18.5	18.5	18.5	22	22	40	2	2	GC40L	0.94
15	22	22	22	30	30	50	2	2	GC50L	0.94
15	25	25	25	30	30	63	2	2	GC63L	0.94
18.5	30	30	30	33	33	65	2	2	GC65L	1.82
22	37	37	37	37	37	75	2	2	GC75L	1.82
25	45	45	45	45	45	85	2	2	GC85L	1.82
25	45	45	45	50	45	95	2	2	GC95L	1.82

Accessories

Auxiliary contact blocks and modules: see pages B-1-13 to B-1-17.

Mounting

Clip-on mounting on 35 mm ⊓ rail or screw fixing.
GC65 to GC95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage

- AC circuit 50/60Hz
  50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
  60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
  50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V

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

Overloads to suit contactors are on page B-2-2.

3-pole contactors
for control in utilization category AC-1, 25 to 140 A

Control circuit voltage : AC or DC
Connection by lugs



GC63L



GC95L

AC-1 Non inductive loads maximum current ($\theta \leq 55°C$)	Number of poles	Built-in auxiliary contacts		Type	Weight
				Connection by lugs terminals	AC control
AC-1 (A)	NO	NC	NO		kg
55	3	2	2	GC35L	0.94
60	3	2	2	GC40L	0.94
70	3	2	2	GC50L	0.94
75	3	2	2	GC63L	0.94
100	3	2	2	GC65L	1.82
110	3	2	2	GC75L	1.82
135	3	2	2	GC85L	1.82
140	3	2	2	GC95L	1.82

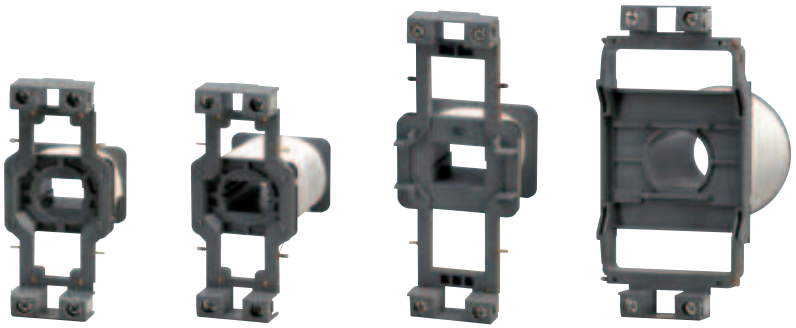
Accessories
Auxiliary contact blocks and modules: see pages B-1-13 to B-1-17.

Mounting
Clip-on mounting on 35 mm ⊓ rail or screw fixing.
GC65 to GC95 types are mountable on 70mm DIN rail.

Standard control circuit voltage, Coil voltage
- AC circuit 50/60Hz
  50Hz : 24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V
  60Hz : 24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V
  50/60Hz : 24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V
- DC circuit
  12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250V

Overloads to suit contactors are on page B-2-2.

Control circuit characteristics

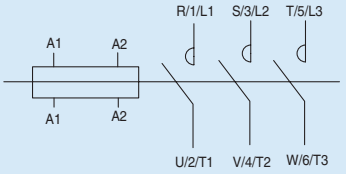


Type			32AF	63AF	95AF
Contactor types			GC9 GC12 GC18 GC25 GC32	GC35 GC40 GC50 GC63	GC65 GC75 GC85 GC95
AC control circuit characteristics					
Rated control circuit voltage [Uc]					
	50Hz	[V]	24, 32, 36, 42, 48, 80, 100, 110, 220, 230, 240, 380, 400, 415, 440, 500, 550V		
	60Hz	[V]	24, 48, 100, 110, 120, 200, 208, 220, 230, 240, 277, 380, 440, 480, 600V		
	50/60Hz	[V]	24, 48, 100, 110, 120, 200, 220, 230, 240, 380, 415, 440, 500, 550V		
Control voltage limits					
	Operational		0.85 ... 1.1 Uc on 50 Hz		
			0.85 ... 1.1 Uc on 60 Hz		
	Drop-out		0.3 ... 0.6 Uc		
Coil consumption at 20°C					
	Inrush	[VA]	80	120	220
	Holding	[VA]	9	11	16
Heat dissipation		[W]	2.2	2.2	5.1
Operating time					
	Closing	[ms]	12 ... 22	12 ... 22	15 ... 30
	Opening	[ms]	4 ... 19	4 ... 19	15 ... 30
DC control circuit characteristics					
Rated control circuit voltage		[Uc]	12, 20, 24, 48, 60, 80, 100, 110, 125, 200, 220, 250		
Control voltage limits					
	Operational		0.7 ... 1.1Uc		
	Drop-out		0.1 ... 0.3 Uc		
Coil consumption at 20°C					
	Inrush	[W]	7	9	18
	Holding	[W]	7	9	18
Time constant (L/R)		[ms]	28	65	75
Operating time					
	Closing	[ms]	12 ... 22	12 ... 22	100 ... 120
	Opening	[ms]	4 ... 19	4 ... 19	10 ... 25

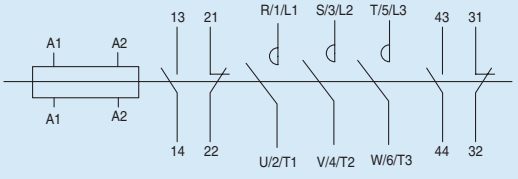
Overall Dimensions

Circuit diagram

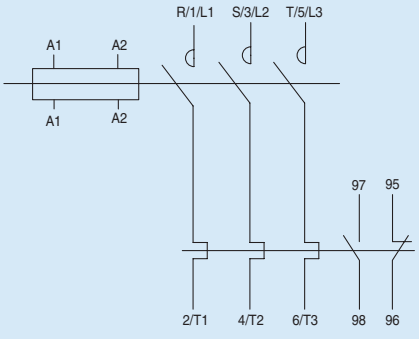
GC9~95



GC9~95 2N02NC



GC9~95



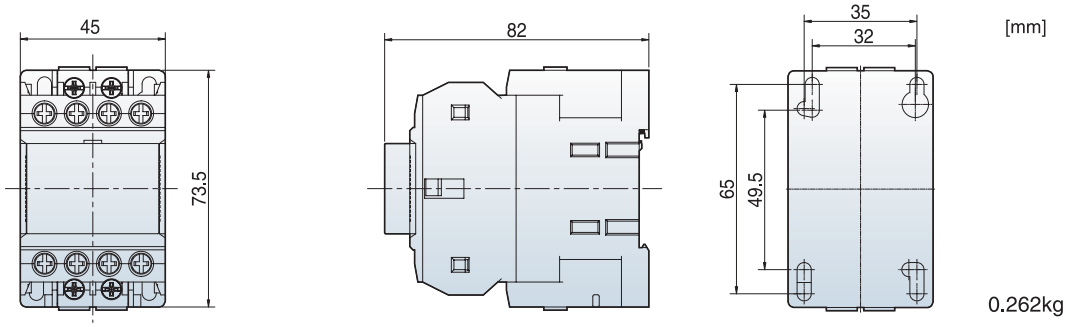
Overall Dimensions

Contactors

[mm]

GC-9~12 AC

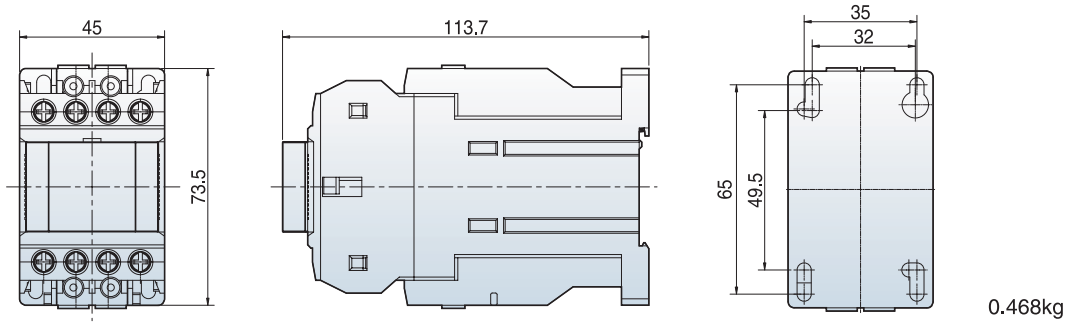
1a or 1b



0.262kg

GC-9~12 DC

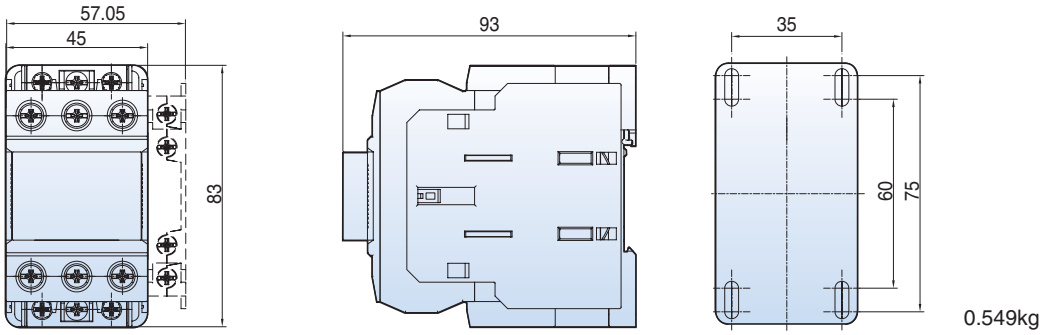
1a or 1b



0.468kg

GC-18~32 AC

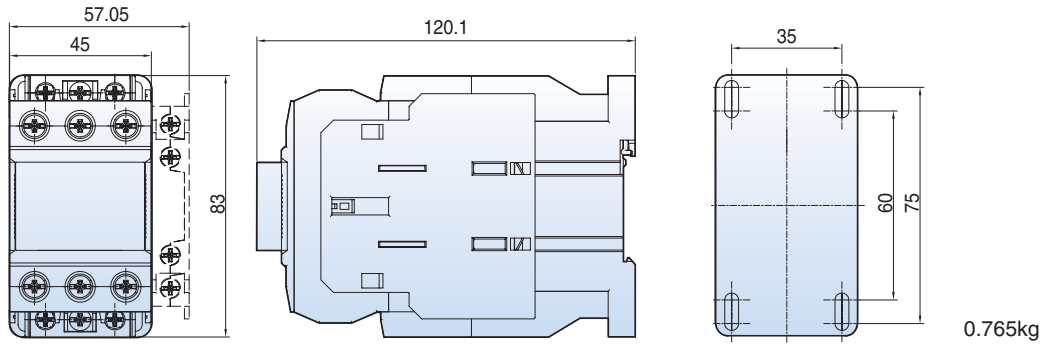
1a1b



0.549kg

GC-18~32 DC

1a1b



0.765kg

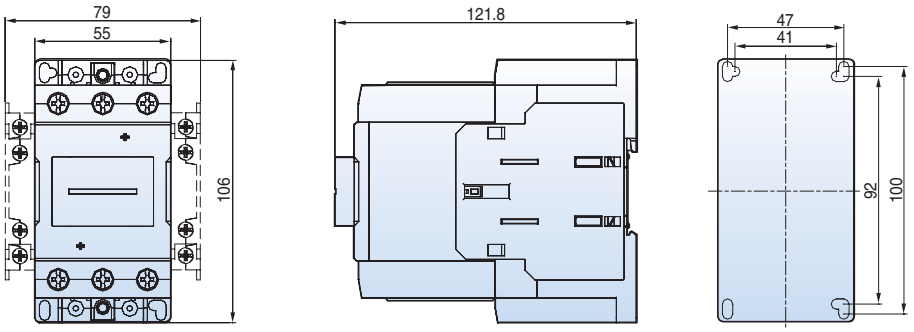
Overall Dimensions

Contactors

[mm]

GC-35~63 AC

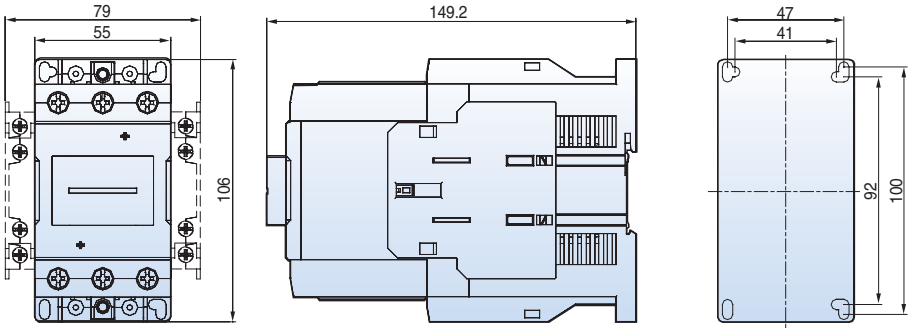
2a2b



1.045kg

GC-35~63 DC

2a2b



1.301kg

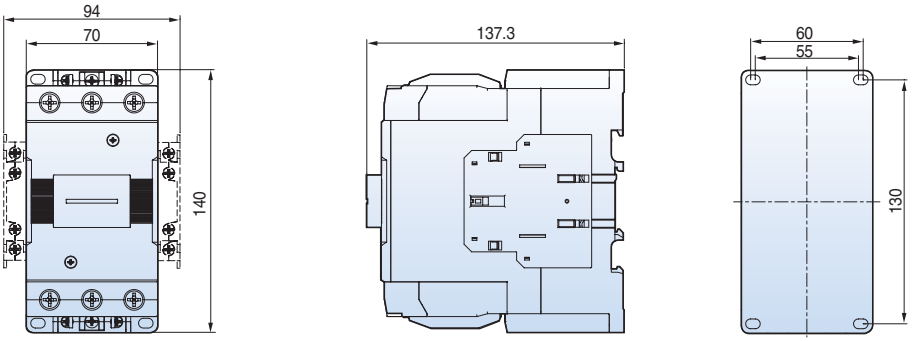
Overall Dimensions

Contactors

[mm]

GC-65~95 AC

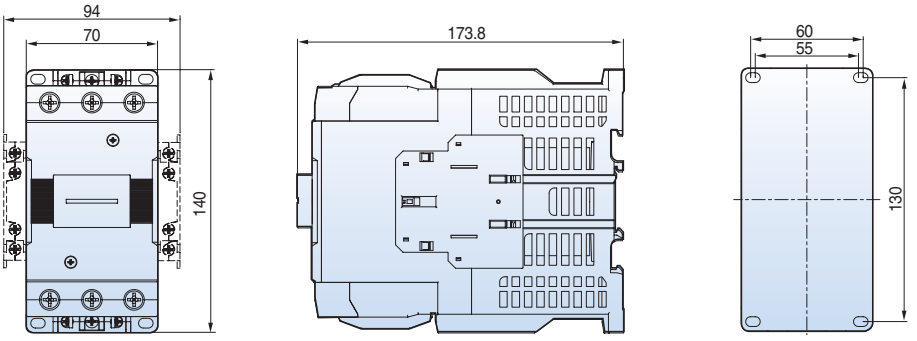
2a2b



1.925kg

GC-65~95 DC

2a2b



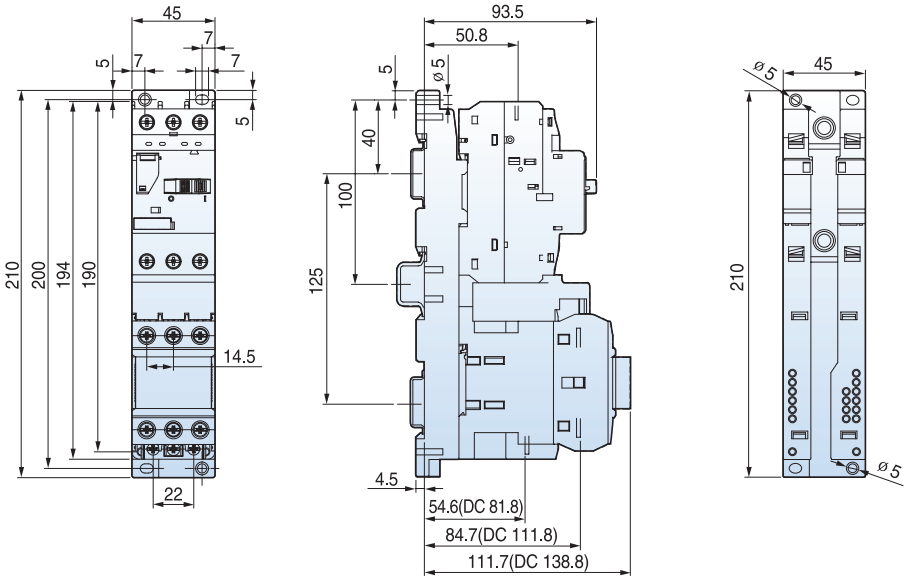
2.805kg

Overall Dimensions

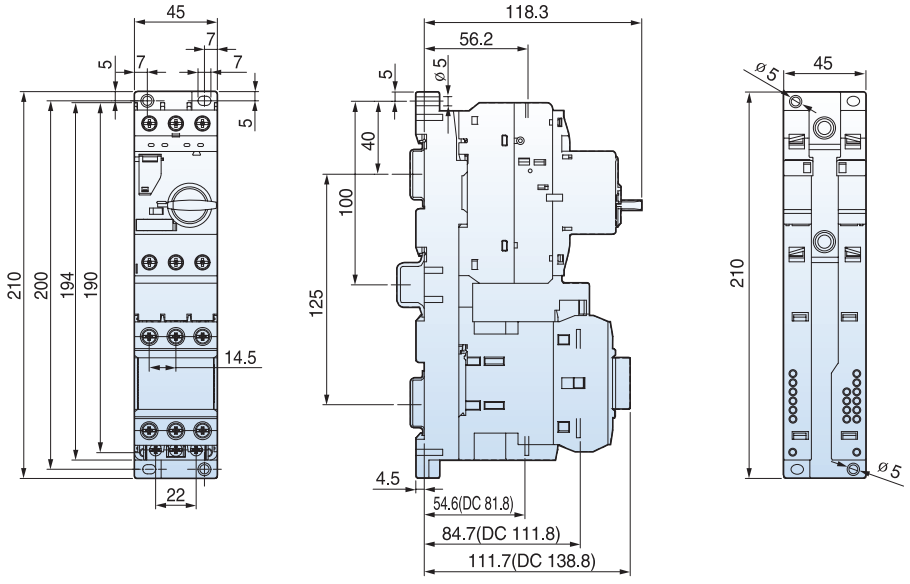
Combination manual motor starters and contactors

[mm]

GMS-32S
+
GC32AF



GMS-32H
+
GC32AF

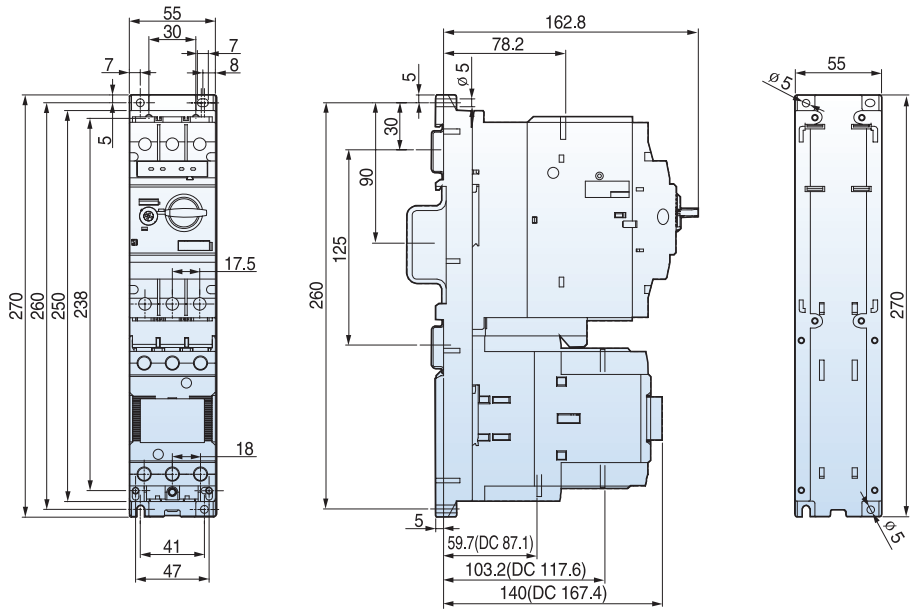


Overall Dimensions

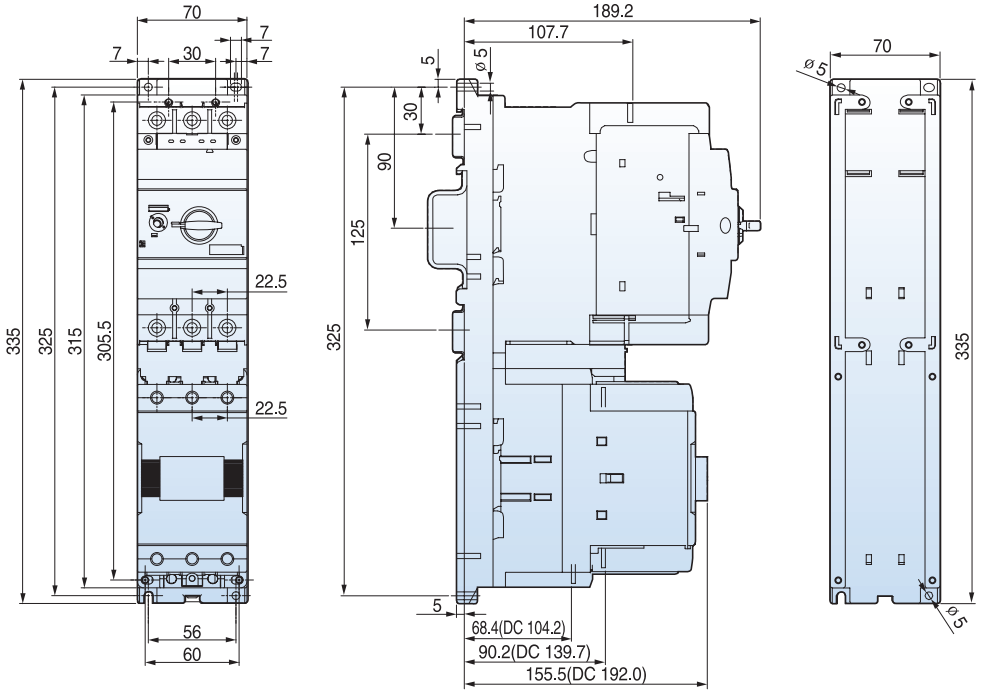
Combination manual motor starters and contactors

[mm]

GMS-63H
+
GC63AF



GMS-100H
+
GC95AF

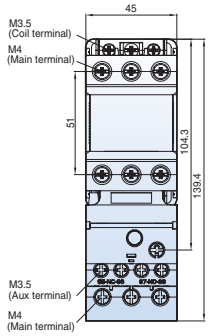


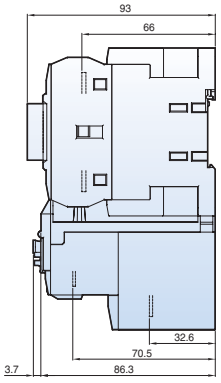
Overall Dimensions

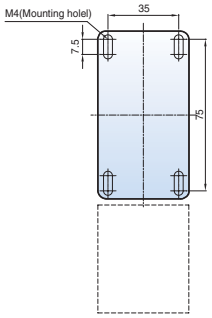
Motor starters (Screw type)

[mm]

GS18
GS25
GS32

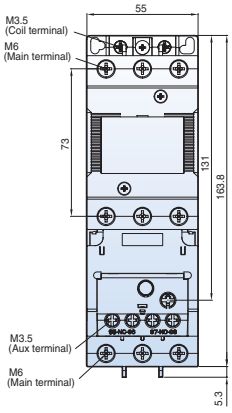


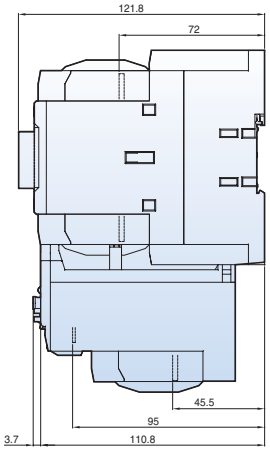


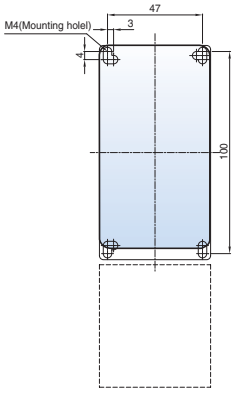


0.61kg

GS35
GS40
GS50
GS63

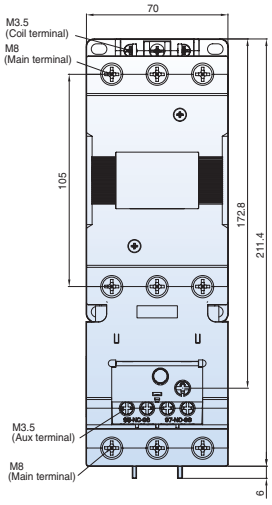


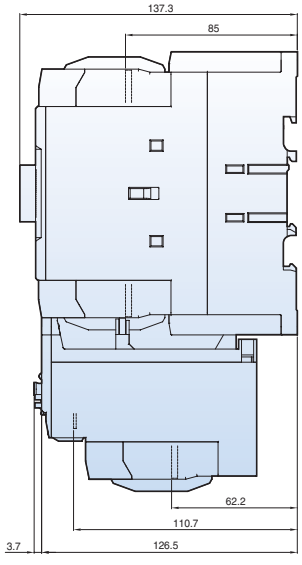


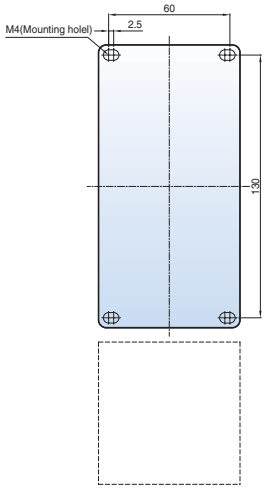


1.14kg

GS-65
GS-75
GS-85
GS-95







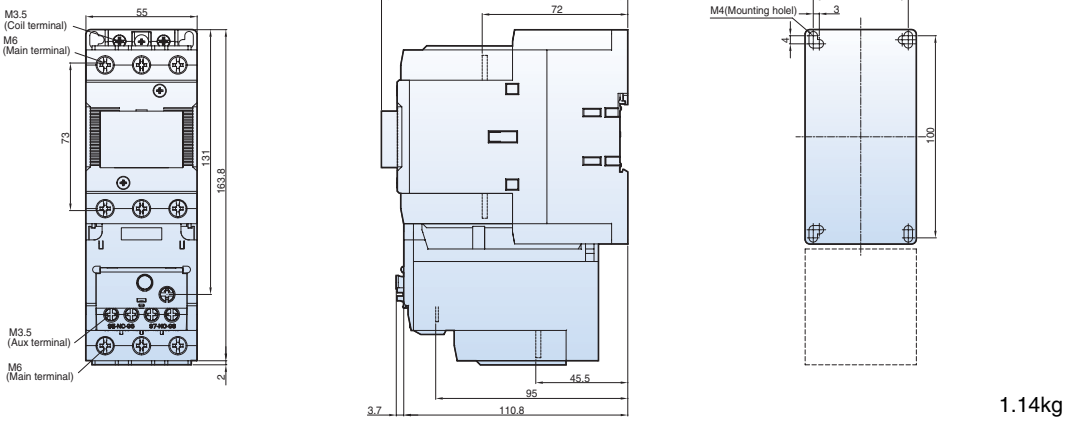
2.19kg

Overall Dimensions

Motor starters (Lug type)

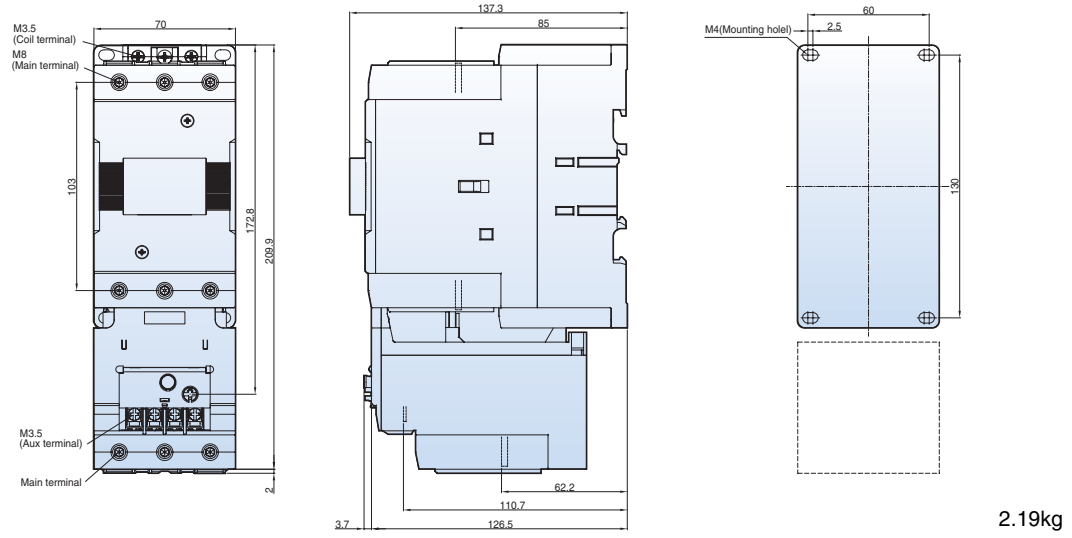
[mm]

GS35L
GS40L
GS50L
GS63L



1.14kg

GS65L
GS75L
GS85L
GS95L



2.19kg

MIDI-CONTACTOR NUMBERING SYSTEM



Midi-Contactor

GC — Contactor

Amp Rating

9	35	75
12	40	85
18	50	95
25	63	
32	65	

Application

	Non-Reversing
R	Reversing
C	Capacitive

Terminal Type

S	Screw (standard)
L	Lug (optional, 35A and larger only)

Coil Type

A	AC
D	DC

Coils

Coil voltage

see catalog pages

for options

Auxiliary Contacts

only GC9 and CG12 contactors

Blank	1NO
NC	1NC

Ordering Notes:

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC

GC