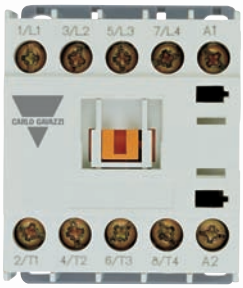
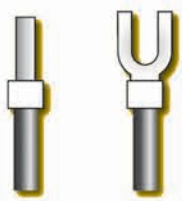
Mini contactors providing various connections and Accessories

Ratings

Frame size	AC3 ratings (IEC60947-4)				AC1 rating Ith
	220 ~ 240V	380 ~ 440V	500 ~ 550V	690V	
6A	1.5kW 7A	2.2kW 6A	3kW 5A	3kW 4A	20A
9A	2.2kW 9A	4kW 9A	3.7kW 6A	4kW 5A	20A
12A	3kW 12A	5.5kW 12A	4kW 7A	4kW 5A	20A

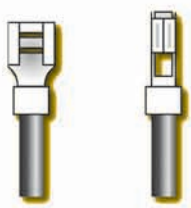
Screw clamps





For conventional screw connections

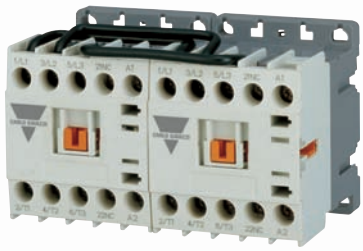
Fast-on



For fast-on connections

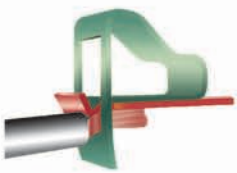
Mini-overload relay

Overload relay separately mounted



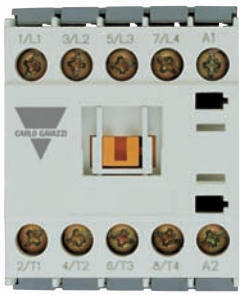
Reversing contactor

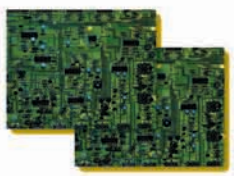
Cage clamps



For screwless connections

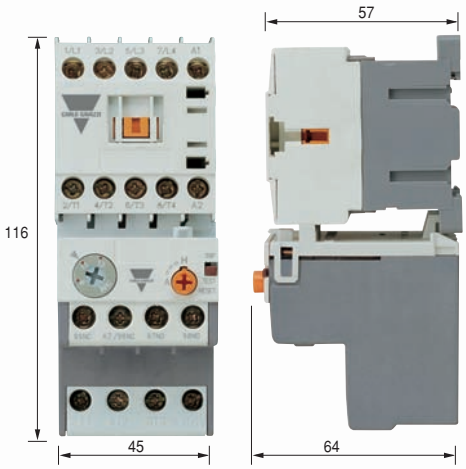
Solder pins



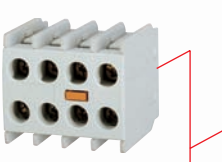


To mount on printed circuit boards

Dimensions,mm

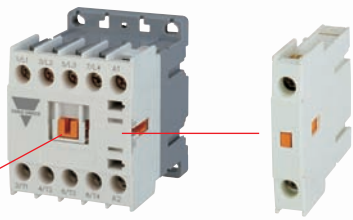


(Screw clamp type)



(Front mount, 4pole)

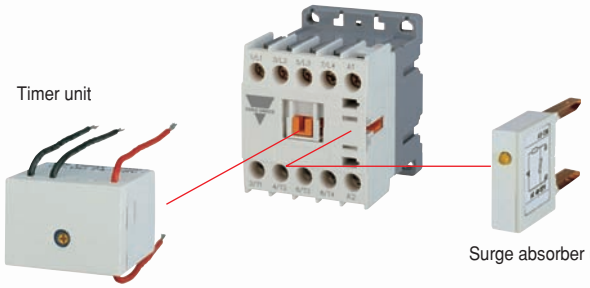
(Front mount, 2pole)



Auxiliary contact units

(Side mount, 1pole)

Timer unit



Surge absorber unit

Quick selection table

Mini contactors & overloads

Mini contactors

3NO main contacts
1 auxiliary contacts

Screw clamp type

Fast-on type

Cage clamp type

Solder pin type

Frame size		6A		9A		12A	
Screw clamp type	AC coil	CGMS-6A		CGMS-9A		CGMS-12A	
	DC coil	CGMS-6D		CGMS-9D		CGMS-12D	
Fast-on type	AC coil	CGMF-6A		CGMF-9A		CGMF-12A	
	DC coil	CGMF-6D		CGMF-9D		CGMF-12D	
Cage clamp type	AC coil	CGMC-6A		CGMC-9A		CGMC-12A	
	DC coil	CGMC-6D		CGMC-9D		CGMC-12D	
Solder pin type	AC coil	CGMP-6A		CGMP-9A		CGMP-12A	
	DC coil	CGMP-6D		CGMP-9D		CGMP-12D	
Ratings / IEC60947-4		kW	A	kW	A	kW	A
AC1			**20**		**20**		**20**
AC3	200/240V	1.5	7	2.2	9	3	12
	380/440V	**2.2**	**6**	**4**	**9**	**5.5**	**12**
	690V	3	4	4	5	4	5
Ratings / UL508		hp	A	hp	A	hp	A
continuous current		Ith = 20A (maximum for cage clamp type is 10A)					
single phase	115V	0.5		0.5		1*	
	230V	1		1.5		2**	
three phase	200V	*		*		*	
	230V	1.5		3		3	
	460V	**3**		**5**		**7.5*** **	
	575V	3		5		7.5	
NEMA size		00		00		00	

Additional auxiliary contacts

	Screw clamp type	Fast-on type	Cage clamp type	Solder pin type
2-pole, Front mount	AX-2M	AX-2MF	AX-2MC	
4-pole, Front mount	AX-4M	AX-4MF	AX-4MC	AX-1MP
2-pole, Side mount	AX-1M	AX-1MF	AX-1MC	

See page 30 for more details

Overload Relays

Bimetallic style
Type CGT
Class 10A

CGT-12M

Setting ranges (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 - 16
1.6 - 2.5	
2.5 - 4	

Base for separate mount

See page 27 for more details

Differential	CGT-12M
Non-differential (3-heater)	CGTH-12M/3
Non-differential (2-heater)	CGTH-12M

Note: * = 1/2 for cage clamp type, ** = 1.5hp for cage clamp type, *** = 5hp for cage clamp type

Contactors

- For motor control
- 3 main plus 1 auxiliary contacts
- Coil voltage : A.C.

Cage clamp connection types

Frame size	AC3 ratings (IEC60947-4)				AC1 rating Ith	Auxiliary contact (standard)	Type
	220 ~ 240V	380 ~ 440V	500 ~ 550V	690V			
6A	1.5kW 7A	2.2kW 6A	3kW 5A	3kW 4A	20A	1NO or 1NC	CGMC-6A
9A	2.2kW 9A	4kW 9A	3.7kW 6A	4kW 5A	20A	1NO or 1NC	CGMC-9A
12A	3kW 12A	5.5kW 12A	4kW 7A	4kW 5A	20A	1NO or 1NC	CGMC-12A

Solder pin connection types

Frame size	AC3 ratings (IEC60947-4)				AC1 rating Ith	Auxiliary contact (standard)	Type
	220 ~ 240V	380 ~ 440V	500 ~ 550V	690V			
6A	1.5kW 7A	2.2kW 6A	3kW 5A	3kW 4A	20A	1NO or 1NC	CGMP-6A
9A	2.2kW 9A	4kW 9A	3.7kW 6A	4kW 5A	20A	1NO or 1NC	CGMP-9A
12A	3kW 12A	5.5kW 12A	4kW 7A	4kW 5A	20A	1NO or 1NC	CGMP-12A

Coil voltage, 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

Ordering information

Type, Auxiliary contact and Coil voltage

For more information

Drawings → page 34
Reversing contactors → page 23
Overload relays → page 27
Optional accessories → page 29~33

Certificate
CE, ULcUL

Contactors

- For motor control
- 3 main plus 1 auxiliary contacts
- Coil voltage : D.C.

Cage clamp connection types

Frame size	AC3 ratings (IEC60947-4)				AC1 rating Ith	Auxiliary contact (standard)	Type
	220 ~ 240V	380 ~ 440V	500 ~ 550V	690V			
6A	1.5kW 7A	2.2kW 6A	3kW 5A	3kW 4A	20A	1NO or 1NC	CGMC-6D
9A	2.2kW 9A	4kW 9A	3.7kW 6A	4kW 5A	20A	1NO or 1NC	CGMC-9D
12A	3kW 12A	5.5kW 12A	4kW 7A	4kW 5A	20A	1NO or 1NC	CGMC-12D

Solder pin connection types

Frame size	AC3 ratings (IEC60947-4)				AC1 rating Ith	Auxiliary contact (standard)	Type
	220 ~ 240V	380 ~ 440V	500 ~ 550V	690V			
6A	1.5kW 7A	2.2kW 6A	3kW 5A	3kW 4A	20A	1NO or 1NC	CGMP-6D
9A	2.2kW 9A	4kW 9A	3.7kW 6A	4kW 5A	20A	1NO or 1NC	CGMP-9D
12A	3kW 12A	5.5kW 12A	4kW 7A	4kW 5A	20A	1NO or 1NC	CGMP-12D

Coil voltage, DC

① Standard type : 12, 20, 24, 36, 42, 48, 60, 72, 110, 120, 125, 220, 240, 250V DC
② Low consumption type : 12, 20, 24, 48, 72, 110, 120V DC(Low)
③ Wide Voltage : 12, 20, 24, 48, 72, 110, 12V DC(Wide)

Ordering information

Type, Auxiliary contact and Coil voltage

For more information

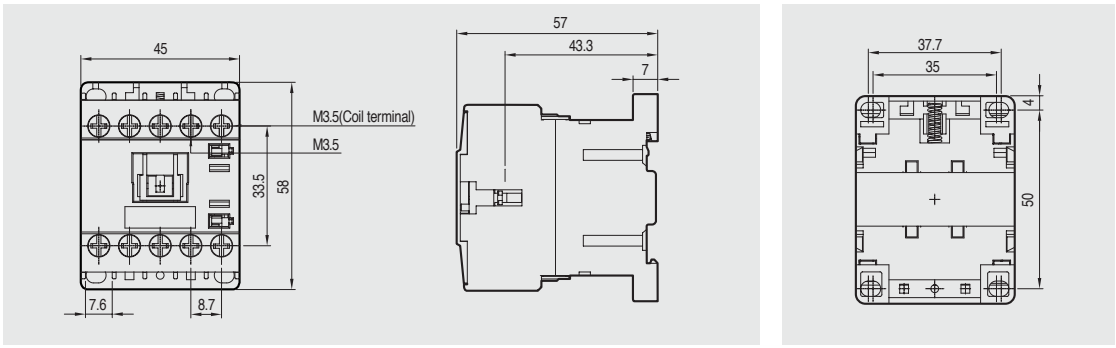
Drawings → page 34
Reversing contactors → page 25
Overload relays → page 27
Optional accessories → page 29~33

Certificate
CE, ULcUL

Mini contactors

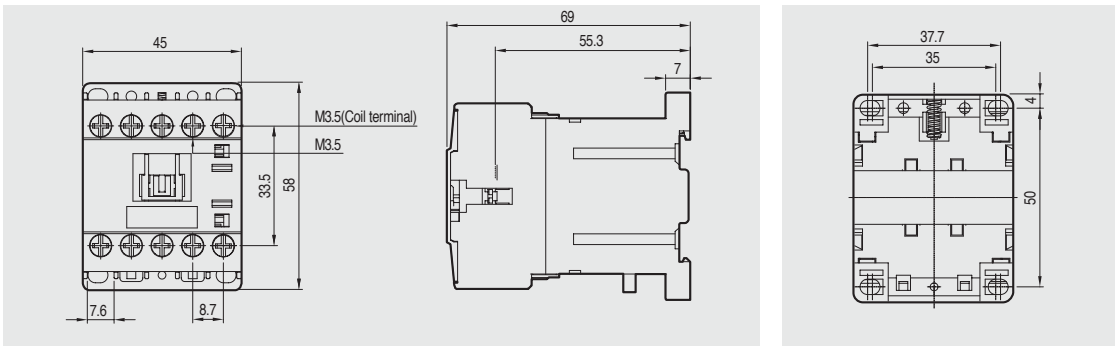
Dimensions

CGMS-12A



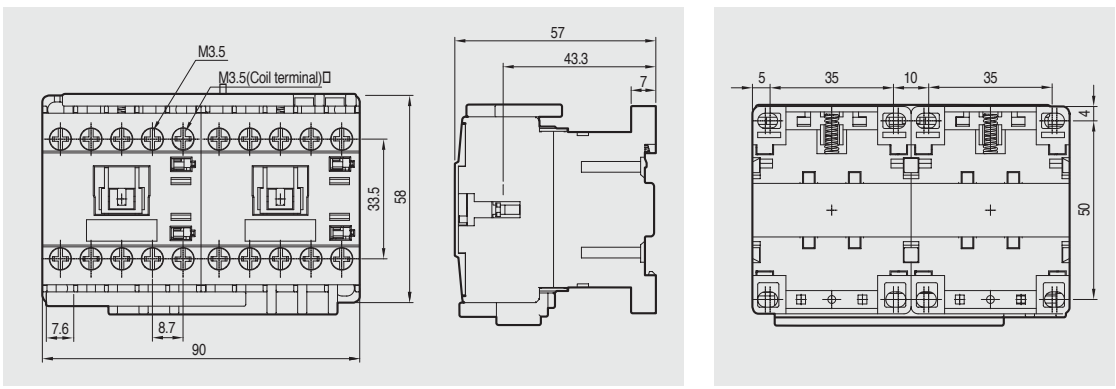
0.17kg

CGMS-12D



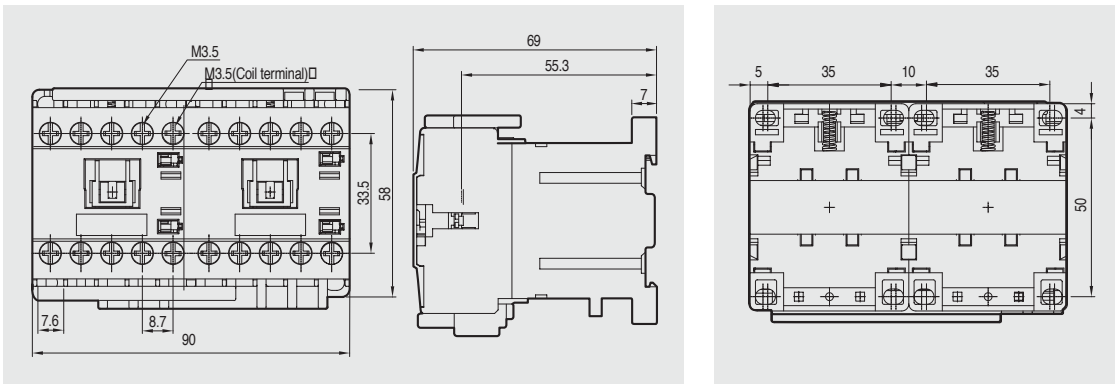
0.23kg

CGMUS-12A



0.36kg

CGMUS-12D

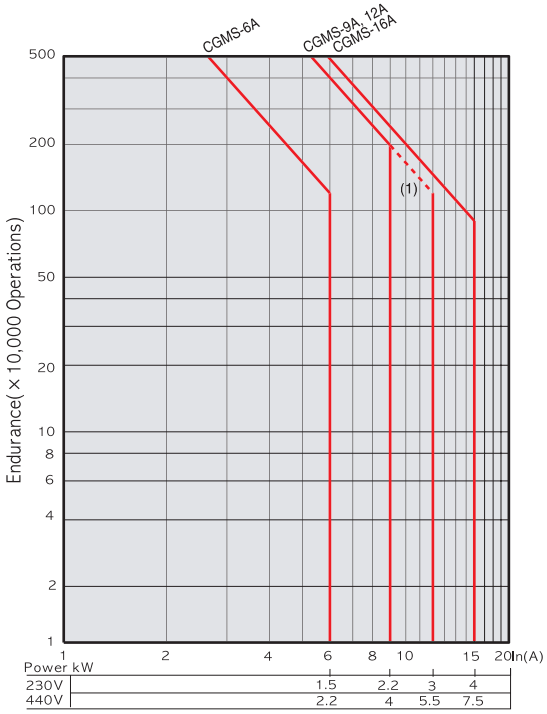


0.48kg

Characteristic

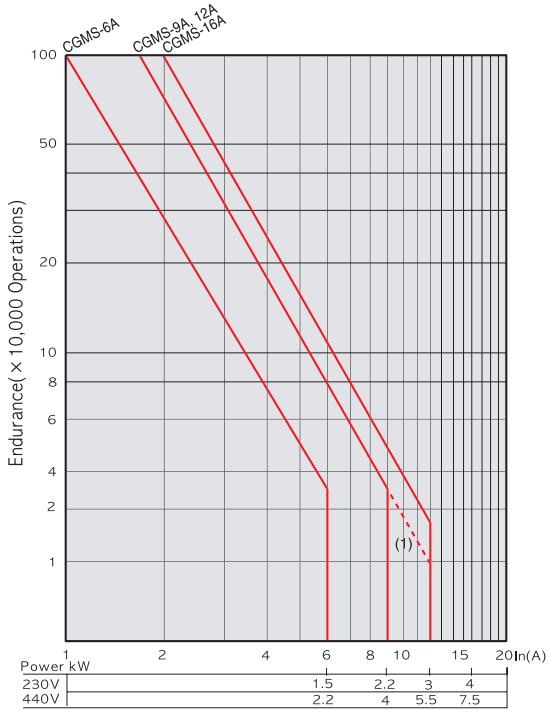
Electrical lifespan of contactors

Use in category AC-3
(Ue ≥440V)



(1) The dotted lines are only applicable to CGMS-12A contactors.

Use in category AC-4
(Ue ≥440V)



(1) The dotted lines are only applicable to CGMS-12A contactors.