

Control and Automation

For industrial applications ED.03

Contactors and overload relays



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C.2 Series M - Minicontactors

Order codes

Terminal numbering

Dimensions

C.10 Series CL - Contactors

Order codes

Terminal numbering

Dimensions

C.18 Series CK - Contactors

Order Codes

Dimensions

C.32 Series MT0 - Thermal overload relays for minicontactors

Order codes

Dimensions

Plug-in relays and Auxiliary contactors

C.34 Series RT - Thermal overload relays for contactors

Order codes

Dimensions

Motor protection devices

Contactors and Thermal overload relays

C.38 Series RE - Electronic overload relays

Order codes

Dimensions

Motorstarters

Control and signalling units

C.48 Series CSCN - Contactors for capacitors

Order codes

Dimensions

Electronic relays

Limit switches

C.52 Series 390.R - Clapper contactors

Order codes

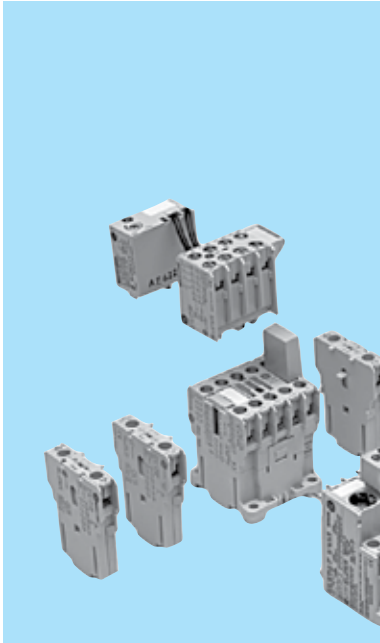
Dimensions

Speed drive units

Main switches

Numerical index





Three and four pole minicontactors 6, 9 and 12A (AC3) 20A (AC1)

- Control circuit: Alternating current up to 600V
Direct current up to 440V
- Terminal numbering in accordance with EN 50012
- Fixing by clipping onto 35 mm DIN rail (EN 50022-35) or by screws
- Screws and fast-on terminals protected against accidental contact in accordance with VDE 0106 T.100 and VBG4
- Versions: Ring terminal and printed circuit terminals
- Facility to mount instant and timed auxiliary contact blocks and voltage suppressor block
- Degree of protection IP20 (EN 60529).
- Maximum number of auxiliary contacts to be added: 6

Standards

IEC/EN 60947-1	BS 4794
IEC/EN 60947-4-1	NFC 63-110
IEC/EN 60947-5-1	CSA C22.2/14
EN 50003	VDE 0660
EN 50005	SEV 10254
EN 50012	JIS C8325
UL 508	JEM 1038
NEMA ICS-1	CENELEC HD 419

General data

	MC0...	MC1...	MC2...
Maximum number of poles	4	4	4
Rated thermal current θ_H 60°⁽¹⁾	(A) 20	20	20
Rated operational current I_e⁽²⁾	(A) 6	9	12
[3x440V, 50/60Hz, AC3]			
Rated insulation current U_i	(V) 750	750	750
Rated operational current U_e	(V) 690	690	690

Approvals

 cULus	 DEMKO	 NEMKO
 SEMKO	 SETI	 IMQ
 Lloyd's Register	 Bureau Veritas	 RINA
 CE		

Order codes	pg. C.3
Auxiliary contact blocks	pg. C.6
Accessories	pg. C.8
Dimensions	pg. C.22

Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (other voltages on request)*

Alternating current (V). Bifrequency coil

♦	10	1	2	9	3	4	5	6	7	8	12	13
AC	12	24	42	48	110	120	220	230	240	440	380	400
50/60Hz					115							

Operating voltages limits with bifrequency coils:

With 60Hz=0.85 to 1.1 x Us

With 50Hz=0.8 to 1.1 x Us in continuous service (ED=100%) with a maximum ambient temperature of 40°C

Alternating current (V).

♦	A	E	G	K	M	N	S	U	W	Y
AC			48	115		220	260	380	415	500
50Hz				127		240		400	440	
AC	6	32	60		208	240		440	480	600
60Hz					220	277				

Direct current (V)

♦	A	B	C	D	E	F	G	H	I	J	K	L	N	17	R	S	16
DC	6	12	32	24	36	42	48	60	72	110	120	125	220	230	240	250	440

Direct current (V) - Wide voltage range

♦	WD	WE	WG	WI	WJ	WN
DC	24	33	48	72	110	220

* Please Consult GE for non standard Coil Voltages



Three pole minicontactors

Max.operat.current Non- inductive loads AC1 ⁽²⁾ A	Motors <440V, 3~ 50/60Hz AC3 ⁽³⁾ A	Admissible power AC3					Aux. contacts		Control circuit: Alternating current		Control circuit: Direct current	
		1-phase 115V 220V		3-phase 220V 380V 500V 230V 400V			•3 •4	•1 •2	Cat. no. ⁽¹⁾	Pack	Cat. no. ⁽¹⁾	Pack
Terminal: screw												
20	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AT ♦ MC0A301AT ♦	20 20	MC0C310AT ♦ MC0C301AT ♦	10 10
20	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AT ♦ MC1A301AT ♦	20 20	MC1C310AT ♦ MC1C301AT ♦	10 10
20	12	0.75 1	2 2.6	3 4	5.5 7.3	5.5 7.3	1 0	0 1	MC2A310AT ♦ MC2A301AT ♦	20 20	MC2C310AT ♦ MC2C301AT ♦	10 10
Terminal: ring terminal												
20	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AR ♦ MC0A301AR ♦	20 20	MC0C310AR ♦ MC0C301AR ♦	10 10
20	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AR ♦ MC1A301AR ♦	20 20	MC1C310AR ♦ MC1C301AR ♦	10 10
20	12	0.75 1	2 2.6	3 4	5.5 7.3	5.5 7.3	1 0	0 1	MC2A310AR ♦ MC2A301AR ♦	20 20	MC2C310AR ♦ MC2C301AR ♦	10 10
Terminal: faston 2x2.8 insulated (5)												
16 ⁽⁴⁾	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AF ♦ MC0A301AF ♦	20 20	MC0C310AF ♦ MC0C301AF ♦	10 10
16 ⁽⁴⁾	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AF ♦ MC1A301AF ♦	20 20	MC1C310AF ♦ MC1C301AF ♦	10 10
Terminal: printed circuit												
20	6	0.37 0.5	0.75 1	1.5 2	2.2 3	3 4	1 0	0 1	MC0A310AI ♦ MC0A301AI ♦	20 20	MC0C310AI ♦ MC0C301AI ♦	10 10
20	9	0.56 0.75	1.12 1.5	2.2 3	4 5.5	4 5.5	1 0	0 1	MC1A310AI ♦ MC1A301AI ♦	20 20	MC1C310AI ♦ MC1C301AI ♦	10 10
20	12	0.75 1	2 2.6	3 4	5.5 7.3	5.5 7.3	1 0	0 1	MC2A310AI ♦ MC2A301AI ♦	20 20	MC2C310AI ♦ MC2C301AI ♦	10 10
Spare coil									MB0A ♦	10	MB0C ♦	10



- (1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (other voltages on request) (see C.2)
- (2) Electrical endurance AC-1: MC0... 0.2 × 10⁶ operations
MC1... 0.3 × 10⁶ operations
MC2... 0.35 × 10⁶ operations
- (3) Electrical endurance AC-3: MC0... (6A) = 1.2 × 10⁶ operations
MC1... (9A) = 0.85 × 10⁶ operations
MC2... (12A) = 0.6 × 10⁶ operations
- (4) Terminal with wire 1.5 mm²: I_e = 16A
with wire 1 mm²: I_e = 10A
Insulated terminal type B 2.8 × 0.8 and wire 1 mm² I_e = 8A in accordance with DIN 46247.
- (5) Fast-on 1 × 6.3 terminals on request (replace letter F by H in the catalogue number)

Three pole interface contactors

Max. oper. current Non- inductive load AC1 A	Motors <440V, 3 ~ 50/60Hz AC3 ⁽³⁾ A	Admissible power AC3					Aux. contacts		Voltage 24V D.C, coil 1.2W ⁽¹⁾			Voltage 24V D.C, coil 2W ⁽²⁾			
		1-phase		3-phase			•3	•1	Cat. no. ⁽¹⁾	Ref. no.	Pack	Cat. no. ⁽¹⁾	Ref. no.	Pack	
		115V	220V	220V	380V	500V	•4	•2							
		kW	kW	kW	kW	kW									
Terminal: screw															
20	6	0.37	0.75	1.5	2.2	3	1	0	MC0I310ATD	100570	10	MC0K310ATD	100574	10	
							0	1	MC0I301ATD	100571	10	MC0K301ATD	100575	10	
20	9	0.56	1.12	2.2	4	4	1	0	MC1I310ATD	100572	10	MC1K310ATD	100576	10	
							0	1	MC1I301ATD	100573	10	MC1K301ATD	100577	10	
20	12	0.75	2	3	5.5	5.5	1	0	MC2I310ATD	100559	10	MC2K310ATD	103590	10	
							0	1	MC2I301ATD	100538	10	MC2K301ATD	103591	10	
Spare coil									MB0ID	100470	10	MB0KD	100471	10	



- (1) No possibility of adding instantaneous auxiliary contact blocks.
- (2) Facility to mount an instantaneous auxiliary contact block of two contacts or two instantaneous auxiliary contact blocks of one contact.
- (3) Electrical endurance AC-3:
 - MC0... (6A) = 1.2×10^6 operations.
 - MC1... (9A) = 0.85×10^6 operations.
 - MC2... (12A) = 0.6×10^6 operations.

Four poles minicontactors



Max.oper.current Non-inductive load AC1 ⁽²⁾ A	Motors <440V, 3 ~ 50/60Hz AC3 ⁽³⁾ A	Admissible power AC3					Poles		Control circuit: Alternating current		Control circuit: Direct current		
		1-phase		3-phase			4	0	Cat. no. ⁽¹⁾	Pack	Cat. no. ⁽¹⁾	Pack	
		115V	220V	220V	380V	500V							2
		kW	kW	kW	kW	kW	0	4					
		HP	HP	HP	HP	HP							
Screw terminal													
20	6	AC1	1.8	3.5	6.1	10.5	13.8	4	0	MC0A400AT ♦	20	MC0C400AT ♦	10
			-	-	-	-	-	2	2	MC0AB00AT ♦	20	MC0CB00AT ♦	10
			0	4						MC0AA00AT ♦	20		
		AC3	0.37	0.75	1.5	2.2	3						
			0.5	1	2	3	4						
20	9	AC1	2.3	4.4	7.5	13	17	4	0	MC1A400AT ♦	20	MC1C400AT ♦	10
			-	-	-	-	-	2	2	MC1AB00AT ♦	20	MC1CB00AT ♦	10
			0	4						MC1AA00AT ♦	20		
		AC3	0.56	1.12	2.2	4	4						
			0.75	1.5	3	5.5	5.5						
20	12	AC1	2.3	4.4	7.5	13	17	4	0	MC2A400AT ♦	20	MC2C400AT ♦	10
			-	-	-	-	-	2	2	MC2AB00AT ♦	20	MC2CB00AT ♦	10
			0	4									
		AC3	0.75	2	3	5.5	5.5						
			1	2.6	4	7.3	7.3						
Terminal: faston 2x2.8 insulated (5)													
20	6	AC1	1.8	3.5	6.1	10.5	13.8	4	0	MC0A400AF ♦	20	MC0C400AF ♦	10
			-	-	-	-	-	2	2	MC0AB00AF ♦	20	MC0CB00AF ♦	10
			0	4						MC0AA00AF ♦	20		
		AC3	0.37	0.75	1.5	2.2	3						
			0.5	1	2	3	4						
16 ⁽⁴⁾	9	AC1	2.3	4.4	7.5	13	17	4	0	MC1A400AF ♦	20	MC1C400AF ♦	10
			-	-	-	-	-	2	2	MC1AB00AF ♦	20	MC1CB00AF ♦	10
			0	4						MC1AA00AF ♦	20		
		AC3	0.56	1.12	2.2	4	4						
			0.75	1.5	3	5.5	5.5						
Terminal: printed circuit													
20	6	AC1	1.8	3.5	6.1	10.5	13.8	4	0	MC0A400AI ♦	20	MC0C400AI ♦	10
			-	-	-	-	-	2	2	MC0AB00AI ♦	20	MC0CB00AI ♦	10
			0	4						MC0AA00AI ♦	20		
		AC3	0.37	0.75	1.5	2.2	3						
			0.5	1	2	3	4						
20	9	AC1	2.3	4.4	7.5	13	17	4	0	MC1A400AI ♦	20	MC1C400AI ♦	10
			-	-	-	-	-	2	2	MC1AB00AI ♦	20	MC1CB00AI ♦	10
			0	4						MC1AA00AI ♦	20		
		AC3	0.56	1.12	2.2	4	4						
			0.75	1.5	3	5.5	5.5						
Spare coil									MC0A ♦	10	MC0C ♦	10	

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.2)

(2) Electrical endurance AC-1: MC0... 0.2 × 10⁶ operations
MC1... 0.3 × 10⁶ operations
MC2... 0.35 × 10⁶ operations

(3) Electrical endurance AC-3: MC0... (6A) = 1.2 × 10⁶ operations
MC1... (9A) = 0.85 × 10⁶ operations
MC2... (12A) = 0.6 × 10⁶ operations

(4) Terminal with wire 1.5 mm²: I_e = 16A
with wire 1 mm²: I_e = 10A
Insulated terminal type B 2.8 × 0.8 and wire of 1 mm² I_e = 8A in accordance with DIN 46247.

(5) Faston 1 × 6.3 terminals on request, (replace letter F by H in the catalogue number).



Instantaneous auxiliary contact blocks

Front mounting

Number contacts	Combinations with basic contactor 10E	Contacts in acc. with EN 50012	Contacts in acc. with EN 50005	Aux. contacts		Cat. no.	Ref. no.	Pack
				•3 •4	•1 •2			
<ul style="list-style-type: none"> Two or four additional contacts, to cover combinations of 3 or 5 contacts without increasing the surface area of the basic contactor 								
Screw terminal								
2	21E	11		1	1	MACN211AT	100999	10
2	12E	02		0	2	MACN202AT	100998	10
2			20	2	0	MARN220AT	100994	10
2			11	1	1	MARN211AT	100993	10
2			02	0	2	MARN202AT	100992	10
4	41E	31		3	1	MACN431AT	100997	10
4	32E	22		2	2	MACN422AT	100996	10
4	23E	13		1	3	MACN413AT	100995	10
4			40	4	0	MARN440AT	100991	10
4			31	3	1	MARN431AT	100990	10
4			22	2	2	MARN422AT	100989	10
4			13	1	3	MARN413AT	100988	10
4			04	0	4	MARN404AT	100987	10
Ring terminal								
2	21E	11		1	1	MACN211AR	103557	10
2	12E	02		0	2	MACN202AR	103558	10
2			20	2	0	MARN220AR	103349	10
2			11	1	1	MARN211AR	103350	10
2			02	0	2	MARN202AR	103351	10
4	41E	31		3	1	MACN431AR	103559	10
4	32E	22		2	2	MACN422AR	103560	10
4	23E	13		1	3	MACN413AR	103561	10
4			40	4	0	MARN440AR	103352	10
4			31	3	1	MARN431AR	103353	10
4			22	2	2	MARN422AR	103354	10
4			13	1	3	MARN413AR	103355	10
4			04	0	4	MARN404AR	103300	10



Contactors

A

B

C

D

E

F

G

H

I

X

Instantaneous auxiliary contact blocks

Lateral mounting



Number contacts	Combinations with basic contactor 10E	Contacts in acc. with EN 50012	Contacts in acc. with EN 50005	Aux. contacts •3 •4	•1 •2	Cat. no.	Ref. no.	Pack
-----------------	---------------------------------------	--------------------------------	--------------------------------	----------------------------	----------	----------	----------	------

• One or two additional blocks, to cover combinations of 1 or 2 contacts without increasing the height of the basic unit contactor

Screw terminal								
1	20	10		1	0	MACL110AT	100560	10
1	11E	01		0	1	MACL101AT	100561	10

Ring terminal								
1	20	10		1	0	MACL110AR	103555	10
1	11E	01		0	1	MACL101AR	103556	10

Terminal: faston 2x2.8 insulated (1)								
1	20	10		1	0	MACL110AF	100562	10
1	11E	01		0	1	MACL101AF	100563	10

Terminal: printed circuit								
1	20	10		1	0	MACL110AI	100564	10
1	11E	01		0	1	MACL101AI	100565	10

- One or two additional blocks, when up to 6 or 7 contacts are needed (combination possible with frontal blocks)
- One or two additional blocks on both sides, to cover up to five contacts (combination possible only with lateral blocks)

Screw terminal								
			10	1	0	MARL110ATS	100519	10
			01	0	1	MARL101ATS	100520	10

Ring terminal								
			10	1	0	MARL110ARS	103299	10
			01	0	1	MARL101ARS	103298	10






Terminal: faston 2x2.8 insulated (1)								
			10	1	0	MARL110AFS	100521	10
			01	0	1	MARL101AFS	100522	10

Terminal: printed circuit								
			10	1	0	MARL110AIS	100523	10
			01	0	1	MARL101AIS	100524	10

(1) Terminal with wire 1 mm²: Ie = 10A
Insulated terminal type B 2.8 x 0.8 with wire 1 mm²: Ie = 8A, in accordance with DIN 46247



Accessories

	For use with:	Time	Function	Ue	Cat. no.	Ref. no.	Pack	
 <p>Electronic timer block</p>	Lateral or front fixing to the contactor							
	MCR..MC ...	0.5 - 60 seg.	delay ON	24... 250V AC/DC	MREBC10AC2	100541	10	
	MCR..MC ...	0.2 - 24 seg.	delay ON	24...250V AC/DC	MREBC20AC2	100542	10	
 <p>DIN rail adaptor for electronic timer block</p>	For fixing onto EN 50022-35							
	MREBC...				MVB0R	100543	10	
 <p>Voltage suppressor block</p>	Connection and (plug-in) fixing on to the connector							
	MCRA,MC ...	R/C	AC	12...60V 50/60Hz	MP0AAE1	100544	10	
	MCRA,MC ...	R/C	AC	72...250V 50/60Hz	MP0AAE2	100545	10	
	MCRC,MC ...	Diode	DC	6...250V DC	MP0CAE3	100546	10	
	MCRC,MC ...	Varistor	AC/DC	24-48V	MP0DAE4	100536	10	
 <p>Pole paralleling links</p>	To connect two, three or four phases in parallel							
	MC ...	2, 3, 4 (parallel)	Ø4.5mm - 16mm ²		MVPOC	100600	10	
 <p>Mechanical interlock</p>	Mechanical interlock and pole jumpers							
	MCR, MC ...				MMHO	100547	10	
<p>Identification</p>	For use with:							
	MCR, MC ...	Labels (10 sheets of 260 labels)				EAT 260	100548	1
	MCR, MC ...	Labelling plate base. Plug-in labelling plate bases (50 pieces in one pack)				SPR	100549	1

Multipack. Series M and Series CL

To reduce the amount of waste packaging material and to save time during installation, we offer the opportunity to order contactors in a multipack without the individual packaging.

	Product	Type	Standard pack	Multipack (1)
	Minicontactors	MCOA...MC2A	20	40
	Contactors	CL00A...CL25A...	20	40
		CL03...CL45...	10	20

(1) The quantity ordered must be a multiple of the quantity in each multipack (with the same frame/size and coil voltage)

How to order

To order a multipack, add the suffix **MP** to the standard catalogue number

Example	Standard pack	Multipack
	MCOA310ATN	MCOA310ATN MP (40 pieces)
	CL03A400MJ	CL03A400MJ MP (20 pieces)

A

B

C

D

E

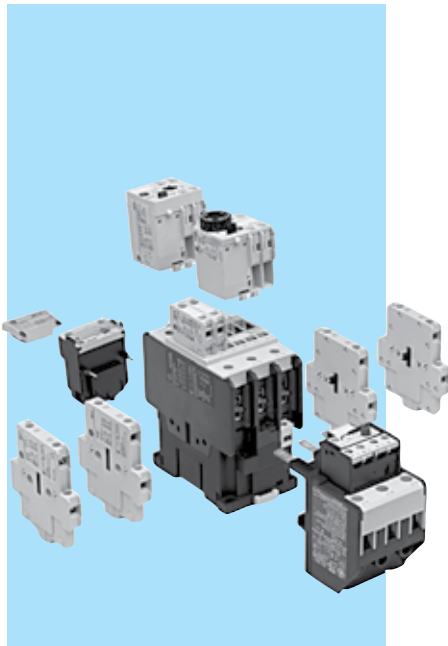
F

G

H

I

X



Three and four pole contactors 9 to 105A (AC3) 25 to 140A (AC1)

- Control circuit: Alternating current up to 690V
Direct current up to 440V
- Terminal numbering in accordance with EN 50005 and EN 50012
- Fixing by clipping onto 35mm DIN rail EN 50022-35 or by screws
- Screws protected against accidental contact in accordance with VDE 0106 T.100, VBG4
- Ring terminal version
- Three coil terminals
- Mounting possibilities of front/side instantaneous auxiliary contact blocks, timed auxiliary contact blocks, mechanical latch, transient suppressor block and interface modules
- Degree of protection: IP20 to CL00 ... CL02
IP10 to CL25 ... CL10
- Maximum number of auxiliary contacts: 4 for CL00 ... CL25
6 for CL04 ... CL45
8 for CL06 ... CL10

Standards

IEC/EN 60947-1	CSA 22.2/14
IEC/EN 60947-4-1	NFC 63-110
IEC/EN 60947-5-1	ASE 1025
EN 50005	VDE 0660/102
UL 508	CENELEC HD 419
NEMA ICS 1	
BS 5424 & 775	

Approvals



Order codes	pg. C.11
Auxiliary contact blocks	pg. C.15
Accessories	pg. C.15
Dimensions	pg. C.24

Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit. (other voltages on request)*

Alternating current (V). Dual-frequency coil

♦	1	2	9	3	4	5	6	7	13	8	15
AC	24	42	48	110	120	220	230	240	400	440	480
50/60Hz				115							

Alternating current (V).

♦	E	K	L	N	T	U	W	Y	Z
AC	32	127		220		380	415	500	660
50Hz				230		400		690	
AC		208	277	380	480	460	600		
60Hz									

Direct current (V)

For contactors type CL...D / Operating limits: 0.80 ... 1.10 x Us

♦	B	D	E	F	G	H	I	J	K	N	P	R	T	X
Voltage	12	24	36	42	48	60	72	110	120	220	230	240	250	440
										125				

Coil with electronic module for contactors CL...E (can also be used with alternating current)

♦	D	F	H	J	N	Y
Voltage	24	42	60	110	220	440
	28	48	72	125	250	

Direct current (V). Coil with wide voltage range (0.70 ... 1.30 x Us)

For contactors type CL...D

♦	WB	WD	WE	WF	WG	WH	WI	WJ	WK	WN	WP	WR	WT	WX
DC	12	24	33	42	48	60	72	110	125	220	230	240	250	440

Maximum number of add-on auxiliary contact blocks:

CL00D...CL02D : 2NO or 1NC
CL03D...CL45D : 1NO and 1NC
CL05D...CL10D : 4NO or 2NC
CL05E...CL10E : 4 cont. aux.

Coil with electronic module for contactors CL...E

♦	WD	WE	WF	WH	WJ	WN
Voltage	24	33	48	72	110	220

Different auxiliary contact configurations, contact us.

* Please Consult GE for non standard Coil Voltages



Three pole contactors. Screw terminal

Max.oper.current Non-inductive load AC1 A	Motors <440V, 3 ~ 50/60Hz AC3 A	Admissible power AC3				Electrical endurance Cat. AC3 Operations	Aux. contacts		Control circuit: Alternating current		Control circuit: Direct current		Control circuit: Coil with electronic module (AC/DC)	
		220V 230V	380V 400V	415V 440V	500V		•3 •4	•1 •2	Cat. no. ⁽¹⁾	Pack ⁽³⁾	Cat. no. ⁽¹⁾	Pack ⁽³⁾	Cat. no. ⁽¹⁾	Pack ⁽³⁾
25	9	2.2 3	4 5.5	4 5.5	5.5 7.5	2x10 ⁶	0 1 0	0 0 1	CL00A300T♦ CL00A310T♦ CL00A301T♦	5 5 5	Ref. no. see bottom	CL00D310T♦ CL00D301T♦	10 10	
25	12	3 4	5.5 7.5	5.5 7.5	7.5 10	2x10 ⁶	0 1 0	0 0 1	CL01A300T♦ CL01A310T♦ CL01A301T♦	5 5 5	Ref. no. see bottom	CL01D310T♦ CL01D301T♦	10 10	
32	18	4 5.5	7.5 10	7.5 10	10 13.5	1.7x10 ⁶	0 1 0	0 0 1	CL02A300T♦ CL02A310T♦ CL02A301T♦	5 5 5	Ref. no. see bottom	CL02D310T♦ CL02D301T♦	10 10	
45	25	7.5 10	11 15	11 15	15 20	1.2x10 ⁶	0 1 0	0 0 1	CL25A300T♦ CL03A300M♦ CL03A310M♦ CL03A301M♦	5 10 10 10	Ref. no. see bottom	CL25D300T♦ CL03D310M♦ CL03D301M♦	10 10 10	
45	25	7.5 10	12 16	12 16	15 20	2x10 ⁶	0 1 0	0 0 1	CL03A300M♦ CL03A310M♦ CL03A301M♦	10 10 10	Ref. no. see bottom	CL03D310M♦ CL03D301M♦	10 10	
60	32	9 12	16 22	16 22	18.5 25	2x10 ⁶	0 1 0	0 0 1	CL04A300M♦ CL04A310M♦ CL04A301M♦	10 10 10	Ref. no. see bottom	CL04D310M♦ CL04D301M♦	10 10	
60	40	11 15	18.5 25	22 30	25 34	2x10 ⁶	0 1	0 1	CL45A300M♦ CL45A311M♦ ⁽²⁾	10 10	Ref. no. see bottom	CL45D300M♦	10	
90	50	15 20	22 30	25 34	30 40	1.8x10 ⁶	0 1	0 1	CL06A300M♦ CL06A311M♦ ⁽²⁾	1 1	Ref. no. see bottom	CL06D300M♦	1	CL06E300M♦ 1
110	65	18.5 25	30 40	37 50	40 55	1.7x10 ⁶	0 1	0 1	CL07A300M♦ CL07A311M♦ ⁽²⁾	1 1	Ref. no. see bottom	CL07D300M♦	1	CL07E300M♦ 1
110	80	22 30	37 50	45 60	45 60	1.5x10 ⁶	0 1	0 1	CL08A300M♦ CL08A311M♦ ⁽²⁾	1 1	Ref. no. see bottom	CL08D300M♦	1	CL08E300M♦ 1
140	95	25 34	45 60	50 68	55 75	1.7x10 ⁶	0 1	0 1	CL09A300M♦ CL09A311M♦ ⁽²⁾	1 1	Ref. no. see bottom	CL09D300M♦	1	CL09E300M♦ 1
140	105	30 40	55 75	55 75	65 88	1.5x10 ⁶	0 1	0 1	CL10A300M♦ CL10A311M♦ ⁽²⁾	1 1	Ref. no. see bottom	CL10D300M♦	1	CL10E300M♦ 1
Spare coils							CL00 - CL25	LB1A ♦		5	LB1D ♦	5		
							CL03 - CL45	LB3A ♦		5	LB3D ♦	5		
							CL06 - CL10	LB4A ♦		5	LB4D ♦	1		
		coil + electronic module CL06E - CL10E										LB4E ♦	1	

- (1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.10).
- (2) Equipped with two blocks BCLF
- (3) Multipack, see C.9

3P and 4P contactors

A

B

C

D

E

F

G

H

I

X



Three pole contactors. Ring terminal

Contactors

A

B

C

D

E

F

G

H

I

X



Max.oper.current Non- inductive load AC1 A	Motors <440V, 3 ~ 50/60Hz AC3 A	Admissible power AC3				Electrical endurance Cat. AC3 Operations	Aux. contacts		Control circuit: Alternating current		Control circuit: Direct current		
		220V 230V	380V 400V	415V 440V	500V		•3 •4	•1 •2	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾	
25	9	2.2	4	4	5.5	2x10 ⁶	0	0	CL00A300R ♦	5			
		3	5.5	5.5	7.5		1	0	CL00A310R ♦	5	CL00D310R ♦	10	
							0	1	CL00A301R ♦	5	CL00D301R ♦	10	
25	12	3	5.5	5.5	7.5	2x10 ⁶	0	0	CL01A300R ♦	5			
		4	7.5	7.5	10		1	0	CL01A310R ♦	5	CL01D310R ♦	10	
							0	1	CL01A301R ♦	5	CL01D301R ♦	10	
32	18	4	7.5	7.5	10	1.7x10 ⁶	0	0	CL02A300R ♦	5			
		5.5	10	10	13.5		1	0	CL02A310R ♦	5	CL02D310R ♦	10	
							0	1	CL02A301R ♦	5	CL02D301R ♦	10	
45	25	7.5	11	11	15	1.2x10 ⁶	0	0	CL25A300R ♦	5		CL25D300R ♦	10
		10	15	15	20								
45	25	7.5	12	12	15	2x10 ⁶	0	0	CL03A300R ♦	10			
		10	16	16	20		1	0	CL03A310R ♦	10	CL03D310R ♦	10	
							0	1	CL03A301R ♦	10	CL03D301R ♦	10	
60	32	9	16	16	18.5	2x10 ⁶	0	0	CL04A300R ♦	10			
		12	22	22	25		1	0	CL04A310R ♦	10	CL04D310R ♦	10	
							0	1	CL04A301R ♦	10	CL04D301R ♦	10	
60	40	11	18.5	22	25	2x10 ⁶	0	0	CL45A300R ♦	10		CL45D300R ♦	10
		15	25	30	34								
90	50	15	22	25	30	1.8x10 ⁶	0	0	CL06A300R ♦	1		CL06D300R ♦	1
		20	30	34	40								
110	65	18.5	30	37	40	1.7x10 ⁶	0	0	CL07A300R ♦	1		CL07D300R ♦	1
		25	40	50	55								
110	80	22	37	45	45	1.5x10 ⁶	0	0	CL08A300R ♦	1		CL08D300R ♦	1
		30	50	60	60								
140	95	25	45	50	55	1.7x10 ⁶	0	0	CL09A300R ♦	1		CL09D300R ♦	1
		34	60	68	75								
140	105	30	55	55	65	1.5x10 ⁶	0	0	CL10A300R ♦	1		CL10D300R ♦	1
		40	75	75	88								


Spare coils

CL00 - CL25	LB1A ♦	5	LB1D ♦	5
CL03 - CL45	LB3A ♦	5	LB3D ♦	5
CL06 - CL10	LB4A ♦	5	LB4D ♦	1


(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.10).

(2) Multipack, see C.9


Four pole contactors. Screw terminal



Max.oper.current Non-inductive loads		Admissible power AC1				Electrical endurance AC1 Operations	Power contacts		Control circuit: Alternating current		Control circuit: Direct current		Control circuit: Coil with electronic module (AC/DC)	
AC1 A	AC3 A	220V 230V	380V 400V	415V 440V	500V		d	b	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾
		kW	kW	kW	kW			<i>Ref. no. see bottom</i>		<i>Ref. no. see bottom</i>		<i>Ref. no. see bottom</i>		
25	12	9.5	16.5	18	21.5	1.5x10 ⁶	4	0	CL01A400T♦	5	CL01D400T♦	10		
32	18	12	22	23	27.5	1.5x10 ⁶	4	0	CL02A400T♦	5	CL02D400T♦	10		
45	25	17	29	32	39	2x10 ⁶	4	0	CL03A400M♦	10	CL03D400M♦	10		
60	32	22.5	39.5	43	52	1.5x10 ⁶	4	0	CL04A400M♦	10	CL04D400M♦	10	CL05E400M♦ 1	
90	50	34	59	64	78	1.5x10 ⁶	4	0	CL05A400M♦	1	CL05D400M♦	1	CL07E400M♦ 1	
110	65	42	72.5	79	95	1.8x10 ⁶	4	0	CL07A400M♦	1	CL07D400M♦	1	CL09E400M♦ 1	
140	95	53	92	100	121	1.8x10 ⁶	4	0	CL09A400M♦	1	CL09D400M♦	1		



Max.oper.current Non-inductive loads		Admissible power AC3				Electrical endurance AC3 Operations	Power contacts		Control circuit: Alternating current		Control circuit: Direct current		Control circuit: Coil with electronic module (AC/DC)	
AC1 A	Motors <440V, 3~ 50/60Hz AC3 A	220V 230V	380V 400V	415V 440V	500V		d	b	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾
		kW HP	kW HP	kW HP	kW HP			<i>Ref. no. see bottom</i>		<i>Ref. no. see bottom</i>		<i>Ref. no. see bottom</i>		
25	12	3 4	5.5 7.5	5.5 7.5	7.5 10		2 2	CL01AB00T♦	5	CL01DB00T♦	5			
32	18	4 5.5	7.5 10	7.5 10	10 13.5		2 2	CL02AB00T♦	5	CL02DB00T♦	5			
45	25	7.5 10	12 16	12 16	15 20		2 2	CL03AB00M♦	10	CL03DB00M♦	10			
60	32	9 12	16 22	16 22	18.5 25		2 2	CL04AB00M♦	10	CL04DB00M♦	10			
90	40	11 15	18.5 25	22 30	25 34		2 2	CL05AB00M♦	1	CL05DB00M♦	1	CL05EB00M♦	1	
110	65	18.5 25	30 40	37 50	40 55		2 2	CL07AB00M♦	1	CL07DB00M♦	1	CL07EB00M♦	1	
110	80	22 30	37 50	45 60	45 60		2 2	CL08AB00M♦	1	CL08DB00M♦	1	CL08EB00M♦	1	



Spare coils	Model	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾	Pack ⁽²⁾
	CL00 - CL25	LB1A ♦	5	LB1D ♦	5		
	CL03 - CL45	LB3A ♦	5	LB3D ♦	5		
	CL05A - CL08A	LB4A ♦	5	LB4D ♦	1		
	Coil + Electronic module CL05E - CL08E	LB4E ♦	1			LB4E ♦	1

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.10).
 (2) Multipack, see C.9

Four poles. Ring terminal



Max.oper.current Non-inductive load		Admissible power AC1				Electrical endurance	Power contacts		Control circuit: Alternating current		Control circuit: Direct current	
AC1 A	AC3 A	220V 230V	380V 400V	415V 440V	500V		Cat. AC1 Operations	d	b	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾
25	12	9.5	16.5	18	21.5	1.5x10 ⁶		4	0	Ref. no. see bottom	5	Ref. no. see bottom
32	18	12	22	23	27.5	1.5x10 ⁶	4	0	Ref. no. see bottom	5	Ref. no. see bottom	10
45	25	17	29	32	39	2x10 ⁶	4	0	Ref. no. see bottom	10	Ref. no. see bottom	10
60	32	22.5	39.5	43	52	1.5x10 ⁶	4	0	Ref. no. see bottom	10	Ref. no. see bottom	10
90	50	34	59	64	78	1.5x10 ⁶	4	0	Ref. no. see bottom	1	Ref. no. see bottom	1
110	65	42	72.5	79	95	1.8x10 ⁶	4	0	Ref. no. see bottom	1	Ref. no. see bottom	1
140	95	53	92	100	121	1.8x10 ⁶	4	0	Ref. no. see bottom	1	Ref. no. see bottom	1

Max.oper.current Non-inductive load		Admissible power AC3				Electrical endurance	Power contacts		Control circuit: Alternating current		Control circuit: Direct current	
AC1 A	Motors <440V, 3~ 50/60Hz AC3 A	220V 230V	380V 400V	415V 440V	500V		Cat. AC1 Operations	d	b	Cat. no. ⁽¹⁾	Pack ⁽²⁾	Cat. no. ⁽¹⁾
25	12	3 4	5.5 7.5	5.5 7.5	7.5 10	1.5x10 ⁶		2	2	Ref. no. see bottom	5	Ref. no. see bottom
32	18	4 5.5	7.5 10	7.5 10	10 13.5	1.5x10 ⁶	2	2	Ref. no. see bottom	5	Ref. no. see bottom	5
45	25	7.5 10	12 16	12 16	15 20	2x10 ⁶	2	2	Ref. no. see bottom	10	Ref. no. see bottom	10
60	32	9 12	16 22	16 22	18.5 25	1.5x10 ⁶	2	2	Ref. no. see bottom	10	Ref. no. see bottom	10




Spare coils





CL00 - CL25	LR1A ♦	5	LR1D ♦	5
CL03 - CL45	LR3A ♦	5	LR3D ♦	5
CL05A - CL08A	LR4A ♦	5	LR4D ♦	1

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.10).
 (2) Multipack, see C.9

Auxiliary contact blocks

Instantaneous		Number of contacts	Contacts				Type	Time	Cat. no.	Ref. no.	Pack
			•3 •4	•1 •2	•7 •8	•5 •6					
	Frontal mounting	Terminal: screw									
		1	1	0	0	0			BCLF10	104700	10
		1	0	1	0	0			BCLF01	104701	10
		1	0	0	1	0			BCLF10G	104702	10
		1	0	0	0	1			BCLF01G	104703	10
		Terminal: ring terminal									
1	1	0	0	0			BCRF10	108901	10		
1	0	1	0	0			BCRF01	108902	10		
	Side mounting	Terminal: screw									
		2	2	0	0	0			BCLL20	104706	10
		2	1	1	0	0			BCLL11	104707	10
		For combinations of more than 4 front-mounted and 2 side-mounted auxiliary contact blocks									
		2	2	0	0	0			BRLL20	104704	10
		2	1	1	0	0			BRLL11	104705	10
2	0	2	0	0			BRLL02	106622	10		
Pneumatic timer											
	Front mounting	Terminal: screw									
		2	0	0	1	1	Delay ON	0.1 - 30 sec.	BTLF30C	104709	10
		2	0	0	1	1	Delay ON	1 - 60 sec.	BTLF60C	104710	10
		2	0	0	1	1	Delay OFF	0.1 - 30 sec.	BTLF30D	104711	10
		2	0	0	1	1	Delay OFF	1 - 60 sec.	BTLF60D	104712	10
		Terminal: ring terminal									
		2	0	0	1	1	Delay ON	0.1 - 30 sec.	BTRF30C	108903	10
		2	0	0	1	1	Delay ON	1 - 60 sec.	BTRF60C	108904	10
		2	0	0	1	1	Delay OFF	0.1 - 30 sec.	BTRF30D	108905	10
		2	0	0	1	1	Delay OFF	1 - 60 sec.	BTRF60D	108906	10
Seaking cover protection for pneumatic timer								BTLFX	113001	5	

Accessories

		Number of contacts	Contacts				For use with:	Cat. no. ⁽¹⁾	Ref. no.	Pack	
			•3 •4	•1 •2	•7 •8	•5 •6					
	Interlock	Mechanical									
		-	-	-	-	-	CL00 ... CL10	BELA	104723	5	
		Mech./ electrical									
		2	0	2	-	-	CL00 ... CL10	BELA02	104724	5	
Support interlock											
Only for direct current contactors						CL00D...CL10D	SBELA	101017	5		
	Mechanical latch blocks	Frontal mounted to the contactor						CL00 ... CL10	RMLF ♦	see bottom	10
		♦	D	G	HC	J	N	U	Y		
		50Hz	24, 32	42, 48		110, 115, 120, 127	220, 230, 240	380, 400, 415, 440, 480	500, 660/690		
60Hz	24, 32	48, 60		110, 115, 120, 127	208, 220, 240, 277	380, 400, 415, 440, 480	600				
DC	24, 32, 36	42, 48	60, 72	110, 120, 125	220, 230, 240, 250	440					

1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.10).



Accessories



Transient voltage suppressor block

For use with:	Type	Control circuit	Ue	Cat. no.	Ref. no.	Pack
Fixation to the coil terminals, that allows simultaneous use with the auxiliary contact blocks.						
CL00 ... CL45	R/C	AC	12V ... 48V	BSLR2G	104713	10
CL00 ... CL45	R/C	AC	50V ... 127V	BSLR2K	104714	10
CL00 ... CL45	R/C	AC	130V ... 250V	BSLR2R	104715	10
CL05A ... CL10A	R/C	AC	12V ... 48V	BSLR3G	104716	10
CL05A ... CL10A	R/C	AC	50V ... 127V	BSLR3K	104717	10
CL05A ... CL10A	R/C	AC	130V ... 250V	BSLR3R	104718	10
CL ... D	Diode	DC	12V ... 600V	BSLDZ	104719	10
CL00 ... CL10	Varistor	AC / DC	24V ... 48V	BSLV3G	104720	10
CL00 ... CL10	Varistor	AC / DC	50V ... 127V	BSLV3K	104721	10
CL00 ... CL10	Varistor	AC / DC	130V ... 250V	BSLV3R	104722	10
CL00 ... CL10	Varistor	AC / DC	277V ... 500V	BSLV3U	110836	10



Electronic timer module

For use with:	Control circ.	Type	Time	Cat. no.	Ref. no.	Pack
Fixation to the coil terminals, that allows simultaneous use with the auxiliary contact blocks.						
CL00 ... CL10	24-250V AC/DC	delay ON	0.1 - 2 sec.	BETL02C	113602	5
CL00 ... CL10	24-250V AC/DC	delay ON	1.5 - 45 sec.	BETL45C	113603	5
CL00 ... CL10	24-250V AC/DC	delay OFF	0.1 - 2 sec.	BETL02D	113604	5
CL00 ... CL10	24-250V AC/DC	delay OFF	1.5 - 45 sec.	BETL45D	113605	5

Accessories

	For use with:		Cat. no.	Ref. no.	Pack
Identification	CL00 ... CL10	Sheets of labels (sheets of 260 labels each)	EAT 260	100548	1
	CL00 ... CL10	Labelling plate base (50 pieces in one pack)	SPR	100549	1
Pole terminal protector IPXXB	CL03 ... CL04		PTP04	113850	8
	CL45		PTP45	113851	6
	CL05 ... CL08		PTP08	113852	8
	CL09 ... CL10		PTP10	113853	8

Spares

	For use with:	Number of sets	Type	Cat. no.	Ref. no.	Pack
Contact kits	CL00	3	NO	V31200B	104738	1
	CL01_3 /CL01_4	3	NO	V31201B	104739	1
	CL01_B	4	2NO-2NC	VB1201B	104740	1
	CL02_3 /CL02_4	3	NO	V31202B	104741	1
	CL02_B	4	2NO-2NC	VB1202B	104742	1
	CL25_3	3	NO	V31225B	104757	1
	CL03_3 /CL03_4	3	NO	V31203B	104743	1
	CL03_B	4	2NAO-2NC	VB1203B	133170	1
	CL04_3 /CL04_4	3	NO	V31204B	104745	1
	CL04_B	4	2NO-2NC	VB1204B	133885	1
	CL45_3	3	NO	V31245B	104758	1
	CL05_4	4	NO	V31205B	104747	1
	CL05_B	4	2NO-2NC	VB1205B	104748	1
	CL06	3	NO	V31206B	104749	1
	CL07_3 /CL07_4	3	NO	V31207B	104750	1
	CL07_B	4	2NO-2NC	VB1207B	104751	1
	CL08_3 /CL08_4	3	NO	V31208B	104752	1
	CL08_B	4	2NO-2NC	VB1208B	104753	1
	CL09	3	NO	V31209B	104754	1
	CL10	3	NO	V31210B	104755	1

A

B

C

D

E

F

G

H

I

X





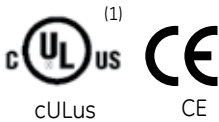
Three and four pole contactors 150 to 825A (AC3) 200 to 1250A (AC1)

- Control circuit: Alternating current up to 690V
Direct current up to 500V
- Degree of protection IP00 (IPxxB with accessories)
- CK07...CK13: auxiliary and coil terminals originally protected against accidental contacts
Protection for power contacts on request (see accessories)
- Terminals protected against accidental contacts according to VDE 0106 T.100, VBG4
- CK_ _E_with electronic module suitable for DC and AC. (50/60Hz)
- CK contactors always provided with one auxiliary contact block BCLL11 (1NO+1NC)

Standards

IEC/EN 60947-1	CSA 22.2/14
IEC/EN 60947-4-1	CENELEC HD 419
IEC/EN 60947-5-1	NFC 63-110
EN 50005	ASE 1025
UL 508	UNE 20109
NEMA ICS 1	VDE 0660/102
BS 5424 & 775	

Approvals



Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit. (other voltages on request)*

Alternating current (V)

Three-pole contactors: CK75CA3..., CK08CA3..., CK85BA3...
Four-pole contactors: CK07BA4..., CK08BA4...

♦	C	D	F	G	H	I	J	K	M	N	R	S	T	U	V	W	X	Y	Z
50Hz	24	42	48				110	127		220	240			380		415	440	500	660
								230					400					690	
60Hz	24		48		110	120			220	277		240	380	480	440				600

Alternating current (V). Dual-frequency coil

Three-pole contactors: CK75CA3..., CK08CA3..., CK85BA3...
Four-pole contactors: CK07BA4..., CK08BA4...

♦	1	2	3	6	13
50/60Hz	24	48	110	230	400

Alternating current (V)

Three-pole contactors: CK13BA3...
Four-pole contactors: CK13BA4...

♦	J	N	U	Y	Z
50/60Hz	110	220	380	480	600
		240	440	500	660

Control circuit with rectifier bridge

♦	J	N	U
50Hz	110	220	380
	230	400	
60Hz	120	240	480

Direct current (V). With electronic module (0.7 ... 1.3 x Us)

Three-pole contactors: CK75CE3..., CK08CE3....

♦	WD	WE	WF	WH	WJ	WN
Voltage	24	33	48	72	110	220

Alternating c. / Direct c. (V). With electronic module (0.8 ... 1.10 x Us)

Three-pole & four-pole contactors: CK E.....

♦	D	F	J	N	U	Y
Voltage	24	42	110	220	380	440
		28	48	127	250	415
				500		

(1) CK13 not UL

* Please Consult GE for non standard Coil Voltages

Order codes	pg. C.19
Auxiliary contact blocks	pg. C.20
Accessories & Spares	pg. C.21
Dimensions	pg. C.30



Three pole contactors



Max.oper.current		Admissible power AC3					Electrical endurance	Control circuit: Alternating current		Control circuit: A.C. / D.C.	
Non-inductive loads	Motors <440V, 3 ~ 50/60Hz	220V 230V	380V 400V	415V 440V	440V 440V	500V		Cat. no. (1)	Pack	Cat. no. (1)	Pack
AC1 A	AC3 A	kW HP	kW HP	kW HP	kW HP	kW HP	Cat. AC3 Operations	Ref. no. see bottom		Ref. no. see bottom	
250	150	45 60	75 100	80 108	80 108	100 135	1.7x10 ⁶	CK75CA311 ♦	1	CK75CE311 ♦	1
250	185	55 75	90 125	100 135	100 135	110 150	1.2x10 ⁶	CK08CA311 ♦	1	CK08CE311 ♦	1
315	205	65 88	110 150	125 170	125 170	132 180	1.7x10 ⁶	CK85BA311 ♦	1	CK85BE311 ♦	1
315	250	75 100	132 180	132 180	132 180	160 220	1.5x10 ⁶			CK09BE311 ♦	1
450	309	90 125	160 220	160 220	185 250	200 270	1.1x10 ⁶			CK95BE311 ♦	1
600	420	125 170	220 300	230 312	230 312	300 405	1x10 ⁶			CK10CE311 ♦	1
700	550	160 220	280 380	315 425	315 425	400 540	0.8x10 ⁶			CK11CE311 ♦	1
1000	700	220 300	375 510	400 540	425 540	480 650	0.7x10 ⁶			CK12BE311 ♦	1
1250	825	250 340	450 610	450 610	450 610	500 680	0.7x10 ⁶ (2)	CK13BA311 ♦	1		

Spare coil

	CK75CA3 ... CK08CA3	C12168 ♦	1
	CK85BA3	C04255 ♦	1
	CK13BA3	C08998 ♦	1
	Control circuit with incorporated rectifier bridge CK13BA3	C09120 ♦	1

Coil	CK75CE3 ... CK08CE3	KB4E ♦	1
	CK85BE3 ... CK95BE3	KB5E ♦	1
	CK12BE3	KB6E ♦	1
	CK10CE3 ... CK11CE3	KB7E ♦	1
Electronic module	CK75CE3 ... CK08CE3	KM4E ♦	1
	CK85BE3 ... CK95BE3	KM5E ♦	1
	CK12BE3	KM6E ♦	1
	CK10CE3 ... CK11CE3	KM7E ♦	1

- (1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.18).
 (2) CK13 non allow the aux. block in right side.

3P and 4P contactors

A

B

C

D

E

F

G

H

I

X



Four pole contactors



Max.oper. current	Admissible power							Electrical endurance	Control circuit: Alternating current		Control circuit: A.C. / D.C.		
	AC3		AC1						Cat. AC3	Cat. no. ⁽¹⁾	Pack	Cat. no. ⁽¹⁾	Pack
	380V 400V		220V 230V	380V 400V	415V	440V	500V						
Non-inductive loads AC1 A	kw	A	kw	kw	kw	kw	kw	Operations	Ref. no. see bottom		Ref. no. see bottom		
200	55	105	76	131	143	151	173	1x10 ⁶	CK07BA41 ♦	1	CK07BE411 ♦	1	
325	100	185	123	214	233	247	281	0.6x10 ⁶	CK08BA411 ♦	1	CK08BE411 ♦	1	
400	132	250	152	263	287	304	346	0.6x10 ⁶			CK09BE411 ♦	1	
500	160	309	191	329	359	380	415	0.6x10 ⁶			CK95BE411 ♦	1	
600	220	408	228	395	431	456	519	0.5x10 ⁶			CK10CE411 ♦	1	
700	280	530	266	460	503	533	606	0.4x10 ⁶			CK11CE411 ♦	1	
1000	375	680	381	658	719	762	866	0.4x10 ⁶			CK12BE411 ♦	1	
1250	450	800	476	822	898	952	1082	0.6x10 ⁶ (2)	CK13BA411 ♦	1			

Spare coil

	CK07BA4	C04255 ♦	1	
	CK08BA4	C04787 ♦	1	
	CK13BA4	C08998 ♦	1	
	Control circuit with incorporated rectifier bridge CK13BA4	C09120 ♦	1	
Coil	CK07BE4			KB5E ♦ 1
	CK08BE4 ... CK95BE4, CK12BE4			KB6E ♦ 1
	CK10CE4 ... CK11CE4			KB7E ♦ 1
Electronic module	CK07BE4			KM5E ♦ 1
	CK08BE4 ... CK95BE4, CK12BE4			KM6E ♦ 1
	CK10CE4 ... CK11CE4			KM7E ♦ 1

(1) To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit (see C.18).
 (2) CK13 non allow the aux. block in right side.



Auxiliary instantaneous contact block



Side mounting


Number of contacts	Contacts				Cat. no.	Ref. no.	Pack
	•3 •4	•1 •2	•7 •8	•5 •6			
2	2	0	0	0	BCLL20	104706	10
2	1	1	0	0	BCLL11	104707	10
combinations of more than 2 blocks							
2	2	0	0	0	BRLl20	104704	10
2	1	1	0	0	BRLl11	104705	10
2	0	2	0	0	BRLl02	106622	10

Accessories

	For use with:	Mounting	Voltage	Ue	Cat. no.	Ref. no.	Pack	
 <p>Transient voltage suppressor</p>	Fixation to the coil terminals, that allows simultaneous use with the auxiliary contact blocks.							
	CK75 ... CK08		AC	24V - 48V	BSLR3G	104716	10	
	CK75 ... CK08		AC	50V - 127V	BSLR3K	104717	10	
	CK75 ... CK08		AC	130V - 240V	BSLR3R	104718	10	
	CK75 ... CK08		AC	227V - 500V	BSLV3U	110836	10	
	CK85 ... CK13		AC	24V	KRC24	104760	10	
	CK85 ... CK13		AC	260V	KRC48/260	104761	10	
	CK85 ... CK13		AC	415V	KRC380/415	104762	10	
	 <p>Mechanical interlock</p>	CK07B ... CK12	Horizontal			BEKH	104763	1
		CK07B ... CK95	Vertical			BEKVS 1	104786	1
CK10C ... CK12B		Vertical			BEKVA 1	104785	1	
CK13		Vertical			BEKV	104764	1	
<p>Pole terminal protection</p>	CK75C ... CK08C	1 pole. VDE0106			CM1CA5F	105200	1	
	CK85B ... CK12B	1 pole. VDE0106	Contactors 3P		C09476	104766	6	
	CK08B ... CK12B	1 pole. VDE0106	Contactors 4P		C09479	204800	8	
	CK75C ... CK08C	1 pole IPXXB			PTPCK75	103747	1 ⁽¹⁾	
	CK85B ... CK95B	1 pole IPXXB			PTPCK95	103748	3 ⁽²⁾	
	CK10C ... CK12B	1 pole IPXXB			PTPCK11	103749	1 ⁽¹⁾	

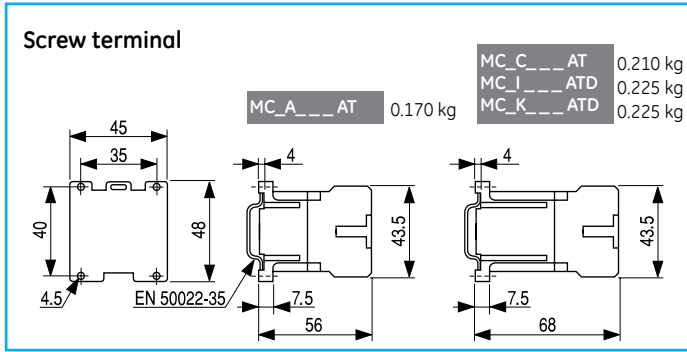
(1) One phase
(2) Three pole

Spares

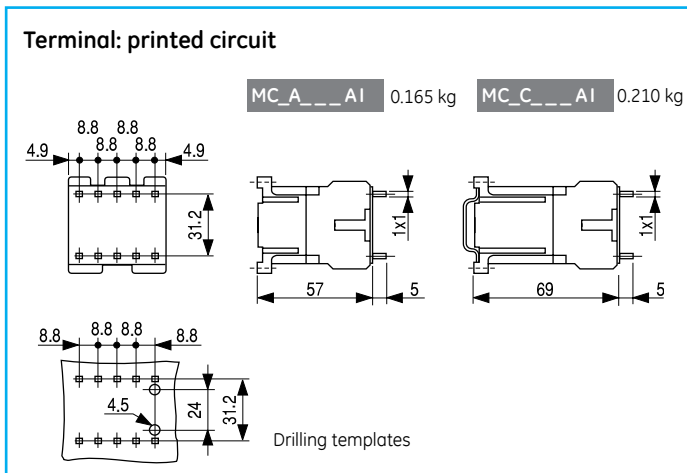
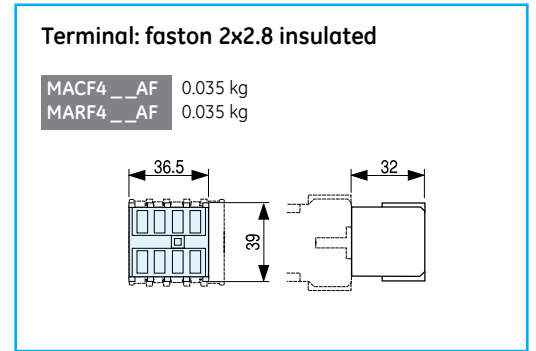
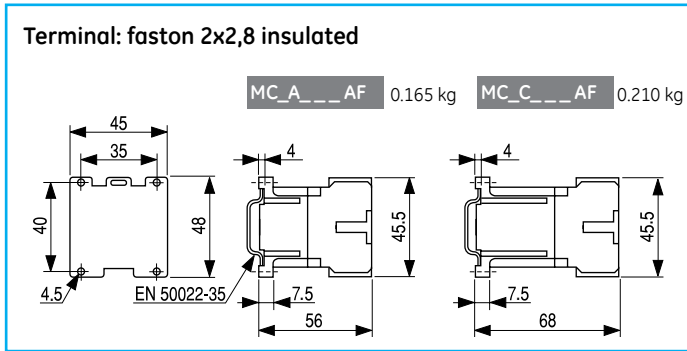
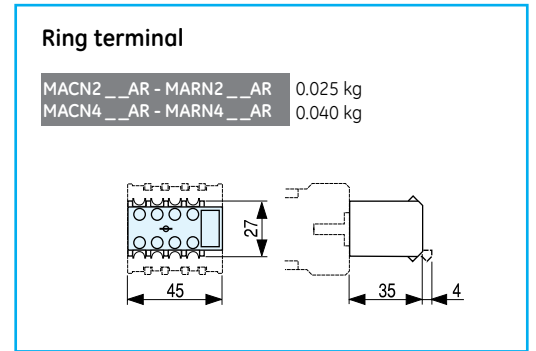
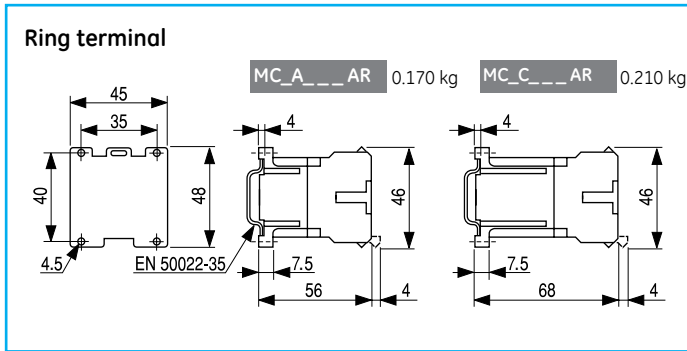
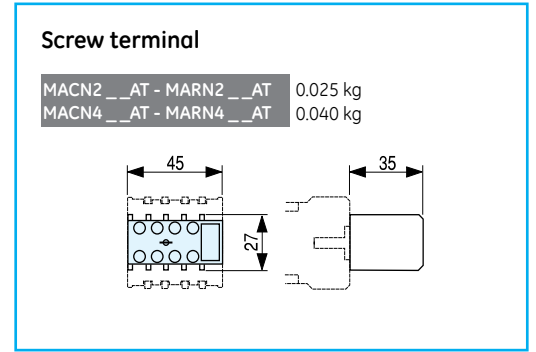
	For use with:	Type		Cat. no.	Ref. no.	Pack
 <p>Contact kits</p>	One set consists of two fixed contacts, one moving contact and accessory parts. When contact replacement is needed, it is recommended to replace all the contacts at the same time.					
	CK07B	NA		V1107BA	113612	1
	CK75C	NA		V1175CA	113613	1
	CK08C	NA		V1108CA	113614	1
	CK08B	NA	Contactors 4P	V1108BA	113505	1
	CK85B	NA		V1185BA	113615	1
	CK09B	NA		V1109BA	113616	1
	CK09B	NA	Contactors 4P	V1109BA	113899	1
	CK95B	NA		V1195BA	113617	1
	CK10C	NA		V1110CE	113618	1
	CK11C	NA		V1111CE	113619	1
	CK12B	NA		V1112BA	113620	1
	CK13B	NA		V1113BA	113621	1

Dimensional drawings

Three and four pole minicontactors



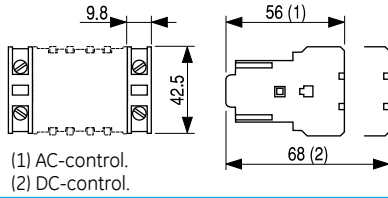
Auxiliary contact block. Lateral mounting



Auxiliary contact blocks. Lateral mounting

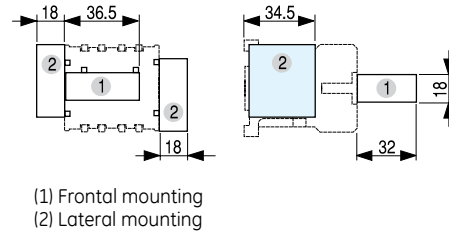
Screw terminal

MACL__AT 0.013 kg
MARL__ATS 0.013 kg



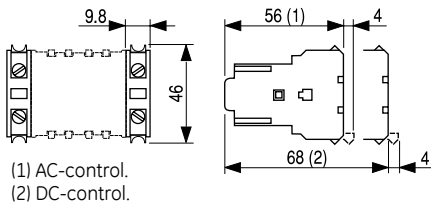
Electronic timer block

MREBC_0AC2 0.040 kg



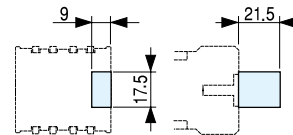
Ring terminal

MACL__AR 0.013 kg
MARL__ARS 0.013 kg



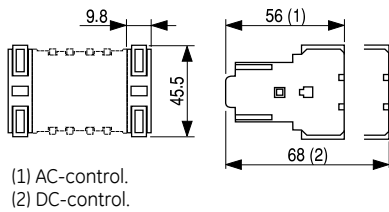
Voltage suppressor block

MP0A_AE 0.010 kg
MPOC_AE3 0.010 kg



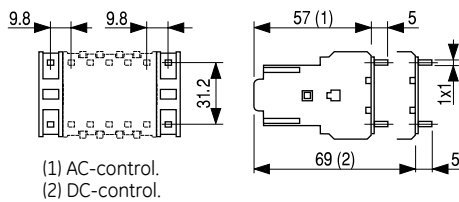
Terminal: faston 2x2.8 insulated

MACL__AF 0.009 kg
MARL__AFS 0.009 kg



Terminal: printed circuit

MACL__AI 0.009 kg
MARL__AIS 0.009 kg



C

D

E

F

G

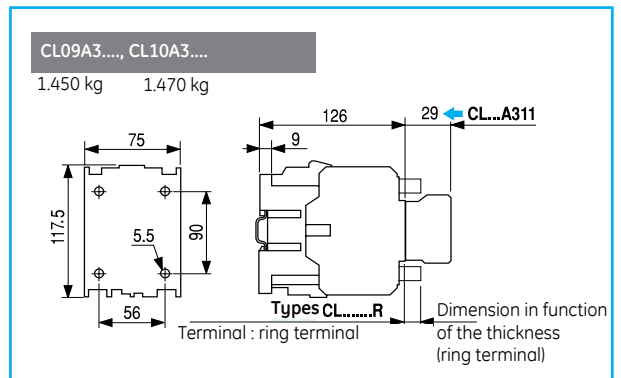
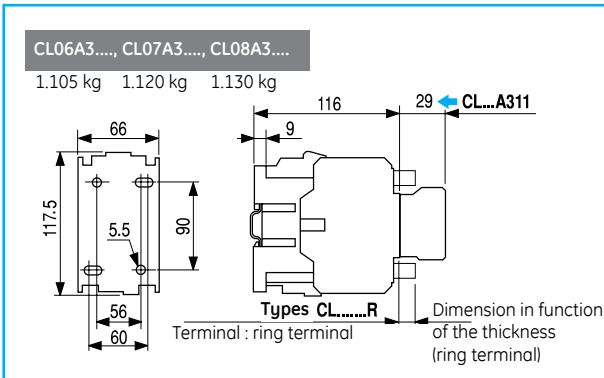
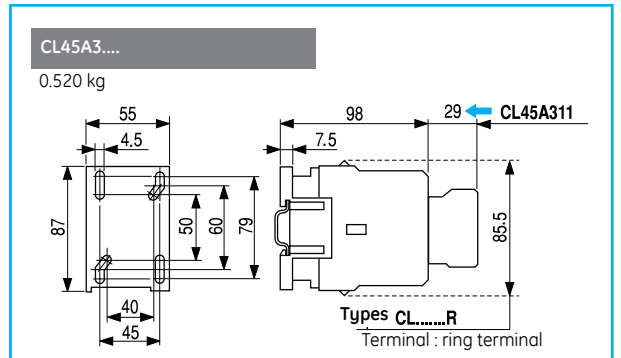
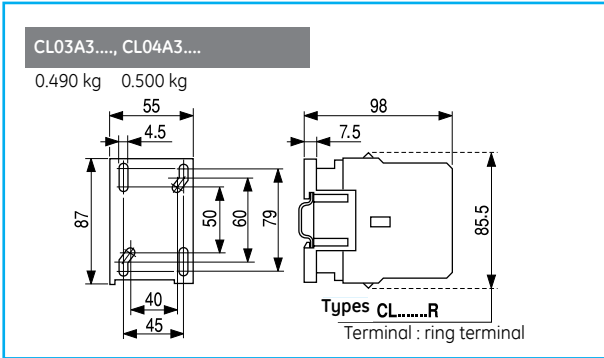
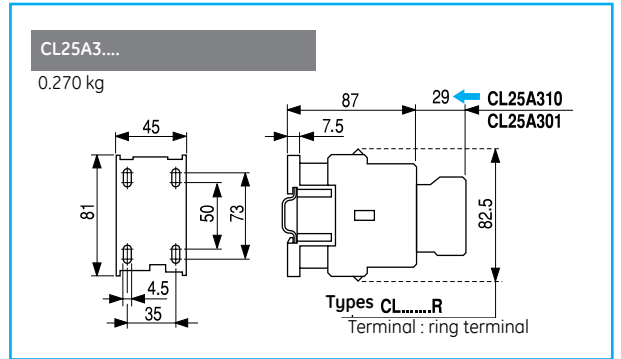
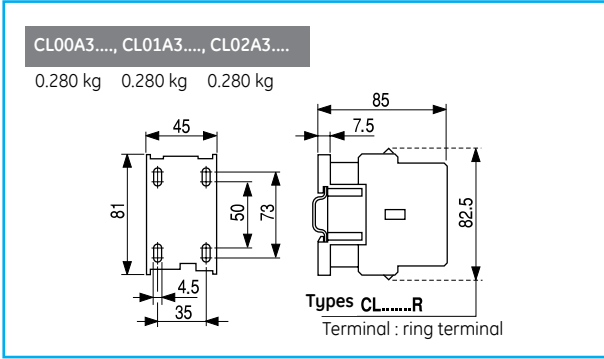
H

I

X

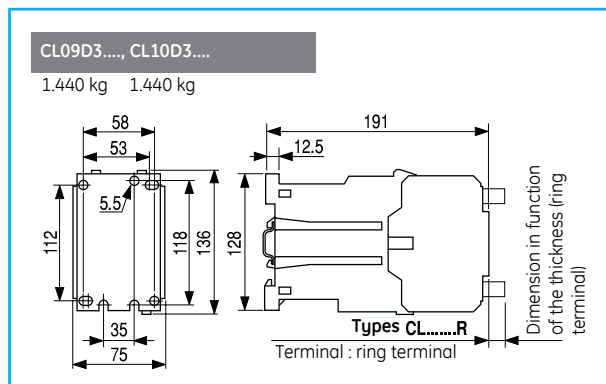
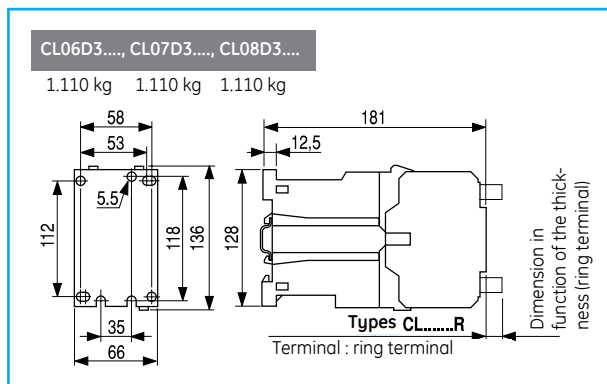
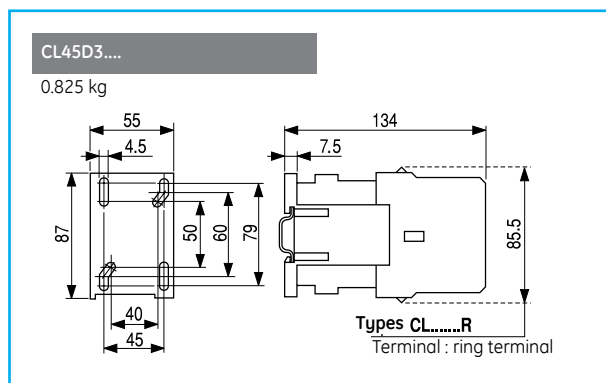
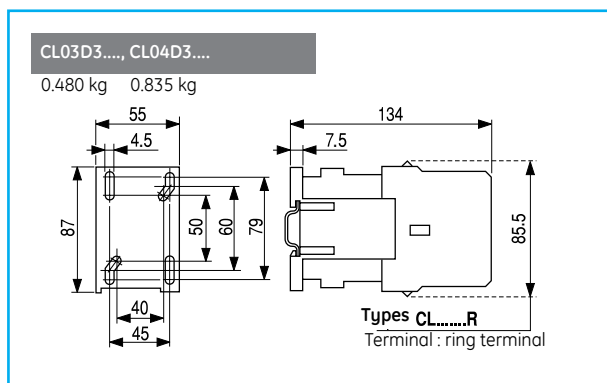
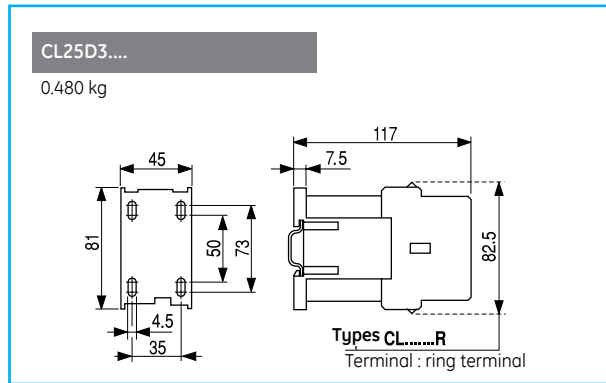
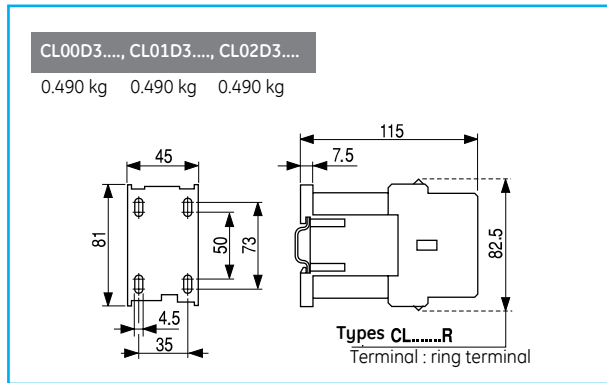
Dimensional drawings. Three pole contactors

Alternating current

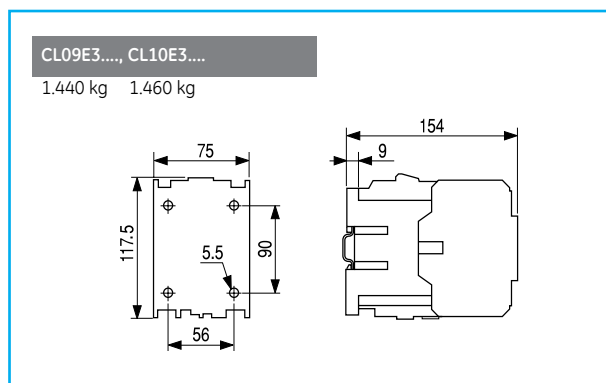
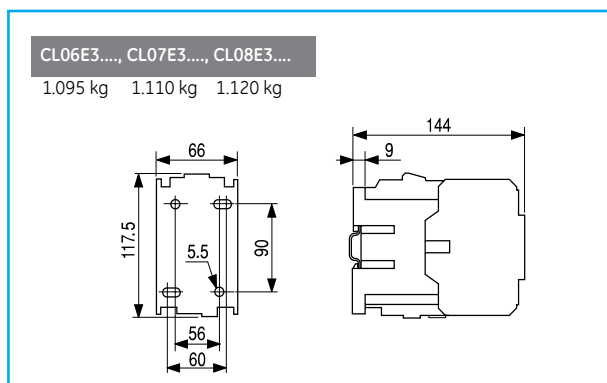


Three pole contactors

Direct current

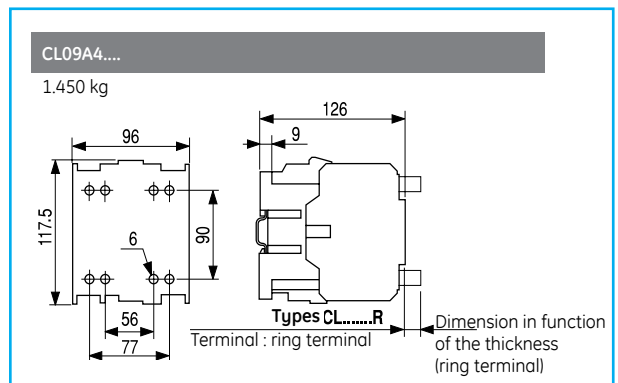
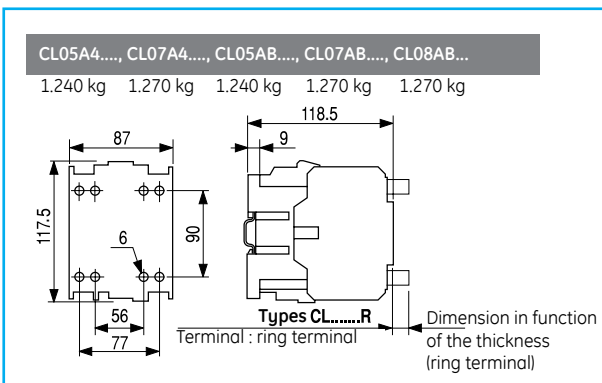
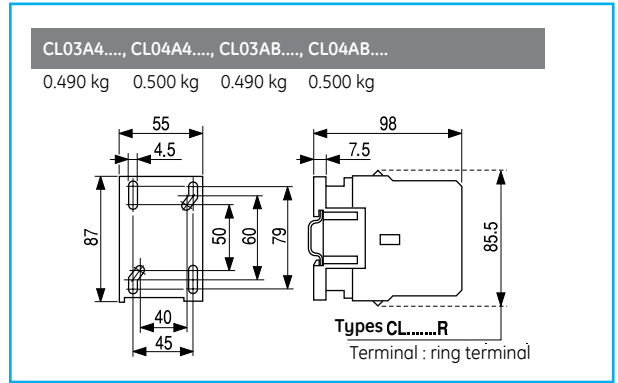
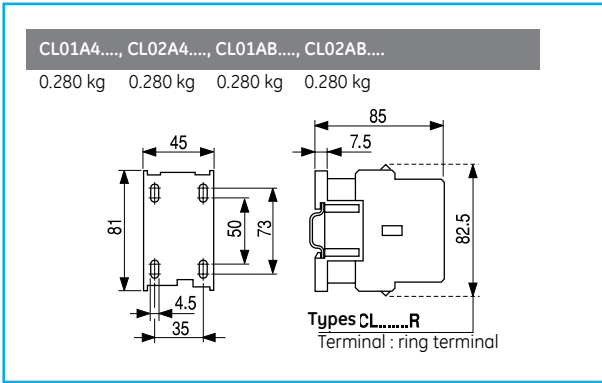


Coil with electronic module

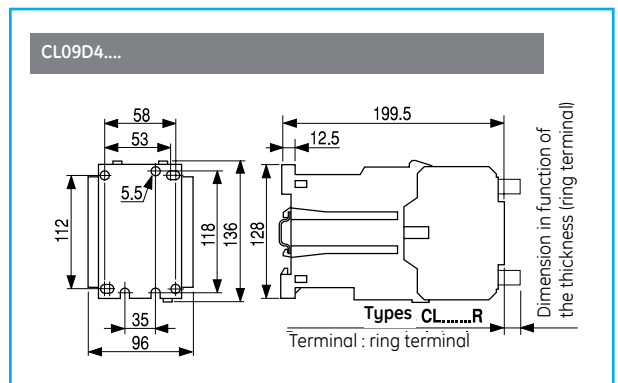
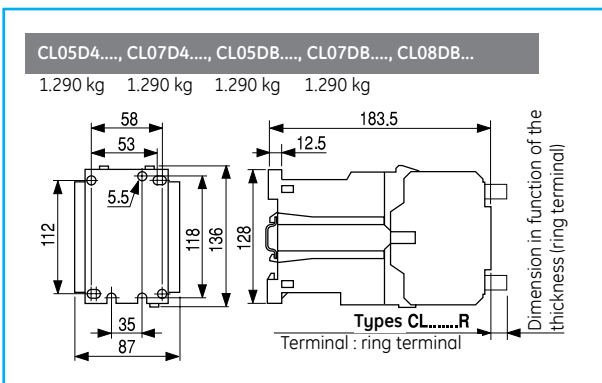
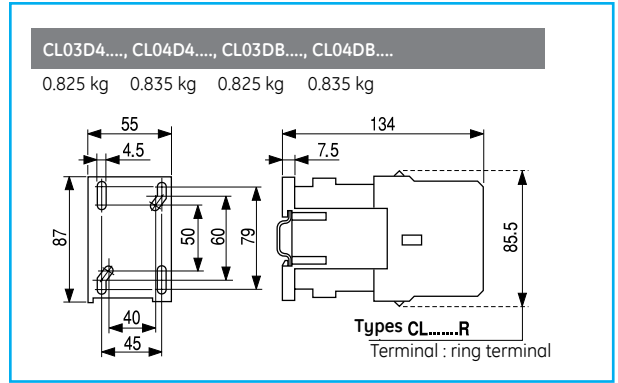
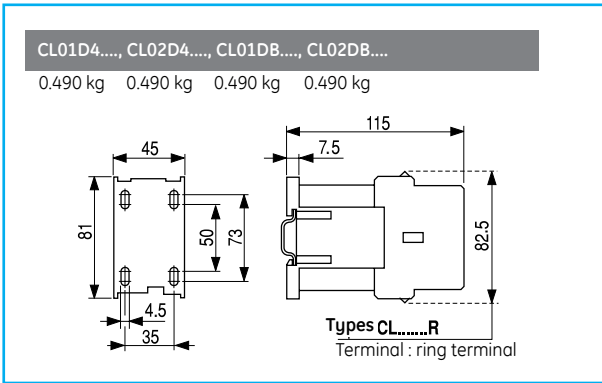


Dimensional drawings. Four pole contactors

Alternating current

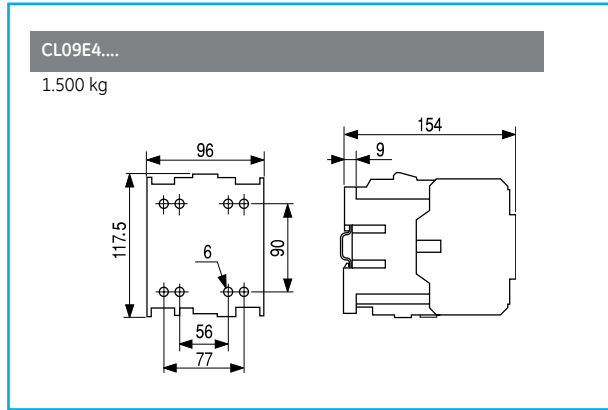
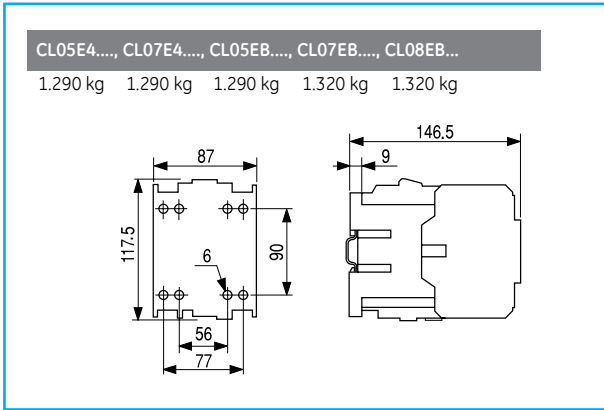


Direct current



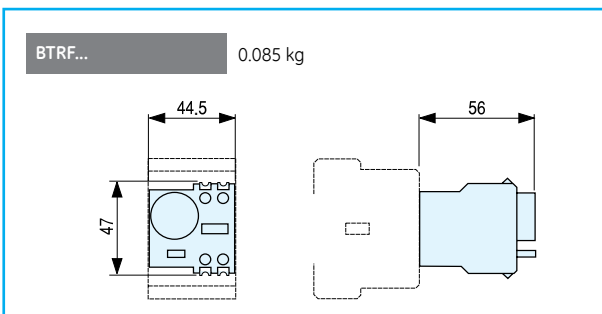
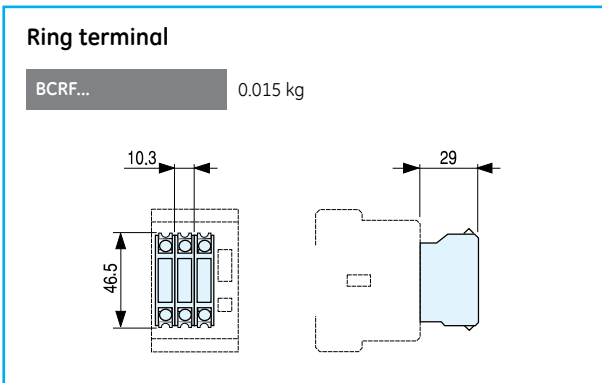
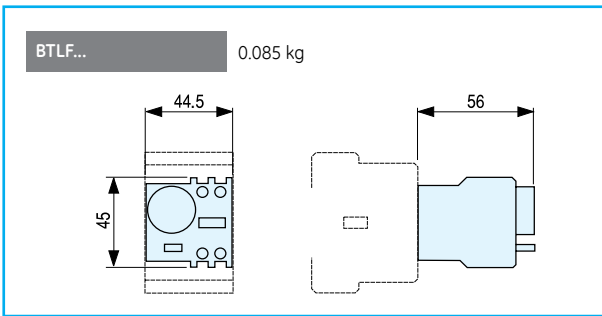
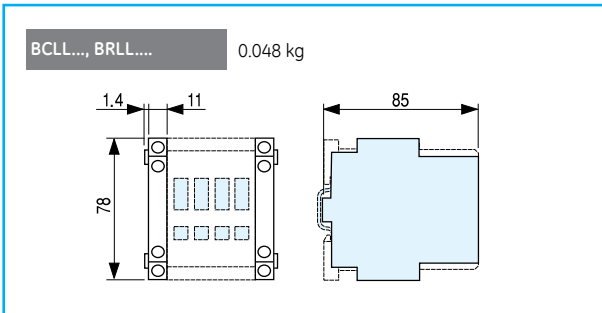
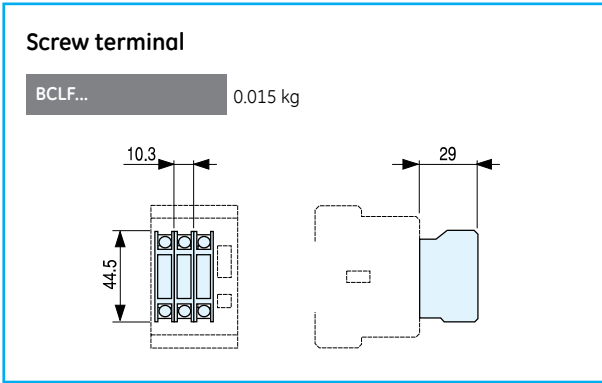
Four pole contactors

Coil with electronic module

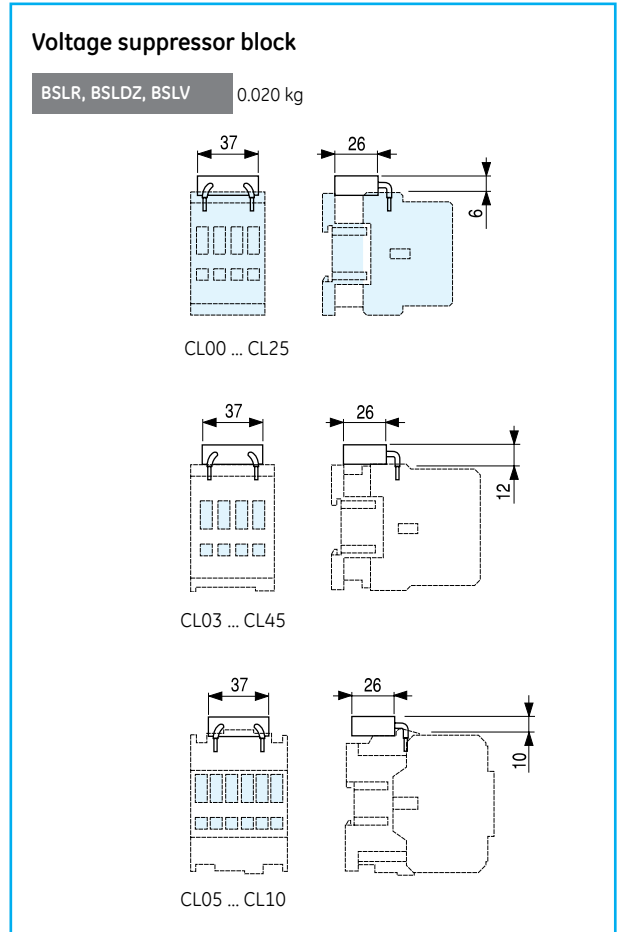


Dimensional drawings

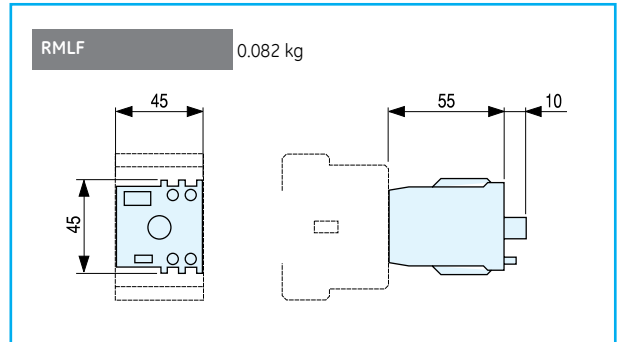
Auxiliary contact blocks



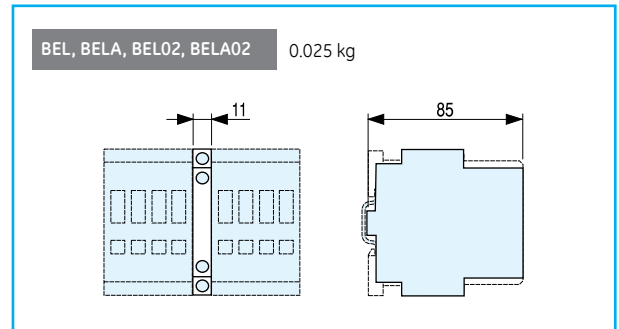
Accessories



Mechanical latch block

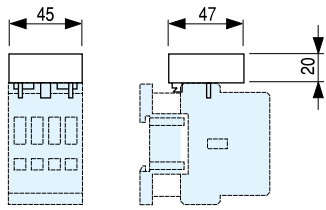


Mechanical / mechanical-electrical interlock

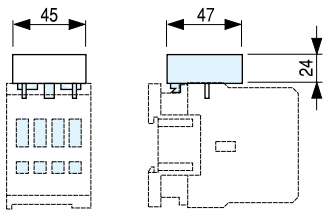


Electronic timer block

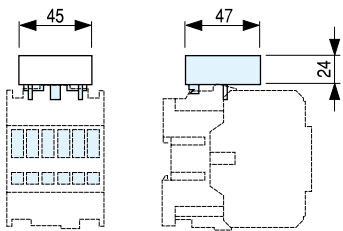
BETL02, BETL45 0.040 kg



CL00 ... CL25



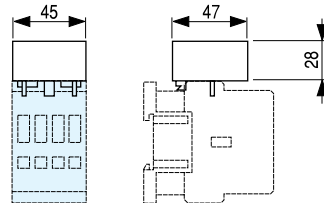
CL03 ... CL45



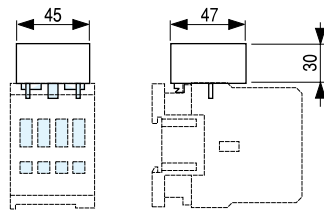
CL05 ... CL10

Interface modules

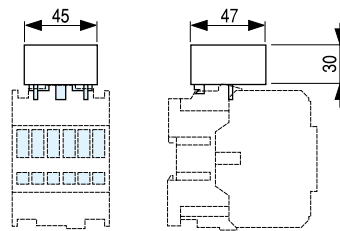
IMR..., IMRF..., IMSSD, IMAMS 0.020 kg



CL00 ... CL25



CL03 ... CL45



CL05 ... CL10

A

B

C

D

E

F

G

H

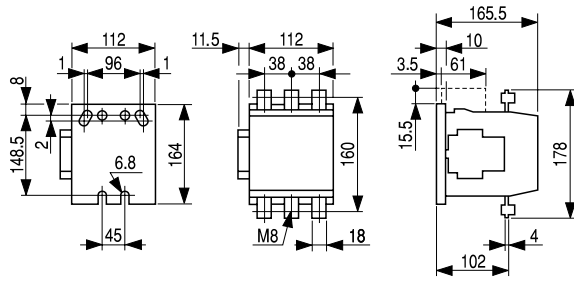
I

X

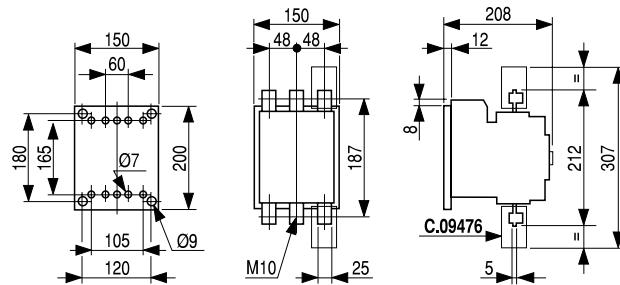
Dimensional drawings

Three pole contactors

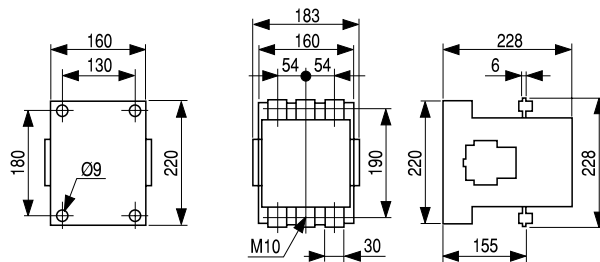
CK75C 3.500 kg
CK08C 3.500 kg



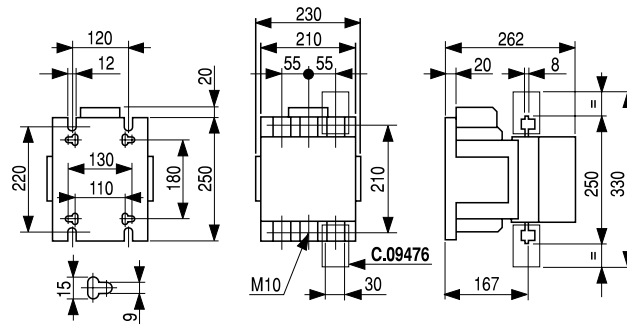
CK85B 6.100 kg
CK09B 6.200 kg
CK95B 6.300 kg



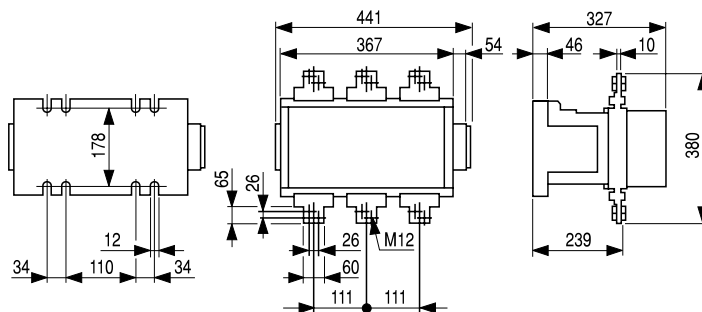
CK10C 11.00 kg
CK11C 11.00 kg



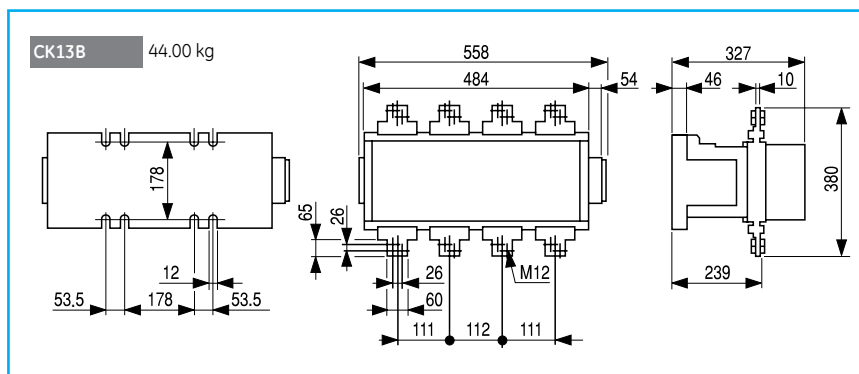
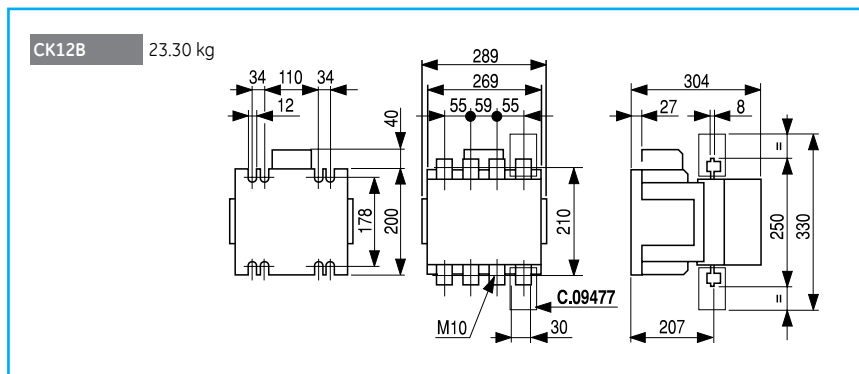
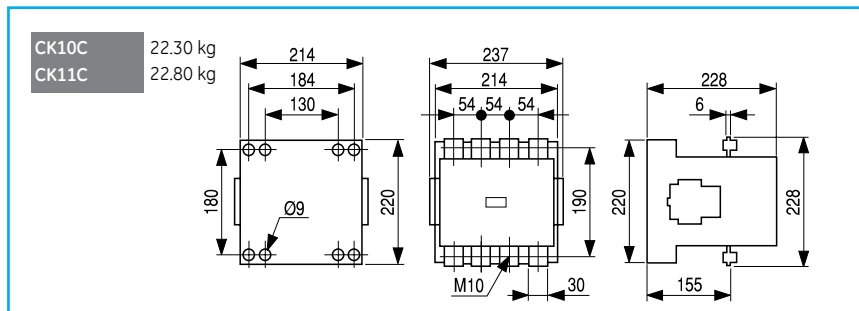
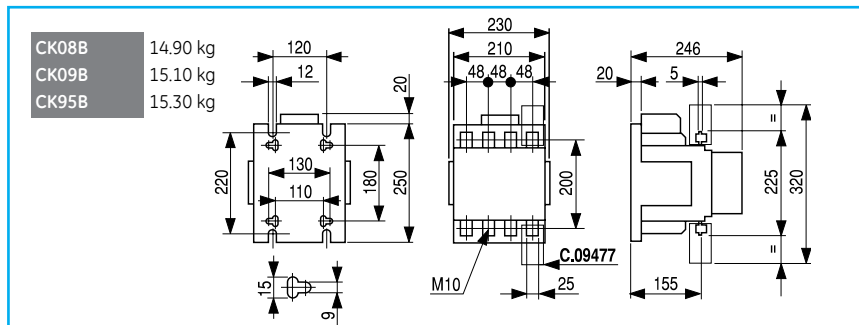
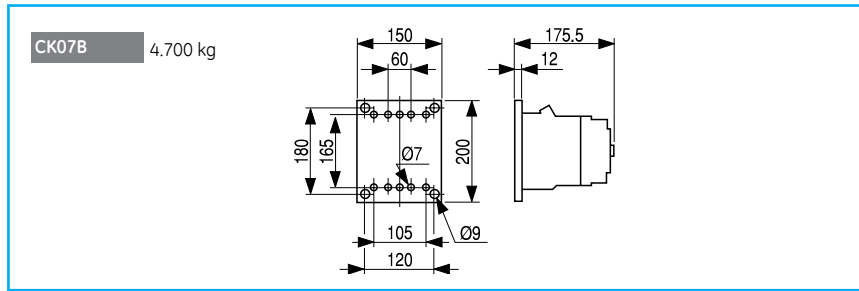
CK12B 18.00 kg



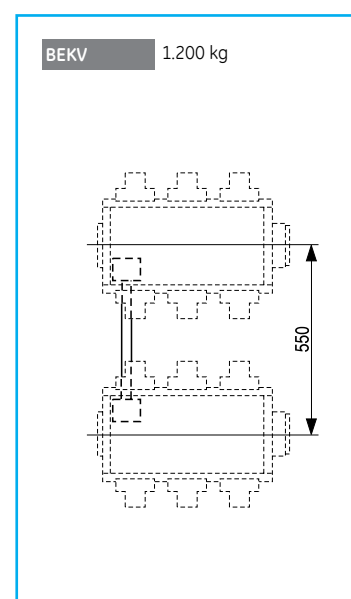
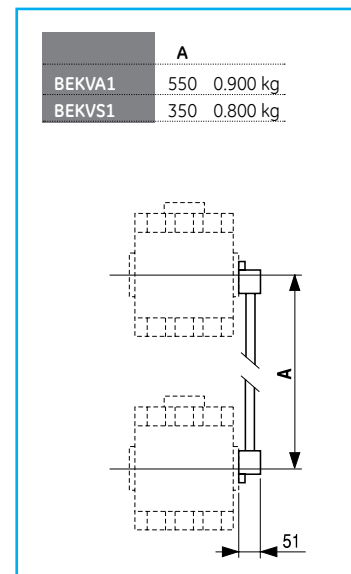
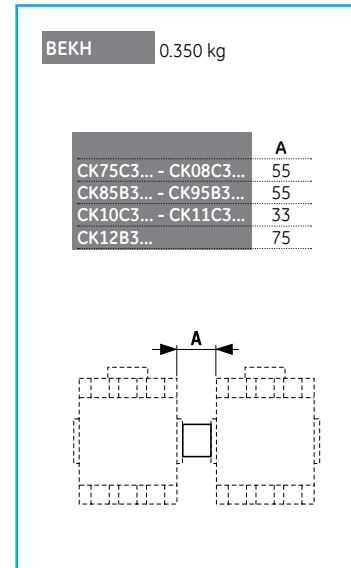
CK13B 35.00 kg



Four pole contactors



Mechanical interlock



3P and 4P contactors

A

B

C

D

E

F

G

H

I

X



A

B

C

D

E

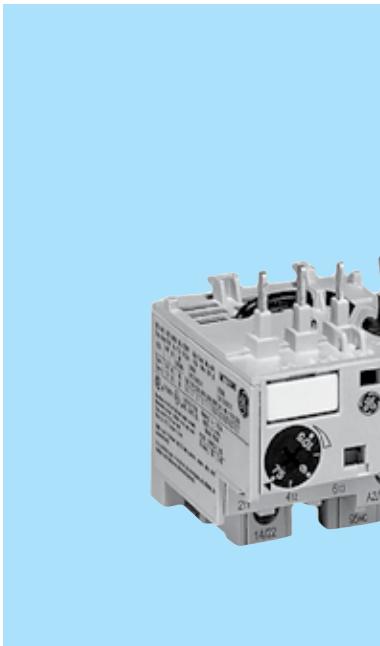
F

G

H

I

X



Thermal overload relays for minicontactors from 0.11 to 14A

- Control circuit up to 690V
- Power circuit up to 690V
- Three-pole differential (phase unbalance protection)
- Automatic ambient temperature compensation between -25°C and +60°C
- Choice of manual or automatic reset
- Direct connection to contactor or independent mounting using accessories.
- Screw and Ring terminal versions
- Terminals protected against accidental contact in accordance with VDE 0106 T.100 and VBG4.
- Terminal numbering in accordance with EN 50005
- Degree of protection IP20 (EN 60529)
- Additional auxiliary contact block 1NO (with manual reset only)

Standards

IEC/EN 60947-4-1	CSA 22.2/14
IEC/EN 60947-5-1	NI C 63-650
UNE 115	VDE 0660
NFC 63-650	UL 508

Approvals



General characteristics

- Thermal protection against balanced overload.
- Three-pole differential (phase unbalance protection).
- Automatic ambient temperature compensation.
- Front mounted selector for choosing utilisation current.
- Reset button, 2 positions : Manual(H) and Automatic(A) by turning the blue selector.
- Stop push button, independent of reset (red).
- Manual trip lever (tripping test).
- Tripping indicator (0-1).
- To facilitate wiring arrangements terminal 96 fits directly onto coil terminal (A2) and terminal 14/22 fits directly onto the feedback auxiliary contact.

Order codes | pg. C.33
Dimensions | pg. C.40



Thermal overload relays for minicontactors



For use with:	Setting range (regulation)		Fuse				Terminal: screw		Terminal: ring terminal		Pack
			aM		gL		Cat. no.	Ref. no.	Cat. no.	Ref. no.	
			Type 2	Type 1	Type 2	Type 1					
	min. A	max. A	A	A	A	A					
MC0...	0.11	0.17	0.5	0.5	0.5	0.5	MT03A	101000	MT03RA	103540	10
MC1...	0.17	0.26	0.85	1	1	1	MT03B	101001	MT03RB	103541	10
MC2...	0.26	0.43	1	2	2	4	MT03C	101002	MT03RC	103542	10
	0.43	0.65	1	4	2	8	MT03D	101003	MT03RD	103543	10
	0.65	1	2	6	4	12	MT03E	101004	MT03RE	103544	10
	0.85	1.3	2	6	4	12	MT03F	101005	MT03RF	103545	10
	1.1	1.6	2	10	4	16	MT03G	101006	MT03RG	103546	10
	1.35	2	4	10	6	16	MT03H	101007	MT03RH	103547	10
	1.7	2.4	4	16	6	25	MT03I	101008	MT03RI	103548	10
	2.2	3.2	4	20	6	32	MT03J	101009	MT03RJ	103549	10
	2.5	4	4	20	6	32	MT03R	101015			10
	3	4.7	6	20	10	32	MT03K	101010	MT03RK	103550	10
	4	6.3	10	32	16	50	MT03L	101011	MT03RL	103551	10
	5.5	8	12	50	20	63	MT03M	101012	MT03RM	103552	10
	7.5	10.5	16	50	25	80	MT03N	101013	MT03RN	103553	10
	10	14	20	32	32	100	MT03P	101014	MT03RP	103554	10

Accessories



Input terminals

Terminal	Cat. no.	Ref. no.	Pack
Screw	MVE0T	101020	5
Ring terminal	MVE0R	103562	5



Base

For separate mounting onto standard EN 50022-35 profile	MVB0T	101021	5
---	-------	--------	---



Auxiliary contact block

Frontal fixing to the relay With trip indicator (0-I) One block per relay and only for manual reset	Screw	MATV10AT	101022	10
	Ring terminal	MATV10AR	103563	10

Identification

Sheets of labels (sheets of 260 labels each)	EAT 260	100548	1
Labeling plate base (50 pieces in one pack)	SPR	100549	1

Order codes

A

B

C

D

E

F

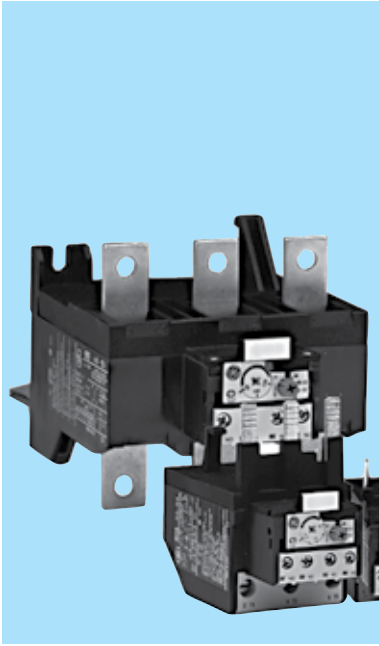
G

H

I

X





Thermal overload relays for contactors from 0.16 to 850A

- Control circuit up to 690V AC
- Power circuit:
 - RT1, RT12: up to 690V
 - RT2, RT22, RT3, RT32, RT4/4L, RT5/5L & RT6/6L: up to 1000V
- Thermal protection against normal overloads.
- Three pole differential (phase unbalance protection).
- Protection against long starting times.
- Automatic ambient temperature compensation between - 25°C y + 60°C.
- Front mounted test button.
- Trip indication.
- Independent auxiliary contacts with double rupture (1NO + 1NC).
- Function selector:
 - Manual RESET
 - Manual RESET and STOP
 - Automatic RESET with STOP
 - Automatic RESET without STOP

Standards

IEC/EN 60947-4-1	CSA 22.2/14
IEC/EN 60947-5-1	NI C 63-650
UNE 115	VDE 0660
NFC 63-650	UL 508
CEI 17-50	

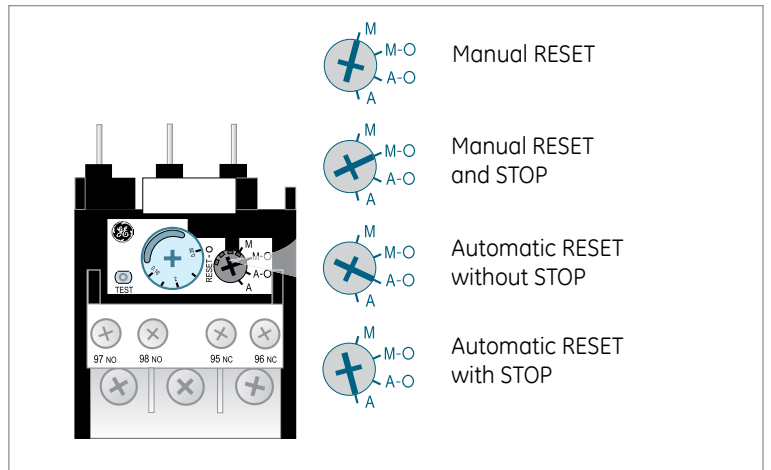
Approvals



Lloyd's Register

Bureau Veritas

RINA



Order codes | pg. C.35
 Dimensions | pg. C.44



Thermal overload relays for contactors



	For use with:	Setting range (regulation)		Fuses ⁽¹⁾		Srew terminal		Ring terminal		Pack	
				aM	gL - gG						
		min. A	max. A	A	A	Cat. no.	Ref. no.	Cat. no.	Ref. no.		
Class 10A	CL00	0.16	0.26	2	2	RT1B	113700	RT1RB	114087	5	
	CL01	0.25	0.41	2	2	RT1C	113701	RT1RC	114088	5	
	CL02	0.4	0.65	2	2	RT1D	113702	RT1RD	114089	5	
	CL25	0.65	1.1	2	4	RT1F	113703	RT1RF	114090	5	
	CL03	1.0	1.5	4	6	RT1G	113704	RT1RG	114091	5	
	CL04	1.3	1.9	4	6	RT1H	113705	RT1RH	114092	5	
	CL45	1.8	2.7	6	10	RT1J	113706	RT1RJ	114093	5	
		2.5	4.0	8	16	RT1K	113707	RT1RK	114094	5	
		4.0	6.3	12	20	RT1L	113708	RT1RL	114095	5	
		5.5	8.5	16	20	RT1M	113709	RT1RM	114096	5	
		8.0	12.0	20	25	RT1N	113710	RT1RN	114097	5	
		10.0	16.0	25	35	RT1P	113711	RT1RP	114098	5	
		14.5	18.0	32	50	RT1S	113712	RT1RS	114099	5	
		17.5	22.0	40	50	RT1T	113713	RT1RT	114100	5	
		21.0	26.0	40	63	RT1U	113714	RT1RU	114101	5	
		25.0	32.0	50	80	RT1V	113715	RT1RV	114102	5	
		30.0	40.0	63	100	RT1W	113716	RT1RW	114103	5	
	Class 10	CL05	11.5	15.0	32	35	RT2A	113717	RT2RA	114104	1
CL06		14.5	19.0	40	50	RT2B	113718	RT2RB	114105	1	
CL07		18.5	25.0	50	63	RT2C	113719	RT2RC	114106	1	
CL08		24.0	32.0	63	100	RT2D	113720	RT2RD	114107	1	
CL09		30.0	43.0	80	125	RT2E	113721	RT2RE	114108	1	
CL10		42.0	55.0	100	160	RT2G	113722	RT2RG	114109	1	
		54.0	65.0	125	160	RT2H	113723	RT2RH	114110	1	
		64.0	82.0	125	200	RT2J	113724	RT2RJ	114111	1	
		78.0	97.0	125	200	RT2L	113725	RT2RL	114112	1	
		90.0	110	160	250	RT2M	113726	RT2RM	114113	1	
Class 20	CL00	0.4	0.65	2	2	RT12D	139138	RT12RD	114060	5	
	CL01	0.65	1.1	2	4	RT12F	139139	RT12RF	114061	5	
	CL02	1	1.5	4	6	RT12G	139140	RT12RG	114062	5	
	CL25	1.3	1.9	4	6	RT12H	139141	RT12RH	114063	5	
	CL03	1.8	2.7	8	10	RT12J	139142	RT12RJ	114159	5	
	CL04	2.5	4.1	8	16	RT12K	113640	RT12RK	114114	5	
	CL45	4	6.3	12	20	RT12L	113641	RT12RL	114115	5	
		5.5	8.5	16	20	RT12M	113642	RT12RM	114116	5	
		8	12	20	35	RT12N	113643	RT12RN	114117	5	
		10	16	25	35	RT12P	113644	RT12RP	114118	5	
		14.5	18	32	50	RT12S	113645	RT12RS	114119	5	
		17.5	22	40	50	RT12T	113646	RT12RT	114120	5	
		21	26	40	63	RT12U	113647	RT12RU	114121	5	
		25	32	50	80	RT12V	113648	RT12RV	114122	5	
		30	40	63	100	RT12W	113649	RT12RW	114123	5	
		CL05	24	32	63	80	RT22D	113650	RT22RD	114124	1
		CL06	30	43	80	100	RT22E	113651	RT22RE	114125	1
		CL07	42	55	100	160	RT22G	113652	RT22RG	114126	1
		CL08	54	65	125	160	RT22H	113653	RT22RH	114127	1
		CL09	64	82	125	200	RT22J	113654	RT22RJ	114128	1
		CL10	78	97	125	200	RT22L	113655	RT22RL	114129	1
			90	110	160	250	RT22M	113656	RT22RM	114130	1

(1) Most suitable fuse in accordance with IEC 60947-4-1.

Order codes

A

B

C

D

E

F

G

H

I

X



Thermal overload relays for contactors



	For use with:	Setting range (regulation)		Fuses ⁽¹⁾		Cat. no. (Screw terminal)	Ref. no.	Pack
		min.	max.	aM	gL - gG			
		A	A	A	A			
Class 10	CK75 CK08 Direct mounting	55	80	125	200	RT3B	113727	1
		63	90	125	200	RT3C	113728	1
		90	120	160	250	RT3D	113729	1
		110	140	200	315	RT3E	113730	1
		140	190	250	355	RT3F	113731	1
	CK85 CK09 CK95 ⁽²⁾	120	190	250	315	RT4N	113732	1
		175	280	315	400	RT4P	113733	1
		200	310	400	500	RT4R	113734	1
	CK10 CK11 CK12 ⁽³⁾	120	190	250	315	RT5A	113750	1
		175	280	315	400	RT5B	113751	1
		250	400	500	630	RT5C	113752	1
		315	500	630	800	RT5D	113753	1
		430	700	800	1000	RT5E	113754	1
CK13 ⁽⁴⁾	500	850	100	1250	RT6A	113760	1	
Class 20	CK75 CK08 Direct mounting	63	90	125	200	RT32C	113657	1
		90	120	160	250	RT32D	113658	1
		110	140	200	315	RT32E	113659	1
		140	190	250	355	RT32F	113660	1
	Class 30	CL... CK... Mounting with screws	2.5	4	10	16	RT4LA	113735
4			6.5	12	20	RT4LB	113736	1
5.5			8.5	16	25	RT4LC	113737	1
7.5			11	20	32	RT4LD	113738	1
10			16	25	40	RT4LE	113739	1
12.5			20	32	50	RT4LF	113740	1
17			27	50	80	RT4LG	113741	1
26			40	80	125	RT4LH	113742	1
32			52	100	160	RT4LJ	113743	1
45			70	125	160	RT4LK	113744	1
60			90	160	200	RT4LL	113745	1
80			125	200	250	RT4LM	113746	1
CK85 CK09 CK95 ⁽²⁾		120	190	250	315	RT4LN	113747	1
		175	280	315	400	RT4LP	113748	1
		200	310	400	500	RT4LR	113749	1
CK10 CK11 CK12 ⁽³⁾		120	190	250	315	RT5LA	113755	1
		175	280	315	400	RT5LB	113756	1
		250	400	500	630	RT5LC	113757	1
	315	500	630	800	RT5LD	113758	1	
	430	700	800	1000	RT5LE	113759	1	
CK13 ⁽⁴⁾	500	850	1000	1250	RT6LA	113761	1	




(1) Most suitable fuse in accordance with IEC 60947-4-1.

(2) Fitting direct to the contactor.

(3) Fitting direct to the contactor: by means of a coupling and connection set. Separate mounting with screws on DIN rail / with cable connection.

(4) RT6A = RT1 with right setting range plus RTXP, independent mounting base adaptor, to be utilised with current transformer connected by passing cable chosen by customer. Current transformer data on request.

Accessories

			Cat. no.	Ref. no.	Pack
 <p>Base for separate mounting</p>	DIN EN50022-35				
	RT1		RTXP	105170	1
	RT2		RT2XP	113764	1
<hr/>					
<p>Setting range cover protection</p>	RT...		RTX3	113762	1
<hr/>					
 <p>Push-button with flexible cable</p>	for distance RESET				
	RT1... - RT6... (front)	0.5 meters	RTXS	113855	1
	RT1... - RT6... (front)	1 meters	RTXSL	113856	1
	RT1..., RT2..., RT4..., RT5..., RT6... (back)		RTXBS	108864	1
<hr/>					
<p>Terminal protection</p>	for RT3 or CK75C/CK08C				
	Thermal overload relay	1 pole IPxxB	PTPCK75	103747	1
	Connection contactor-relay	3 poles	RT3PXX3P	110565	1
<hr/>					
 <p>Remote electrical reset</p>	RT1... - RT6...		RTXRR □		1

Available coil voltages (V)

	♦	B	D	G	J	N	U	X
AC/DC	12	24	48	110	220	380	440	
				240	415	480		

Order codes

A

B

C

D

E

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G

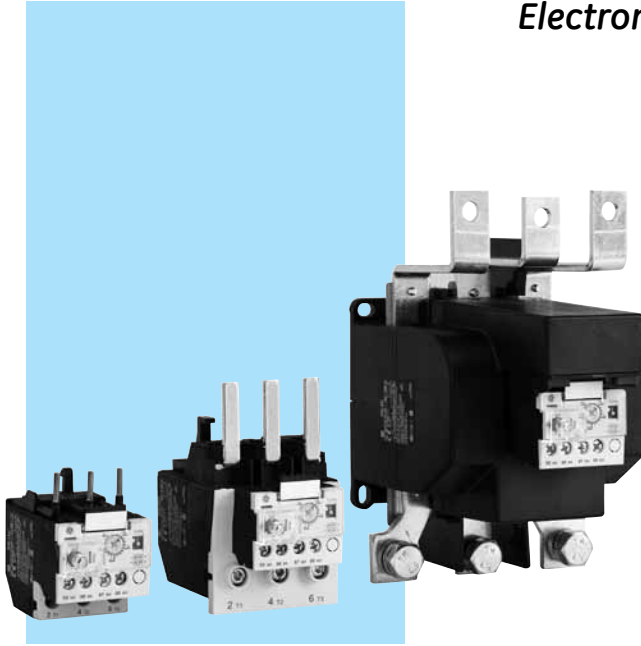
H

I

X



Electronic overload relay



Approvals



Product features

➤ Your benefits

Lower power consumption	➤ Saving space into cabinet
Great accuracy	➤ Better motor protection
Full reliability	➤ Low risk to burn motor
Phase unbalance protection	➤ Better motor protection and current control
Direct fitting to contactors Series CL	➤ Compact starter
Interchangeable with thermal overload relay	➤ No need to redesign existing cabinet
Multiple trip class selection	➤ One device cover for start time motor
Manual / Auto reset	➤ One device for two solutions




Main characteristics

- Setting range from 0.1 up to 150A
- Self powered
- Thermal memory
- Phase loss protection
- Phase unbalance protection
- Direct fitting to contactors Series CL
- Interchangeable with thermal overload relay
- Multiple trip class selection
- Manual / Auto reset
- Increased flexibility, less order codes, less stock
- Tripp class: 5 - 10 - 20 - 30


Order codes | pg. C.39
 Dimensions | pg. C.47



Electronic overload relay for contactors

	Suitable for	Setting range (A)		Fuses (A) ⁽¹⁾	Cat. no.	Ref. no.	Pack.
		Min.	Max.	gL - gG			
 <p>Frame 1</p>	CL00...CL45	0,1	0,5	2	RE1D	101866	5
		0,4	2	4	RE1H	101867	5
		1,0	5	10	RE1K	101868	5
		1,6	8	20	RE1M	101869	5
		6,4	32	63	RE1S	101870	5
		9,0	45	80	RE1W	101871	5
 <p>Frame 2</p>	CL05...CL10	15	75	125	RE2H	101872	1
		22	110	125	RE2M	101873	1
 <p>Frame 3</p>	CK75-CK08	30	150	250	RE3E	101874	1

Accessories

		Cat. no.	Ref. no.	Pack.
 <p>Independent mounting base adaptor</p>	Frame 1	RE1XP	247302	1
	Frame 2	RE2XP	247303	1

(1) Most suitable fuse in accordance with IEC 60947-4-1, see coordination table on pg. C.76.

Order codes

A

B

C

D

E

F

G

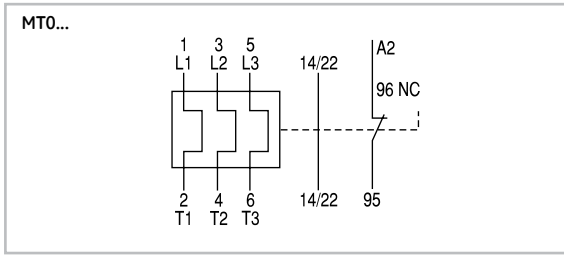
H

I

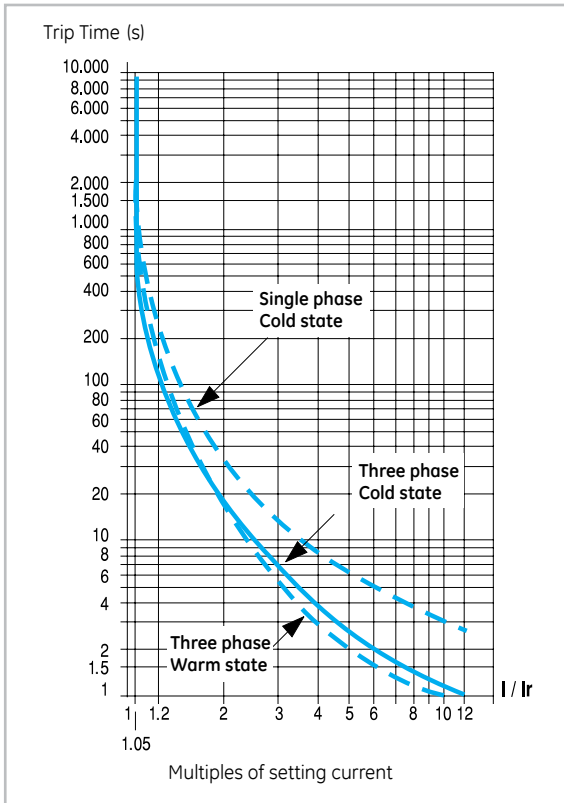
X



Numbering of the terminals

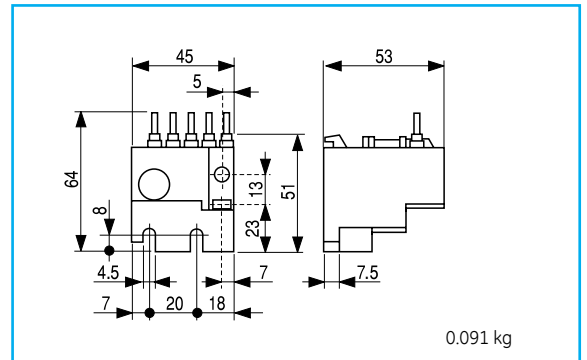


Tripping curves

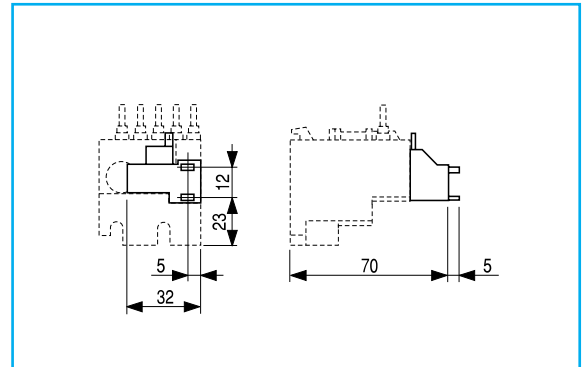


Dimensional drawings

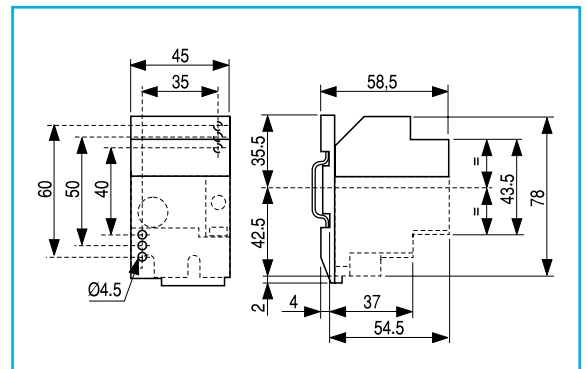
Thermal overload relay



Thermal overload relay + aux. contact block (front mounting)

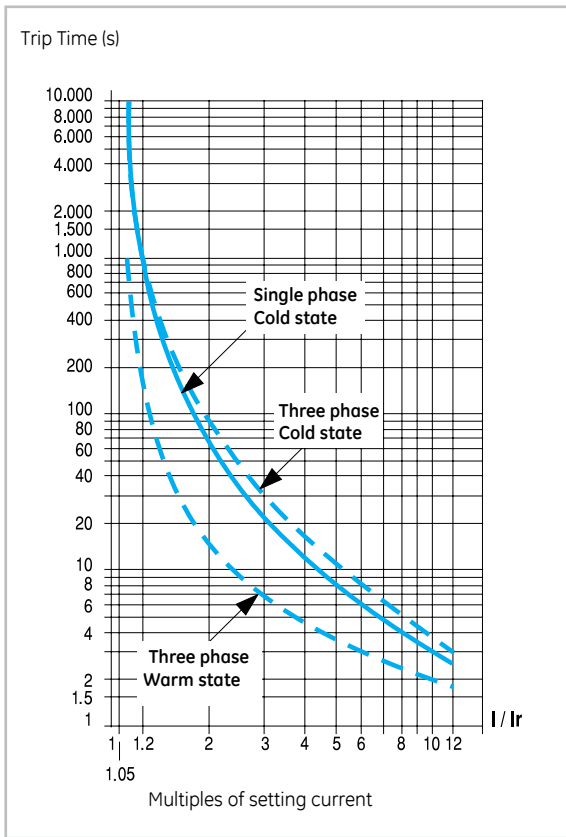


Independent mounting of the thermal overload relay

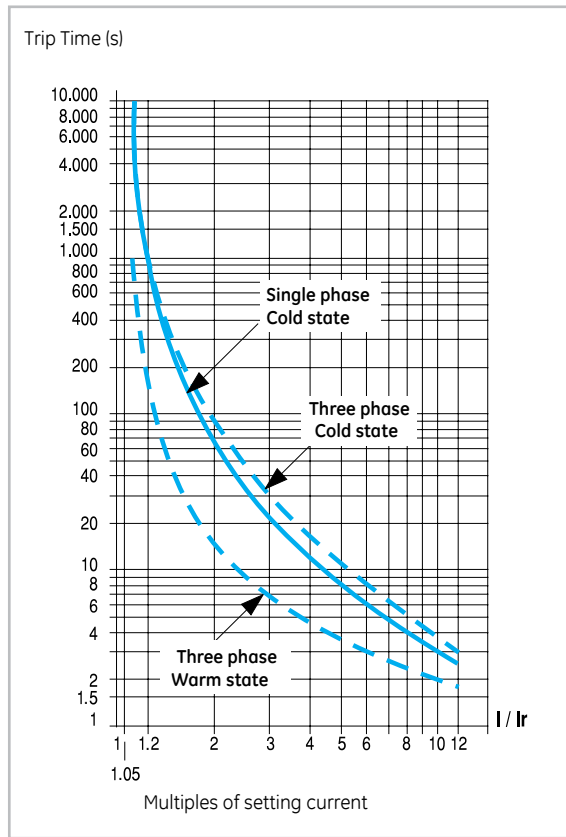


Tripping curves

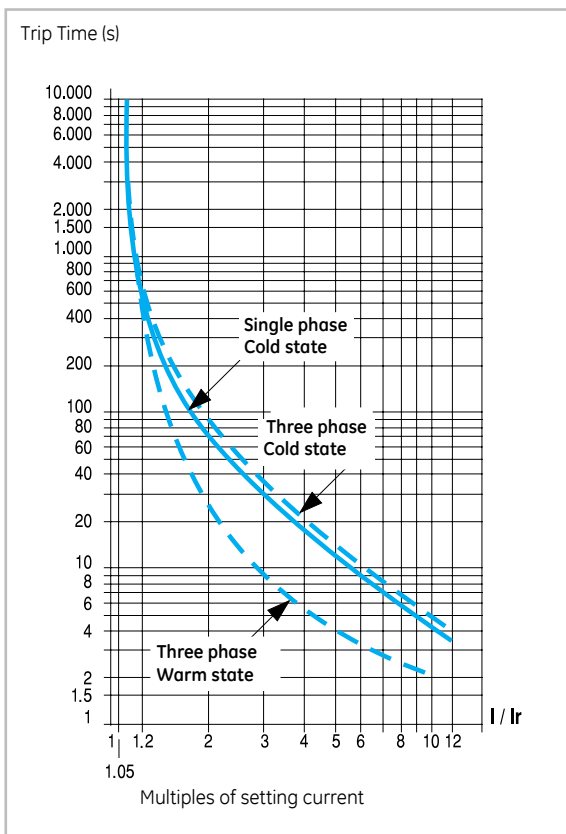
RT1 Class 10A



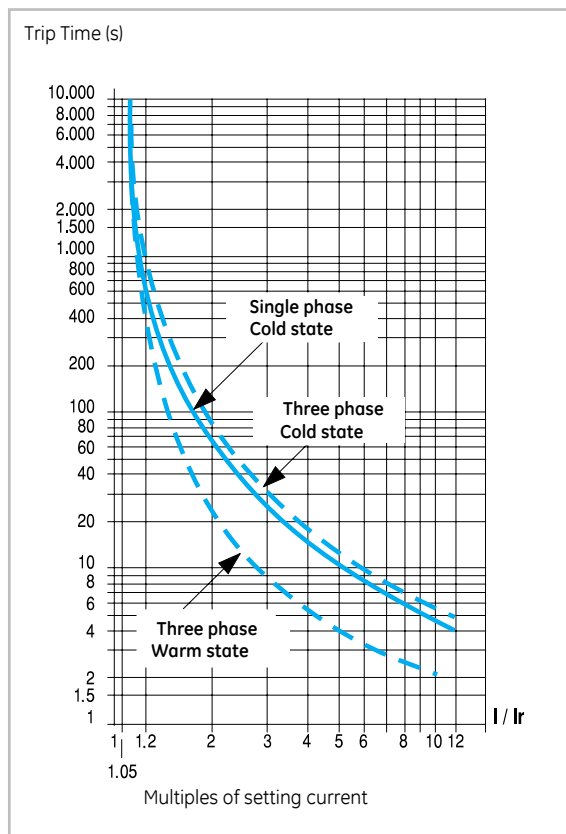
RT2 Class 10



RT12 Class 20



RT22 Class 20



Technical data

A

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D

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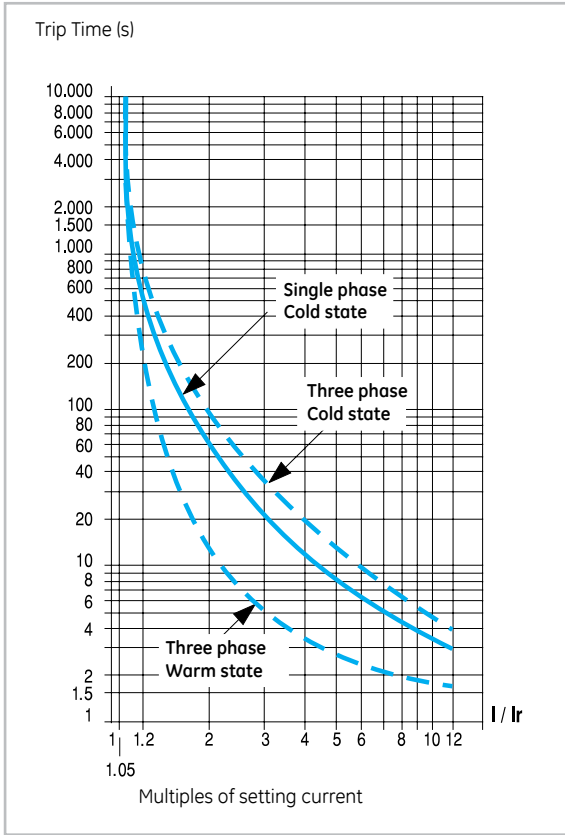
I

X

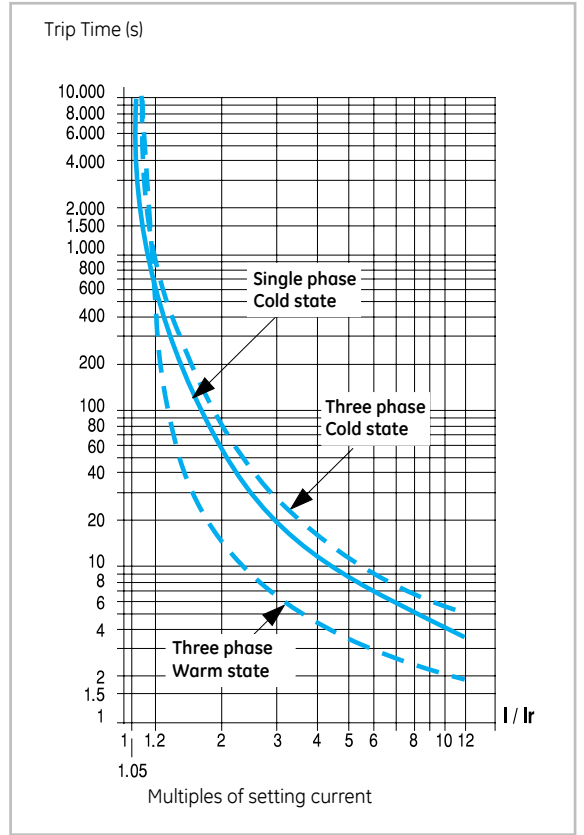


Tripping curves

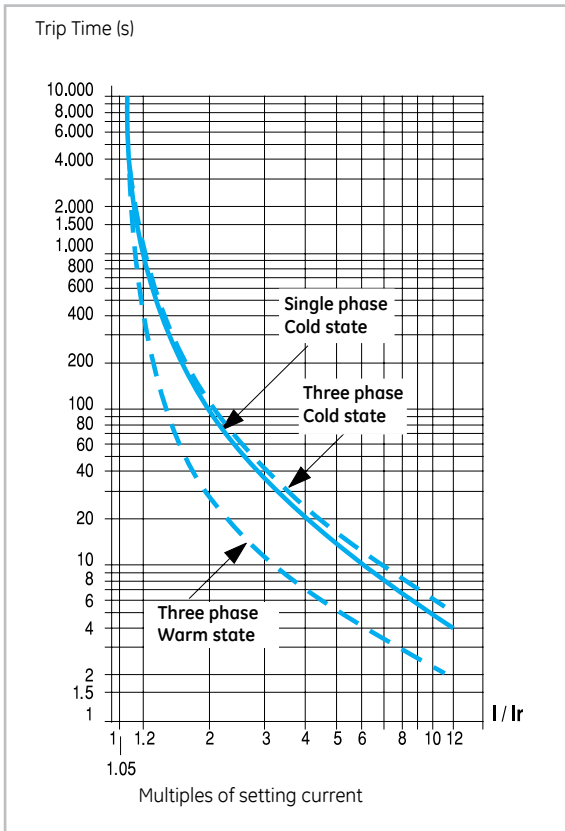
RT3 Class 10



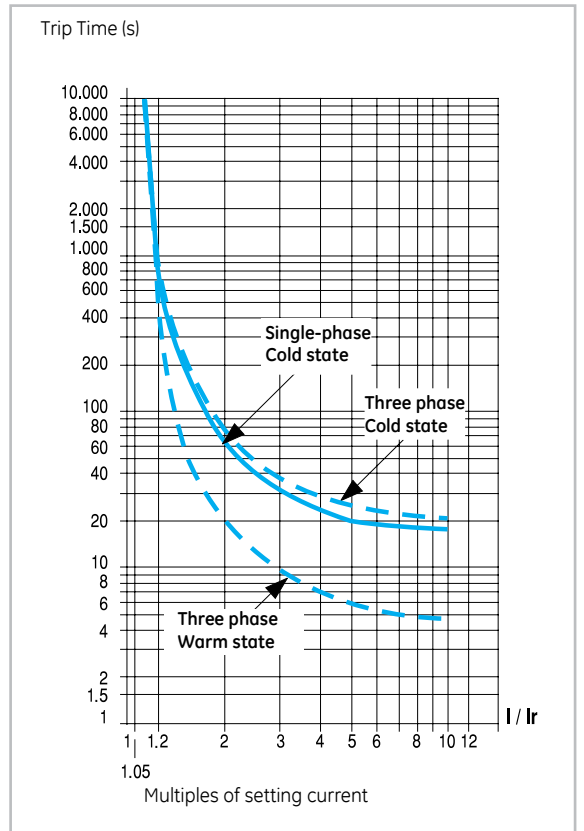
RT4 Class 10



RT32 Class 20

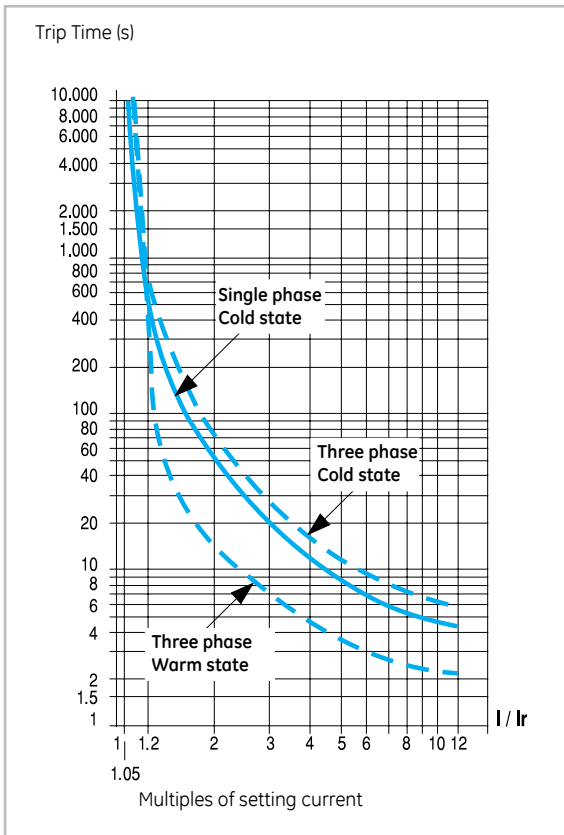


RT4L Class 30

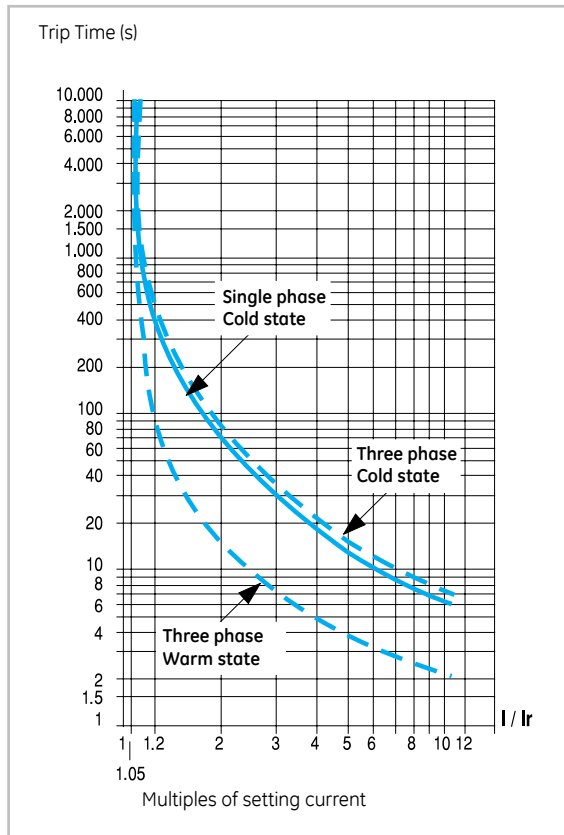


Tripping curves

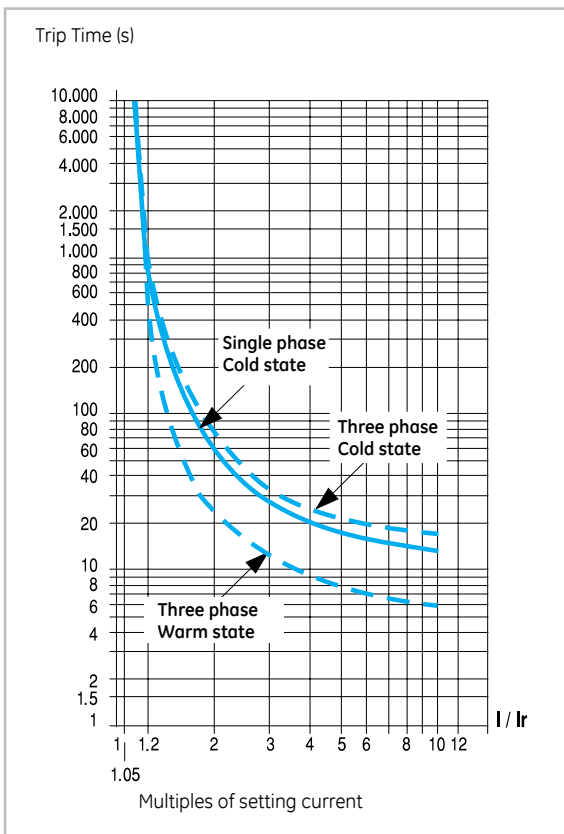
RT5 Class 10



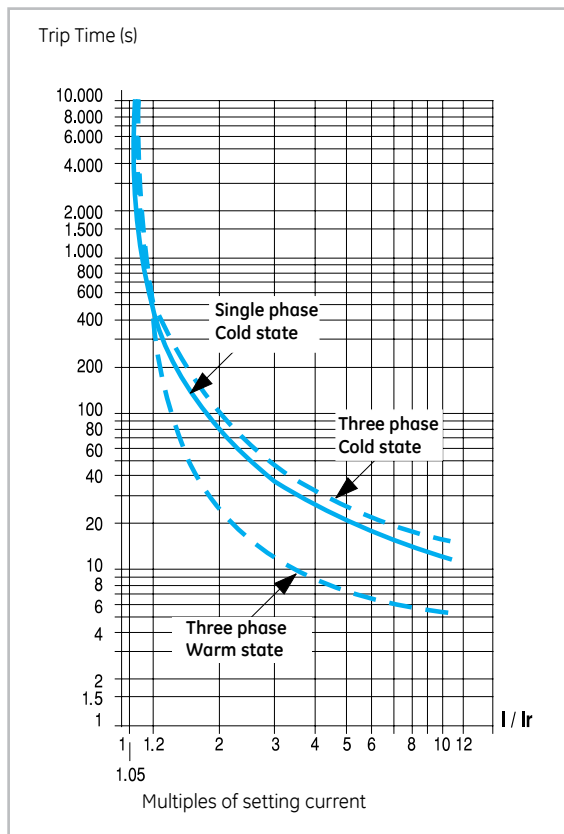
RT6 Class 10



RT5L Class 30



RT6L Class 30



Technical data

A

B

C

D

E

F

G

H

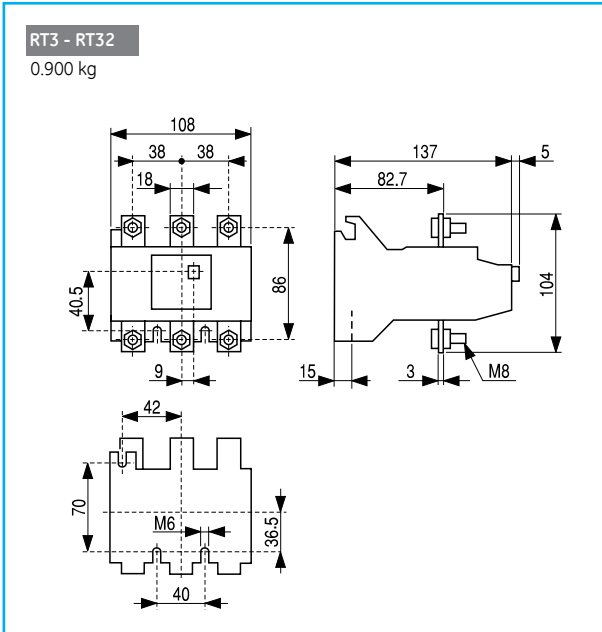
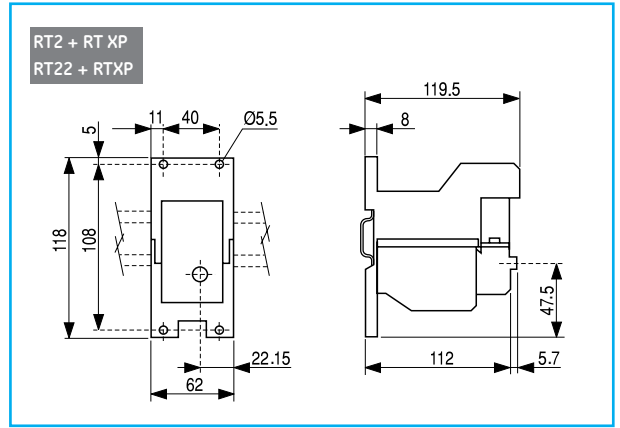
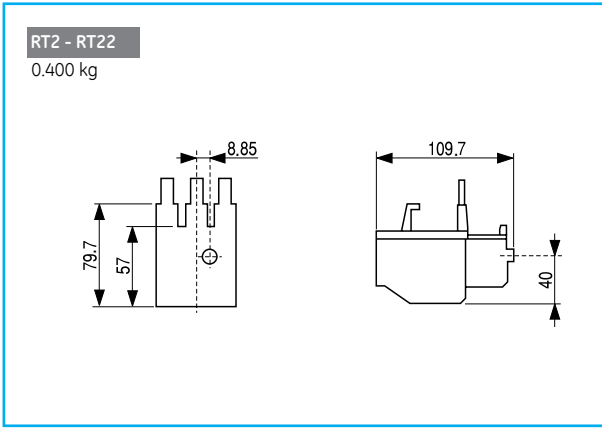
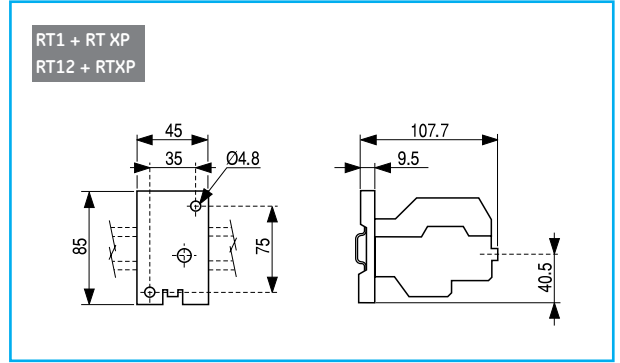
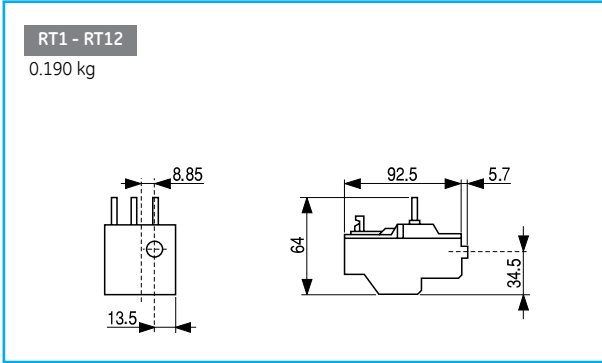
I

X



Dimensional drawings

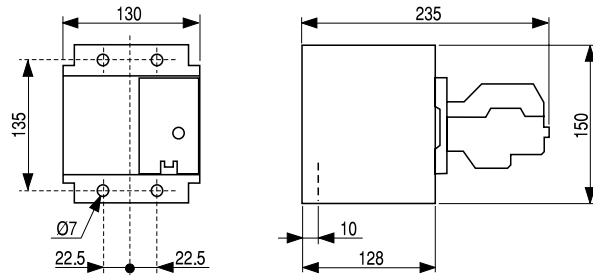
Thermal overload relay for contactors



Thermal overload relay for contactors

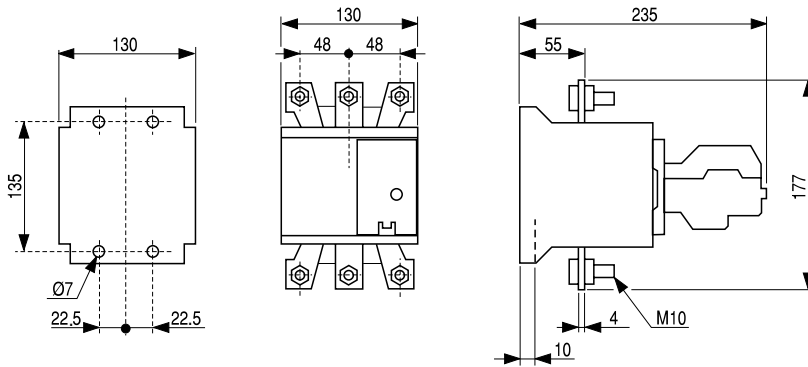
RT4LA...RT4LM

2.400 kg



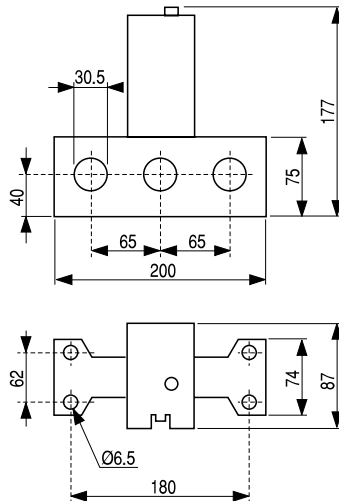
RT4/4LN...RT4/4LR

2.400 kg

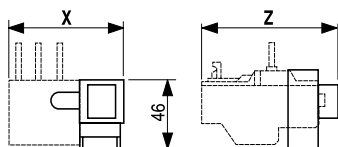


RT5 / 5L

0.875 kg



Remote electrical reset



RTXRR + ...	X	Z
RT1	75	110
RT2	84	121
RT3	108	153
RT4	150	240
RT5	200	196

A

B

C

D

E

F

G

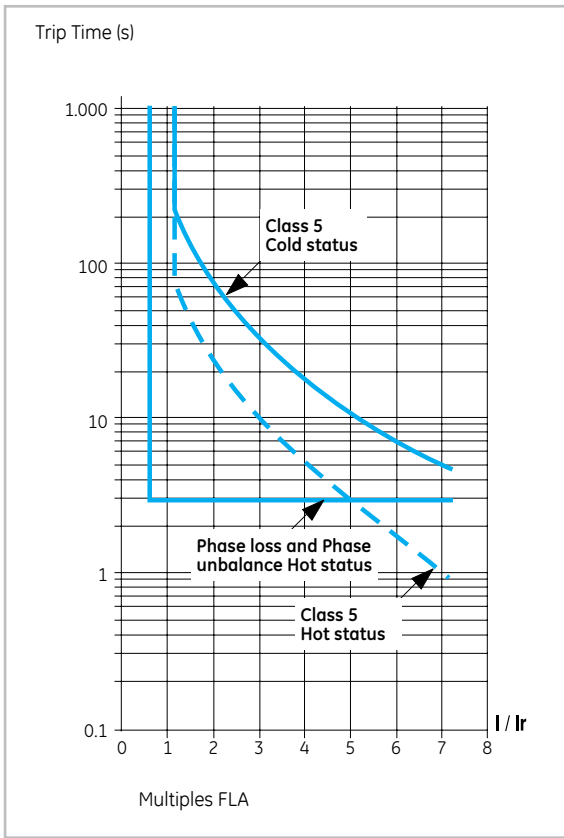
H

I

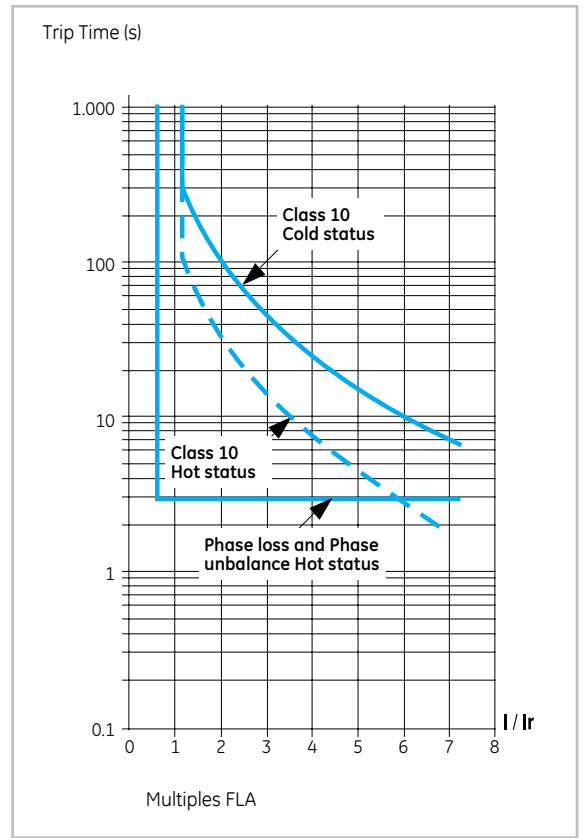
X

Tripping curves

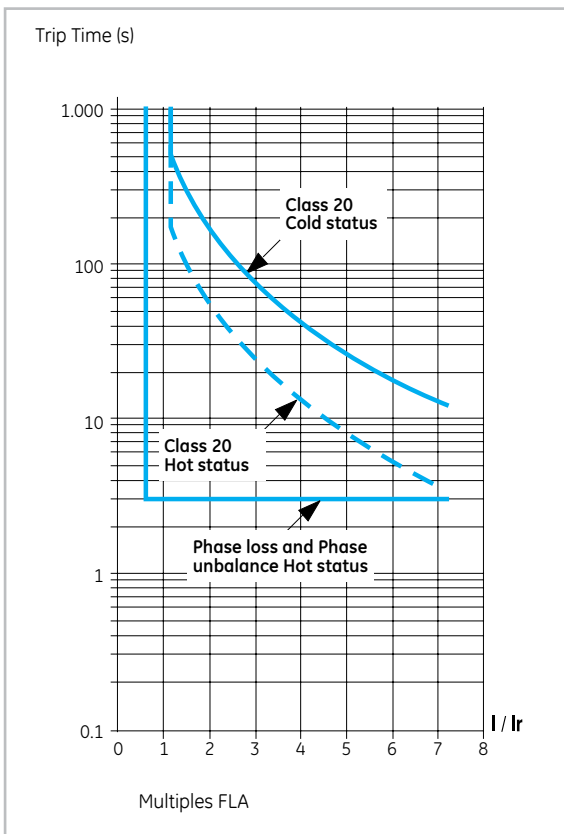
Class 5



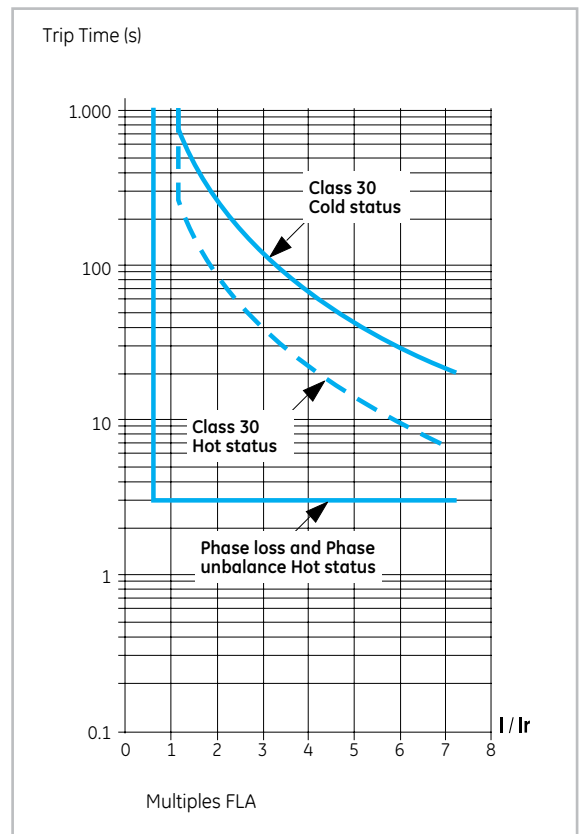
Class 10



Class 20

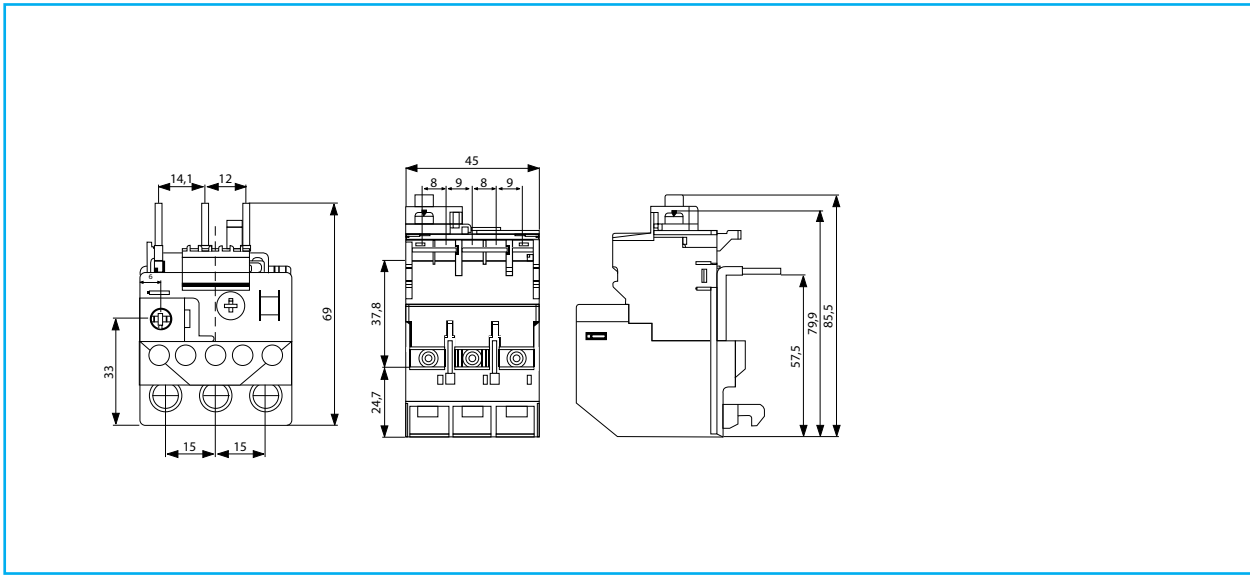


Class 30

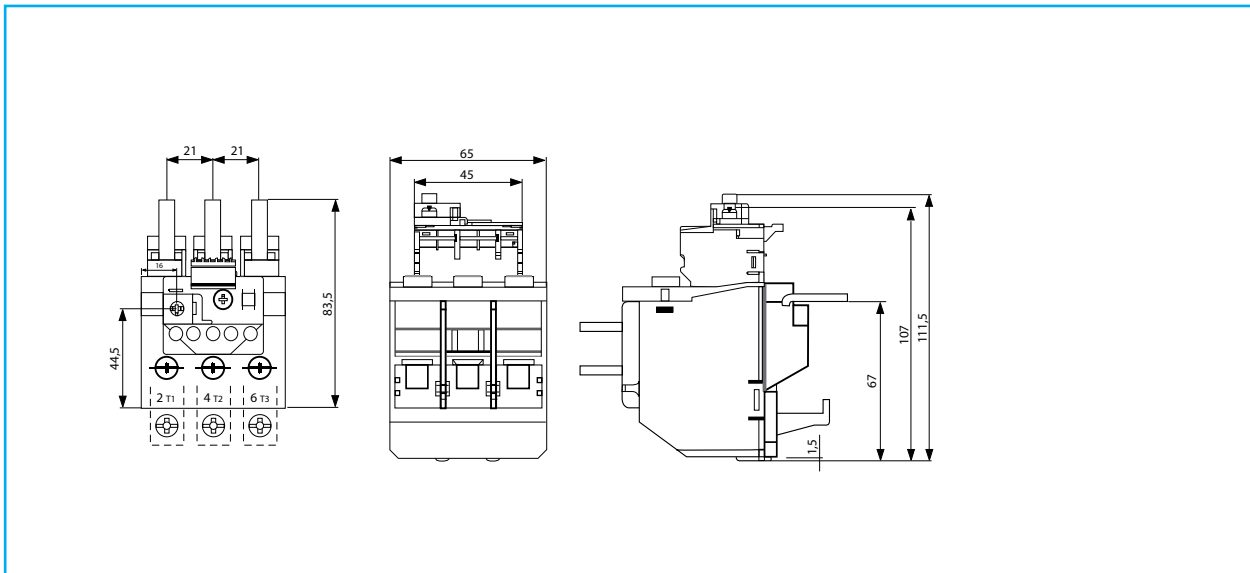


Dimensional drawings

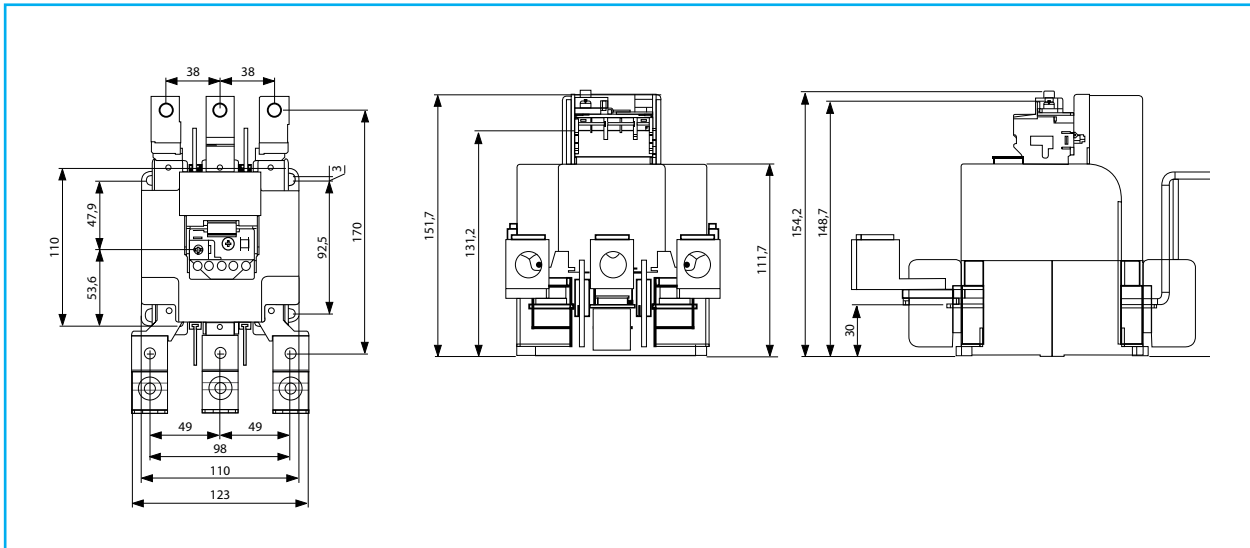
Frame 1

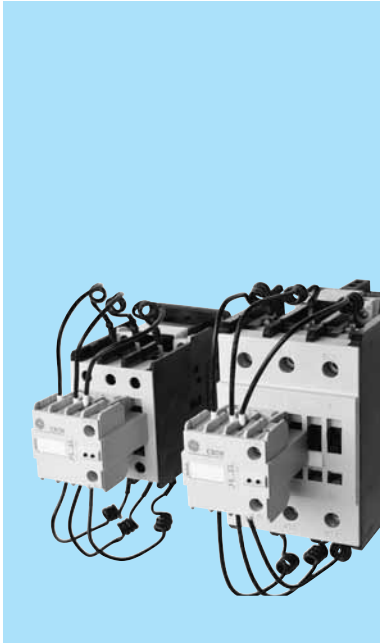


Frame 2



Frame 3





Contactors for capacitors switching

With built-in resistance to switch three phase capacitor banks

“CSCN” contactors incorporate a front block with three early-make auxiliary contacts together with 6 quick discharge resistors (two per phase) through which the capacitors are switched to the network, reducing the current peak. Once the resistors have damped the current peak, the main contacts short-circuit the resistors, carrying the uninterrupted current. A few milliseconds later the early-make auxiliary contact closes to guarantee that all current flows through the main contacts.

Standards / Marking

IEC/EN 60947-1	CENELEC HD 419
IEC/EN 60947-4-1	VDE 0660/102
IEC/EN 60947-5-1	NFC 63-110
EN 50005	ASE 1025
UL 508	UNE 20109
CSA C22.2/14	

Approvals



Standard voltages

To complete the catalogue number, replace the symbol ♦ by the code corresponding to the voltage and frequency of the control circuit. (other voltages on request)*

Alternating current (V). Dual-frequency

♦	1	2	3	4	5	6	7	8	9
50/60Hz	24	42	110	120	220	230	240	440	48
			115						



Alternating current (V)

♦	E	K	L	N	T	U	W	Y	Z
50Hz	32	127		220		380	415	500	660
				230		400			690
60Hz			208	277	380	480	460	600	

* Please Consult GE for non standard Coil Voltages



Contactors for capacitors switching

Ith	Ambient temperature										Fuse gl - gG	Contacts		Cat. no. ⁽¹⁾	Pack	
	$\theta \leq 55^\circ\text{C}$					$\theta \leq 70^\circ\text{C}$.3 .4	.1 .2			
	230V 240V kvar	400V kvar	415V kvar	500V kvar	660V 690V kvar	230V 240V kvar	400V kvar	415V kvar	500V kvar	660V 690V kvar						
	25	7.5	12.5	13	16	15	3.7	7.5	8	9.5	10	25	2	0	CSCN12A320 ♦	1
													1	1	CSCN12A311 ♦	1
													0	2	CSCN12A302 ♦	1
	32	10	16.7	17	21	20	5	10	11	12.5	12.5	35	2	0	CSCN16A320 ♦	1
													1	1	CSCN16A311 ♦	1
													0	2	CSCN16A302 ♦	1
	45	12.5	20	21	25	25	7.5	12.5	13	16	15	40	1	0	CSCN20A310 ♦	1
													0	1	CSCN20A301 ♦	1
													2	1	CSCN20A321 ♦	1
													1	2	CSCN20A312 ♦	1
	45	15	25	26	31	30	10	15	16	18	20	50	1	0	CSCN25A310 ♦	1
													0	1	CSCN25A301 ♦	1
												2	1	CSCN25A321 ♦	1	
												1	2	CSCN25A312 ♦	1	
60	20	30	31	38	35	16	22	23	27	25	63	1	0	CSCN30A310 ♦	1	
												0	1	CSCN30A301 ♦	1	
												2	1	CSCN30A321 ♦	1	
												1	2	CSCN30A312 ♦	1	
90	25	45	47	56	55	20	35	36	44	40	80	1	0	CSCN45A310 ♦	1	
												0	1	CSCN45A301 ♦	1	
												2	0	CSCN45A320 ♦	1	
												1	1	CSCN45A311 ♦	1	
												1	2	CSCN45A312 ♦	1	
110	35	55	57	69	65	30	45	47	56	50	125	1	0	CSCN55A310 ♦	1	
												0	1	CSCN55A301 ♦	1	
												2	0	CSCN55A320 ♦	1	
												1	1	CSCN55A311 ♦	1	
												1	2	CSCN55A312 ♦	1	
140	45	70	73	88	85	35	60	62	75	70	160	1	0	CSCN70A310 ♦	1	
												0	1	CSCN70A301 ♦	1	
												2	0	CSCN70A320 ♦	1	
												1	1	CSCN70A311 ♦	1	
												1	2	CSCN70A312 ♦	1	
	Spare coils															
	For series CSCN12 ... CSCN25												LB1A ♦	5		
	For series CSCN30												LB3A ♦	5		
For series CSCN45 ... CSCN70												LB4A ♦	5			

(1) To complete the reference, replace ♦ by the code corresponding to the voltage and frequency of the control circuit. (see pg. C.80)

Order codes

A

B

C

D

E

F

G

H

I

X



Standard contactors

Series "CL" and "CK" contactors, to switch three phase capacitor banks

Electrical endurance: >100,000 operations

Contactor		$\theta \leq 55^{\circ}\text{C}$					$\theta \leq 70^{\circ}\text{C}$					Fuse gl - gG A	I max. (peak) A
Type ⁽¹⁾	Ith	220V 230V 240V kvar	400V kvar	415V kvar	500V kvar	690V 660V kvar	220V 230V 240V kvar	400V kvar	415V kvar	500V kvar	690V 660V kvar		
CL00A	25	3	5	5.5	6.5	5.7	2.4	4	4.5	5.2	4.5	10	1000
CL01A	25	4.5	9.5	10.5	12.5	11	3.6	6	6.5	10	7	16	1000
CL02A	32	6.5	11	12	14.5	12.5	5.2	8.5	9	11.5	10	25	1000
CL25A	45	7.5	12.5	14	16	15	6.5	10	11	13	12	25	1000
CL03A	45	9	15	16.5	20	17.5	7.2	12	13	16	14	35	2500
CL04A	60	12.5	21	23	27.5	24	10	17	18	22	19.5	40	2500
CL45A	60	16.5	25	27	32	30	13	20	22	25	22	50	2500
CL06A	90	22	40	43	52	50	17	30	33	41	35	80	3500
CL07A	110	25	45	48	58	65	19	35	37	46	40	125	3500
CL08A	110	30	50	54	65	70	22	40	43	52	50	125	3500
CL09A	140	40	65	70	85	95	35	58	62	75	85	160	3500
CL10A	140	50	80	85	105	120	43	70	75	90	105	160	3500
CK75C	250	60	110	118	145	150	48	88	94	116	120	250	5000
CK08C	250	70	125	135	162	170	56	100	107	130	136	250	5000
CK85B	315	80	150	160	195	200	64	120	130	156	160	315	5000
CK09B	315	95	165	177	215	230	85	148	160	192	205	315	5000
CK95B	450	105	190	205	250	288	95	175	188	230	265	450	5500
CK10C	600	135	260	280	340	370	120	235	252	375	330	630	10000
CK11C	700	190	325	350	425	450	152	260	280	340	360	800	10000
CK12B	1000	250	400	430	520	600	200	320	344	416	480	1000	12000
CK13B	1250	315	525	565	685	650	252	420	452	548	520	1250	15000

(1) To complete contactor reference, see C.10 for CL and C.18 for CK

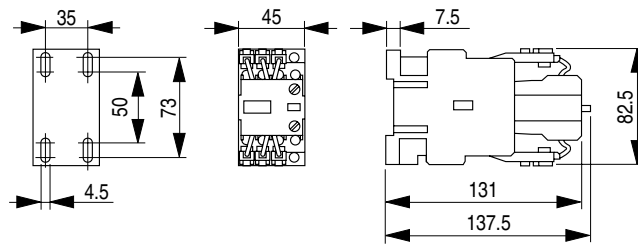
Please Contact GE for CSC type capacitor duty contactors.



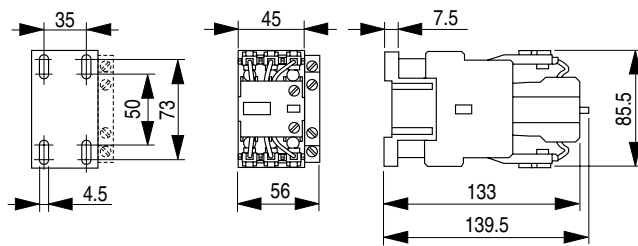
Dimensional drawings

Contactors for capacitors switching

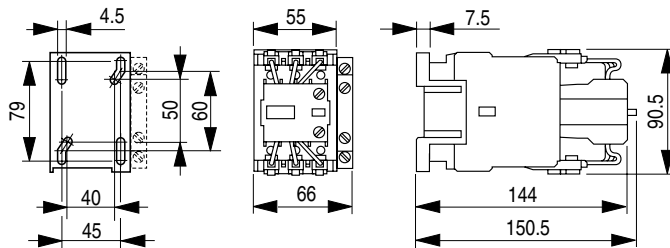
CSCN12..., CSCN16...



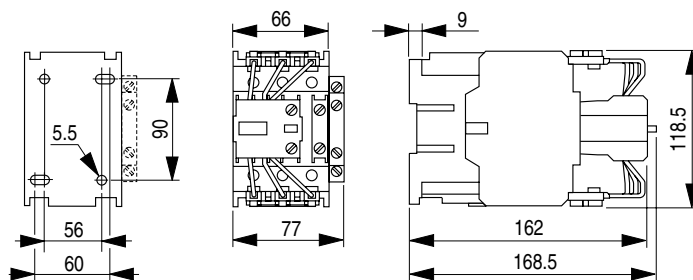
CSCN20..., CSCN25...



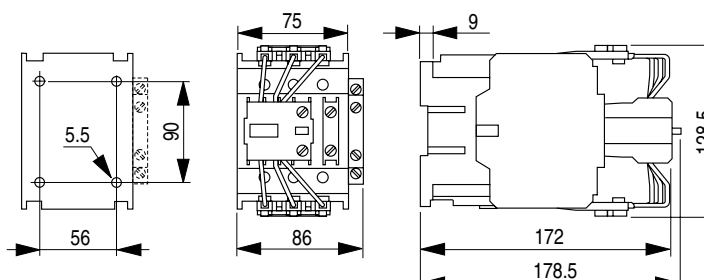
CSCN30...



CSCN45..., CSCN55...



CSCN70...



A

B

C

D

E

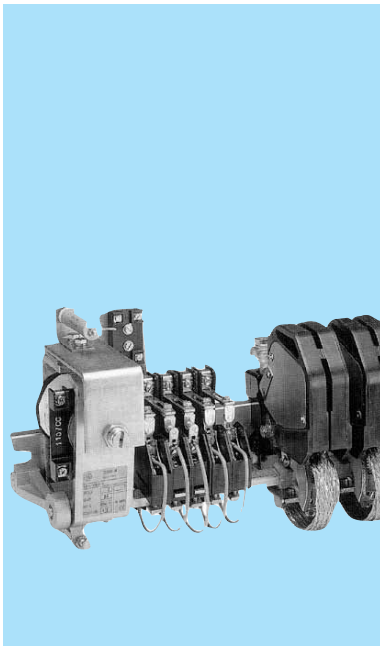
F

G

H

I

X



Clapper contactors 40A to 800A (AC-3) / 45A to 1200A (AC-1)

AC and DC control using a bridge rectifier, designed to meet the most recent stringent requirements in terms of reliability, service life and performance.

Main characteristics

- Sliding contact holder, set on self-centering and self-lubricating bronze bushings
- Minitubes made of high-strength, high electrical resistance material
- Individual auxiliary contacts

Construction

Variable composition contactors (the number of main poles and auxiliary contacts may vary), preferably secured on mounts

Control circuit

Solid iron magnetic circuit with coil powered by direct or rectified current, particularly for heavy-duty applications (e.g., cranes, roll mills, reversing winches, etc.).

The coils are sized for intermittent operation. For continuous operation, insert an economy resistor in series with the coil using the respective auxiliary contact.

Main contacts

The sintered main contacts are classified as Type 4/2 for intermittent operation and Type 5/2 for continuous operation.

The 4/2 sintered contact may be used only for heavy-duty operation when the number of switching operations per hour is above 60 and the operating intermittence is equal or less than 60% (cranes, roll mills, etc.).

If used for continuous operation, the contact will overheat.

The 5/2 sintered contact may be used only for normal duty when the number of switching operations per hour is equal to or less than 60% and the operating intermittence is above 60%.

Auxiliary contacts

Individual NO or NC single-break contacts

Possibility to advance or delay contact making or breaking

Special versions

The following items may be supplied upon request:

- Contactors with coils having an operating limit that exceeds the limits required by the standards
- Contactors with an operating voltage up to 3000V (rotary disconnect switches, induction furnaces, etc.)
- Vertical mechanical interlocks ideal for interlocking 3 contactors.

Spare parts and additional components

Standards

IEC/EN 60947-1
IEC/EN 60947-4-1
IEC/EN 60947-5-1

Standard voltages

Alternating current (V) Dual-frequency coils

	AP	CP	EP	GP
50/60Hz	24	48	110	220

Direct current (V)

	A	B	C	D	E	F	G	H	M	R
Voltage	20	24	40	48	97	110	197	220	230	125

Order codes | pg. C.53
Coils | pg. C.56
Spare parts | pg. C.57
Dimensional drawings | pg. C.60

Spare parts and additional components for the contactors are listed on page C.91.

Control voltage and normal combinations

Normal rated voltages, shaft spacing and combinations (main and auxiliary poles) have been defined for each switchgear unit, thereby allowing the contactor to be rapidly selected.

AC rated voltages: 24V - 48V - 110V - 220/230V

DC rated voltages: 24V - 48V - 110V - 220/230V

Spacing between standardised shafts and combinations:

See pages C.96 to C.98

Standard center-to-center spacing (mm): 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000

Main poles

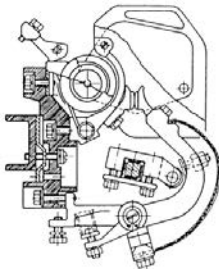
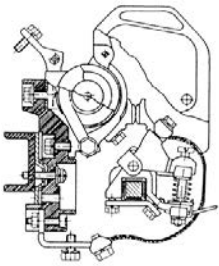
The poles can be constructed as follows, depending on the operating conditions:

Z design (NO)

- For load breaking, with high breaking capacity
- For AC or DC use
- Equipped with magnetic arc-quenching coil. In the case of AC, the poles are normally supplied with an appropriate arc-quenching coil for the maximum rated current of the pole.
- Arc-quenching coils for medium rated currents with respect to the expected peak current are available for DC use upon request, for more effective pole performance (see table on page C.90).

RN design (NC)

- Based on the use of break poles, which are open when the coil is energized and closed when the coil is de-energised.
- For AC or DC use in special circuits where high interrupting capacities are not required.
- This design is intended to be used with contactors R1, R2, R3, R4, R5, R7.



Poles	R1	R2	R3	R4	R5	R6	R7	R8	R9
Z	■	■	■	■	■	■	■	■	■
RN	■	■	■	■	■		■		

Order codes - Clapper contactors

Peak operating current		AC-3 admissible rated powers				Electric endur. Cat. AC3 Switching operations	AC or DC See the following pages C.84 and C.85 on how to complete the catalogue number	Pack.
Resistive loads AC1 A	Motors <440V, 3~ 50/60Hz AC3 A	220V 230V kW HP	380V 400V kW HP	415V 440V kW HP	500V kW HP			
45	40	11,5	20	20	20	1 × 10 ⁶	R1...	1
90	90	26	45	45	45	1 × 10 ⁶	R2...	1
125	120	36.5	62	62	73.5	1 × 10 ⁶	R3...	1
250	200	72.5	100	100	120	1 × 10 ⁶	R4...	1
320	320	93	160	160	165	1.2 × 10 ⁶	R5...	1
450	450	130	225	225	300	1.5 × 10 ⁶	R6...	1
630	630	184	315	315	400	1 × 10 ⁶	R7...	1
800	800	232	400	400	500	0.9 × 10 ⁶	R8...	1
1500	-	-	-	-	-	-	R9...	1

Order codes

A

B

C

D

E

F

G

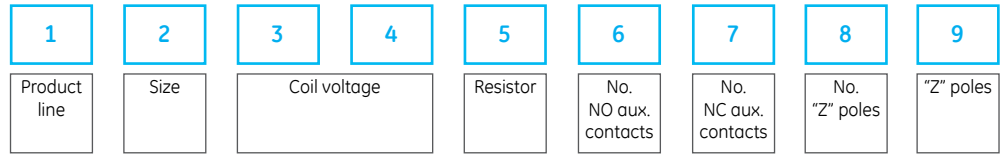
H

I

X



Catalogue number structure



Size		1	2
1	Max.	45	R 1
	500V AC	90	R 2
2	250V DC	125	R 3
		250	R 4
		320	R 5
		450	R 6
		630	R 7
		800	R 8
		1200	R 9

Auxiliary contacts		6	7
6	NO		
	1		1
	2		2
	3		3
	4		4
	5		5
7	6		6
		1	1
		2	2
		3	3
	4	4	

"RN" poles" (NC)		11
"RN" poles	"RN" poles	
0	0	-
1	1	1
2	2	2
3	3	3
4	4	4

Note: The "RN" poles are not available for the R6, R8 and R9 types.

Coil voltage		3	4
AC	DC		
Types R1 ... R7			
24V		A	P
48V		C	P
110V		E	P
220V		G	P
	20V	A	-
	24V	B	-
	40V	C	-
	48V	D	-
	97V	E	-
	110V	F	-
	197V	G	-
	220V	H	-
	230V	M	-
	125V	R	-
Types R8 and R9			
110V		E	P
220V	97V	G	P
	110V	E	-
	197V	F	-
	220V	G	-
	230V	H	-
	125V	M	-
		R	-

"Z" poles" (N)		8
"Z" poles	"Z" poles	
0		-
1		1
2		2
3		3
4		4

"Z" poles		9
Type of pole		
Z	Z	
No "Z" poles	-	

"RN" poles		12
Type of pole		
RN	V	
No "RN" poles	-	

Note: The "RN" poles are not available for the R6, R8 and R9 types.

Arc-quenching coil "Z" poles		Standard Upon request		
Type		A	B	C
R1	45A	14A	25A	
R2	90A	45A	-	
R3	125A	75A	-	
R4	200A	50A	130A	
R5	320A	150A	-	
R6	450A	270A	-	
R7	630A	320A	-	
R8	800A	320A	400A	
R9	1200A	-	-	

Arc-quenching coil «RN» poles		Standard Upon request		
Type		A	B	C
R1	45A	14A	25A	
R2	90A	45A	-	
R3	125A	75A	-	
R4	200A	50A	130A	
R5	320A	150A	-	
R6	-	-	-	
R7	630A	320A	-	
R8	-	-	-	
R9	-	-	-	

Note: The "RN" poles are not available for the R6, R8 and R9 types.

Economy resistor		5
	If required (5/2 contacts)	R
	If not required	-

Type of contacts		14
Type		
4/2	Intermittent op.	4
5/2	Continuous op.	5



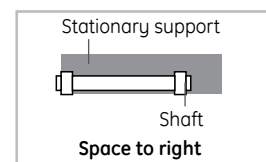
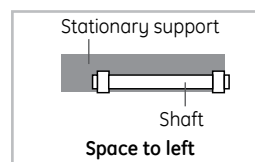
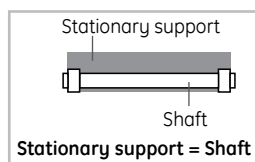
10	11	12	13	14	15	16	17	18
Arc-quenching coil "Z" poles	No. "RN" poles	"RN" poles	Arc-quenching coil "RN" poles	Type of contacts	Stationary support	Space	Shaft	Isolation

	Stationary support				Contactor type			
	R1 R2 R3	R4 R5	R6 R7 R8	R9	R1 R2 R3	R4 R5	R6 R7 R8	R9
15	Length (mm)							
	150	A	-	-	-			
	200	B	-	-	-			
	250	C	C	-	-			
	300	D	D	-	-			
	350	E	E	E	-			
	400	F	F	F	F			
	450	G	G	G	G			
	500	H	H	H	H			
	600	I	I	I	I			
	700	L	L	L	L			
	800	M	M	M	M			
	900	N	N	N	N			
	1000	O	O	O	O			

	Schaft (Hstat. sup.)				Contactor type			
	R1 R2 R3	R4 R5	R6 R7 R8	R9	R1 R2 R3	R4 R5	R6 R7 R8	R9
17	Length (mm)							
	150	A	-	-	-			
	200	B	-	-	-			
	250	C	C	-	-			
	300	D	D	-	-			
	350	E	E	E	-			
	400	F	F	F	F			
	450	G	G	G	G			
	500	H	H	H	H			
	600	I	I	I	I			
	700	L	L	L	L			
	800	M	M	M	M			
	900	N	N	N	N			
	1000	O	O	O	O			

	Isolation		18
18		For more isolation	M
		Not required	-

	Space		16
16	No space	Station. sup.=Shaft	-
	Space	Left	S
		Right	-



Order codes

- A
- B
- C
- D
- E
- F
- G
- H
- I
- X



Standardised DC or rectified coils

The DC coils are suitable for intermittent operation; for continuous operation, an economy resistor must be used.
The coils for rectified rated voltages 20-40-97-197V obtained from AC power supplies. (before the rectifier). 24-48-110-220V are available upon request. For the contactor of "RN" break poles, contact GE.

Contactor	Voltage VDC	Coil		Economy resistor for continuous operation ± 5%				Single-phase bridge rectifier for AC power		
		Cat. no.	Ref. no.	W	Ω	Cat. no.	Ref. no.	V 50/60Hz	Cat. no.	Ref. no.
R1 R2	20	39012Y20D	244107	4	8.2	RSS13/64TA8,2	204177	24	MSK-B250/220-1,5	209997
	24	39012Y24D	202327		18	RSS13/64TA18	211727	-		
	40	39012Y40D	244106		33	RSS13/64TA33	211728	48		
	48	39012Y48D	244734		68	RSS13/64TA6,8	214869	-		
	97	39012Y97D	202328		220	RSS13/64TA220	212702	110		
	110	39012Y110D	202323		330	RSS13/64TA330	211745	-		
	197	39012Y197D	202325		680	RSS13/64TA680	214580	220		
	220	39012Y220D	202326		1200	RSS13/64TA1200	213034	-		
	230	39012Y230D	211706		1200	RSS13/64TA1200	213034	-		
	125	39012Y125D	202324		330	RSS13/64TA300	211714	-		
R3	20	3903Y20D	215278	4	8.2	RSS13/64TA8,2	204177	24	MSK-B250/220-1,5	209997
	24	3903Y24D	244735		18	RSS13/64TA18	211727	-		
	40	3903Y40D	244088		39	RSS13/64TA39	211730	48		
	48	3903Y48D	212705		47	RSS13/64TA47	211731	-		
	97	3903Y97D	213691		270	RSS13/64TA270	214399	110		
	110	3903Y110D	202437		330	RSS13/64TA330	211745	-		
	197	3903Y197D	214442		820	RSS13/64TA820	214400	220		
	220	3903Y220D	202438		1200	RSS13/64TA1200	213034	-		
	230	3903Y230D	211107		1200	RSS13/64TA1200	213034	-		
	125	3903Y125D	216100		330	RSS13/64TA300	211714	-		
R4	20	3904Y20D	244084	6	8.2	RSS13/64TA8,2	204177	24	MSK-B250/220-1,5	209997
	24	3904Y24D	202483		18	RSS13/64TA18	211727	-		
	40	3904Y40D	244083		33	RSS13/64TA33	211728	48		
	48	3904Y48D	213814		33	RSS13/64TA33	211728	-		
	97	3904Y97D	213601		180	RSS13/64TA180	211744	110		
	110	3904Y110D	202479		180	RSS13/64TA180	211744	-		
	197	3904Y197D	202481		680	RSS13/64TA680	214580	220		
	220	3904Y220D	202482		680	RSS13/64TA680	214580	-		
	230	3904Y230D	211708		680	RSS13/64TA680	214580	-		
	125	3904Y125D	202480		180	RSS13/64TA180	211744	-		
R5	20	3905Y20D	244073	10	6.8	RSS13/64TA6,8	214869	24	SKB-B80/70-4	211716
	24	3905Y24D	244072		10	RSS13/64TA10	211742	-		
	40	3905Y40D	244071		27	RSS13/64TA27	244192	48		
	48	3905Y48D	244736		27	RSS13/64TA27	244192	-		
	97	3905Y97D	202513		120	RSS13/64TA120	243281	110		
	110	3905Y110D	202512		180	RSS13/64TA180	211744	-		
	197	3905Y197D	244074		470	RSS13/64TA470	244191	220		
	220	3905Y220D	212706		680	RSS13/64TA680	214580	-		
	230	3905Y230D	211709		680	RSS13/64TA680	214580	-		
	125	3905Y125D	242260		180	RSS13/64TA180	211744	-		
R6	20	3906Y20D	244065	10	6.8	RSS13/64TA6,8	214869	24	SKB-B80/70-4	211716
	24	3906Y24D	244064		8.2	RSS13/64TA8,2	204177	-		
	40	3906Y40D	244063		27	RSS13/64TA27	244192	48		
	48	3906Y48D	212707		27	RSS13/64TA27	244192	-		
	97	3906Y97D	202533		100	RSS13/64TA100	211744	110		
	110	3906Y110D	202532		180	RSS13/64TA180	211744	-		
	197	3906Y197D	244066		470	RSS13/64TA470	244191	220		
	220	3906Y220D	213612		680	RSS13/64TA680	214580	-		
	230	3906Y230D	211770		680	RSS13/64TA680	214580	-		
	125	3906Y125D	211711		180	RSS13/64TA180	211744	-		
R7	20	3907Y20D	244058	16	5.6	RSS13/64TA5,6	211735	24	SKB-B80/70-4	211716
	24	3907Y24D	244057		5.6	RSS13/64TA5,6	211735	-		
	40	3907Y40D	244056		15	RSS13/64TA15	211737	48		
	48	3907Y48D	244737		18	RSS13/64TA18	211727	-		
	97	3907Y97D	244738		82	RSS13/64TA82	204177	110		
	110	3907Y110D	202547		100	RSS13/64TA100	211743	-		
	197	3907Y197D	244059		330	RSS13/64TA330	211745	220		
	220	3907Y220D	202548		390	RSS13/64TA390	211746	-		
	230	3907Y230D	211712		1200	RSS13/64TA1200	213034	-		
	125	3907Y125D	211713		330	RSS13/64TA330	211745	-		
R8	97	3908Y97D	212959	16	82	RSS20/165TA82	214081	110	SKB-B250/220-4	212165
	110	3908Y110D	202565		120	RSS20/165TA120	213664	-		
	197	3908Y197D	214066		390	RSS20/165TA390	211748	220		
	220	3908Y220D	202566		470	RSS20/165TA470	211739	-		
R9	97	3909Y97D	214146	140	100	RSS20/165TA100	213663	110	SKB-B30/08	211720
	110	3909Y110D	202572		150	RSS20/165TA150	215004	-		
	197	3909Y197D	204181		390	RSS20/165TA390	211748	220		
	220	3909Y220D	244739		560	RSS20/165TA560	244987	-		

(1) To insert the resistors, use NC auxiliary contacts in series.

(2) Two 20x165 resistors connected in parallel, each with a resistive value listed in the table.



Spare parts

Contactors	Description	Cat. no.	Ref. no.	Pack (units)	
R1	"Z" stationary part with 14A arc-quenching coil and spark suppressor	390/3921PFZCS14	202273	1	
	"Z" stationary part with 25A arc-quenching coil and spark suppressor	390/3921PFZCS25	244172	1	
	"Z" stationary part with 45A arc-quenching coil and spark suppressor	390/3921PFZCS45	202274	1	
	"RN" stationary part with spark suppressor	390/3921PFRN	244173	1	
	"Z" moving part (with pressure spring and strap)	390/3921PMZI	202276	1	
	"RN" moving part (with pressure spring and strap)	390/3921PMRN	202275	1	
	Stationary and moving main contact, type 4/2 (intermittent operation)	390/3921/2FOM4/2	214120	1	
	Stationary and moving main contact, type 5/2 (continuous operation)	390/3922FOM5/2	214121	1	
	Spark suppressor for "Z" and "RN" poles	390/3921PZ	202277	1	
	R2	"Z" stationary part with 45A arc-quenching coil and spark suppressor	390/3922PFZCS45	244744	1
		"Z" stationary part with 90A arc-quenching coil and spark suppressor	390/3922PFZCS90	202278	1
"RN" stationary part with spark suppressor		390/3922PFRN	212709	1	
"Z" moving part (with pressure spring and strap)		390/3922PMZI	202279	1	
"RN" moving part (with pressure spring and strap)		390/3922PMRN	213014	1	
Stationary and moving main contact, type 4/2 (intermittent operation)		390/3921/2FOM4/2	214120	1	
Stationary and moving main contact, type 5/2 (continuous operation)		390/3922FOM5/2	214121	1	
Spark suppressor for "Z" and "RN" poles		390/3922PZ	202280	1	
R3		"Z" stationary part with 75A arc-quenching coil and spark suppressor	390/3923PFZCS75	244745	1
		"Z" stationary part with 125A arc-quenching coil and spark suppressor	390/3923PFZCS125	202281	1
		"RN" stationary part with spark suppressor	390/3923PFRN	213986	1
	"Z" moving part (with pressure spring and strap)	390/3923PMZI	202283	1	
	"RN" moving part (with pressure spring and strap)	390/3923PMRN	202282	1	
	Stationary and moving main contact, type 4/2 (intermittent operation)	390/3923/2FOM4/2	214122	1	
	Stationary and moving main contact, type 5/2 (continuous operation)	390/3923FOM5/2	214123	1	
	Spark suppressor for "Z" and "RN" poles	390/3923PZ	202284	1	
	R4	"Z" stationary part with 125A arc-quenching coil and spark suppressor	390/3924PFZCS125	202288	1
		"Z" stationary part with 200A arc-quenching coil and spark suppressor	390/3924PFZCS200	202289	1
		"RN" stationary part with spark suppressor	390/3924PFRN	202287	1
"Z" moving part (with pressure spring and strap)		390/3924PMZI	202291	1	
"RN" moving part (with pressure spring and strap)		390/3924PMRN	202290	1	
Stationary main contact, type 4/2 (intermittent operation)		390/3924F4	214124	1	
Moving main contact, type 4/2 (intermittent operation)		390/3924M4/2	214126	1	
Stationary main contact, 5/2 type (continuous operation)		390/3924F5/2	204178	1	
Moving main contact, type 5/2 (continuous operation)		390/3924M5/2	214127	1	
Spark suppressor for "Z" and "RN" poles		390/3924PZ	202292	1	
R5		"Z" stationary part with 125A arc-quenching coil and spark suppressor	390/3925PFZCS150	213573	1
	"Z" stationary part with 320A arc-quenching coil and spark suppressor	390/3925PFZCS320	202295	1	
	"RN" stationary part with spark suppressor	390/3925PFRN	244746	1	
	"Z" moving part (with pressure spring and strap)	390/3925PMZI	202298	1	
	"RN" moving part (with pressure spring and strap)	390/3925PMRN	202297	1	
	Stationary main contact, type 4/2 (intermittent operation)	390/3925F4/2	214128	1	
	Moving main contact, type 4/2 (intermittent operation)	390/3925M4/2	214130	1	
	Stationary main contact, 5/2 type (continuous operation)	390/3925F5/2	214129	1	
	Moving main contact, type 5/2 (continuous operation)	390/3925M5/2	214131	1	
	Spark suppressor for "Z" and "RN" poles	390/3925PZ	202299	1	
	R5	"Z" stationary part with 270A arc-quenching coil and spark suppressor	390/3926PFZCS270	202303	1
"Z" stationary part with 450A arc-quenching coil and spark suppressor		390/3926PFZCS450	213574	1	
"Z" moving part (with pressure spring and strap)		390/3926PMZI	202304	1	
Stationary main contact, type 4/2 (intermittent operation)		390/3926F4/2	214133	1	
Moving main contact, type 4/2 (intermittent operation)		390/3926M4/2	214135	1	
Stationary main contact, 5/2 type (continuous operation)		390/3926F5/2	214134	1	
Moving main contact, type 5/2 (continuous operation)		390/3926M5/2	214136	1	
Spark suppressor for "Z" and "RN" poles		390/3926PZ	202654	1	

Order codes

A

B

C

D

E

F

G

H

I

X



Spare parts (continued)

Contactor	Description	Cat. no.	Ref. no.	Pack (units)
R7	"Z" stationary part with 320A arc-quenching coil and spark suppressor	390/3927PFZCS320	202307	1
	"Z" stationary part with 630A arc-quenching coil and spark suppressor	390/3927PFZCS630	202308	1
	"RN" stationary part with spark suppressor	390/3927PFRN	202306	1
	"Z" moving part (with pressure spring and strap)	390/3927PMZI	202310	1
	"RN" moving part (with pressure spring and strap)	390/3927PMRN	202309	1
	Stationary main contact, type 4/2 (intermittent operation)	390/3927F4/2	214137	1
	Moving main contact, type 4/2 (intermittent operation)	390/3927M4/2	214139	1
	Stationary main contact, 5/2 type (continuous operation)	390/3927F5/2	214138	1
	Moving main contact, type 5/2 (continuous operation)	390/3927M5/2	214140	1
	Spark suppressor for "Z" and "RN" poles	390/3927PZ	202311	1
R8	"Z" stationary part with 400A arc-quenching coil and spark suppressor	3908PFZCS400	202555	1
	"Z" stationary part with 800A arc-quenching coil and spark suppressor	3908PFZCS800	202562	1
	"Z" moving part (with pressure spring and strap)	3908PMZ	202563	1
	Stationary main contact, type 4/2 (intermittent operation)	3908F4/2	214144	1
	Moving main contact, type 4/2 (intermittent operation)	3908/9M4/2	214141	1
	Stationary main contact, 5/2 type (continuous operation)	3908F5/2	214145	1
	Moving main contact, type 5/2 (continuous operation)	3908/9M5/2	214142	1
	Spark suppressor for "Z" and "RN" poles	3908PZ	202564	1
R8	"Z" stationary part with 1200A arc-quenching coil and spark suppr.	3909PFZCS120	244983	1
	"Z" moving part (with pressure spring and strap)	3909PMZ	212962	1
	Stationary main contact, type 4/2 (intermittent operation)	3909F4/2	204179	1
	Moving main contact, type 4/2 (intermittent operation)	3908/9M4/2	214141	1
	Stationary main contact, 5/2 type (continuous operation)	3909F5/2	204180	1
Moving main contact, type 5/2 (continuous operation)	3908/9M5/2	214142	1	



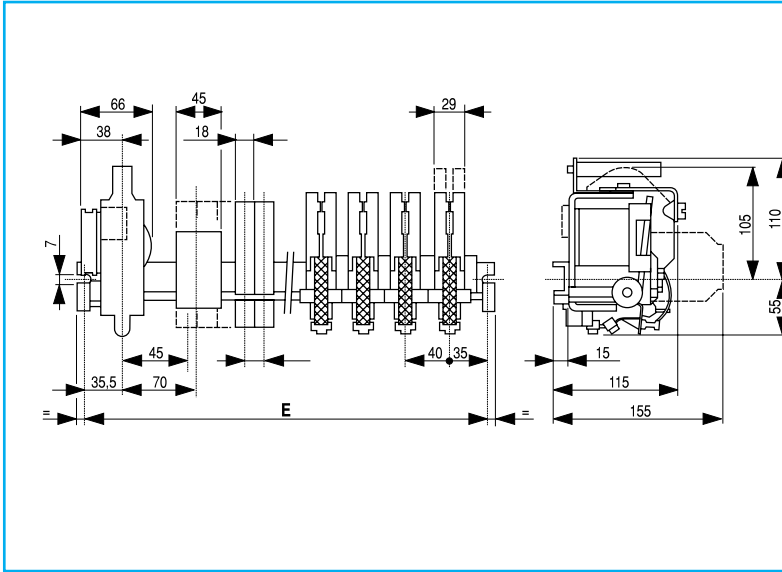
Operating categories

			R1...	R2...	R3...	R4...	R5...	R6...	R7...	R8...	R9...
AC-1	Peak operating current at ambient temp. of: (for all rated voltages)	40°C (A)	45	90	125	250	320	450	630	800	1200
		55°C (A)	45	90	125	250	320	450	600	750	1200
		70°C (A)	30	70	100	200	280	360	500	700	950
	Max. operating power Resistor III	230/220V (kW)	17	30	45	90	114	170	195	240	450
		400/380V (kW)	29	55	75	155	196	310	330	410	750
		440/415V (kW)	32	57	85	180	227	340	330	500	900
		500V (kW)	39	69	102	200	250	390	420	550	1030
Conductor (mm ²)		10	35	50	120	185	2 x (30x5)	2 x (40x5)	2 x (60x5)	4 x (50x5)	
Operation in % of peak operating current	120 ops/h (%)	100	100	100	100	100	100	100	100	100	50
	300 ops/h (%)	50	50	50	50	30	30	20	10	10	
AC-3	Peak operating current	Ue = 400V (A)	40	90	110	200	320	450	630	800	-
	Max. operating power	230/220V (kW)	11.5	26	36.5	72.5	93	130	184	232	-
		400/380V (kW)	20	45	62	100	160	225	315	400	-
		440/415V (kW)	20	45	68	100	160	225	315	400	-
		500V (kW)	20	45	72.5	120	165	280	400	500	-
Use in % of peak operating current	120 ops/h (%)	100	100	100	100	100	100	100	100	-	
	300 ops/h (%)	50	50	50	50	50	50	30	30	-	
AC-4	Peak operating current	Ue = 500V (A)	18.5	44	55	110	125	150	165	250	-
	Operating power (200,000 switching)	230/220V (kW)	4	11	15	33	37	45	50	80	-
		400/380V (kW)	9	22	28	55	63	80	90	132	-
		(HP)	11.9	29.2	37.2	73.1	83.8	106	119.7	175.5	-
		500V (kW)	11	25	33	75	90	100	110	225	-
		(HP)	14.6	33.2	43.9	99.7	119.7	133	146	299	-
	Peak operating current	H 400V (A)	40	90	110	185	280	420	590	700	-
Max. operating power	400/380V (kW)	18.5	38	55	90	150	220	300	375	-	
			R1...	R2...	R3...	R4...	R5...	R6...	R7...	R8...	R9...
DC1 L/R H 1ms	125V	Series poles 1	40	85	115	180	300	400	600	700	900
		2	60	90	125	200	320	450	630	750	1000
		3	60	90	125	200	320	450	630	800	1250
		4	60	90	125	200	320	450	630	800	1250
	220V	1	20	75	110	160	275	350	500	600	800
		2	30	90	115	200	300	370	560	650	900
		3	40	90	125	250	320	400	630	750	1000
		4	40	90	125	250	320	450	630	800	1250
	440V	1	-	-	-	-	-	-	-	-	-
		2	-	75	100	200	275	350	500	600	800
		3	20	90	125	250	320	400	600	700	900
		4	20	90	125	250	320	450	630	800	1000
DC3 L/R H 2.5ms	125V	1	30	75	100	170	280	380	550	650	-
		2	40	80	110	200	320	450	630	800	-
		3	45	90	110	200	320	450	630	800	-
		4	45	100	120	220	340	480	-	-	-
	220V	1	-	-	-	-	-	-	-	-	-
		2	15	65	90	155	245	340	460	550	-
		3	20	90	110	200	320	450	630	800	-
		4	25	90	110	200	320	450	630	800	-
	440V	1	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-
		3	10	55	75	120	200	300	400	500	-
		4	13	70	100	160	260	400	550	660	-
DC5 L/R H 15ms	125V	1	27	50	70	90	240	320	400	500	-
		2	35	70	90	150	280	380	450	550	-
		3	40	90	100	200	320	420	500	600	-
		4	40	90	110	200	320	450	500	650	-
	220V	1	-	-	-	-	-	-	-	-	-
		2	13	55	80	140	220	300	410	490	-
		3	18	80	100	180	290	400	560	700	-
		4	22	80	100	180	290	400	560	700	-
	440V	1	-	-	-	-	-	-	-	-	-
		2	-	-	-	-	-	-	-	-	-
		3	9	50	67	100	180	270	360	450	-
		4	11	60	90	130	224	360	480	600	-



Dimensional drawings

R1..., R2...

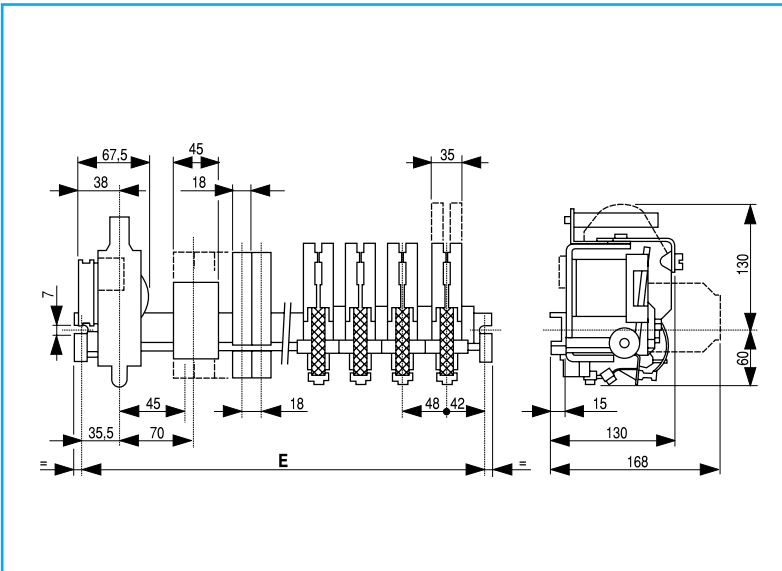


Contact combination

"Z" main pole (1)	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	1	1	1	150
	3	3	3	200
	6	6	4	250
	9	6	4	300
	10	6	4	350
2	1	1	1	200
	4	4	4	250
	7	6	4	300
	9	6	4	350
	9	6	4	400
3	2	2	2	250
	5	5	4	300
	7	6	4	350
	7	6	4	400
4	2	2	2	300
	5	5	4	350
	5	5	4	400

(1) A "RN" pole can be used to replace one of the "Z" poles. To use a higher number of "RN" poles, contact the manufacturer.

R3...

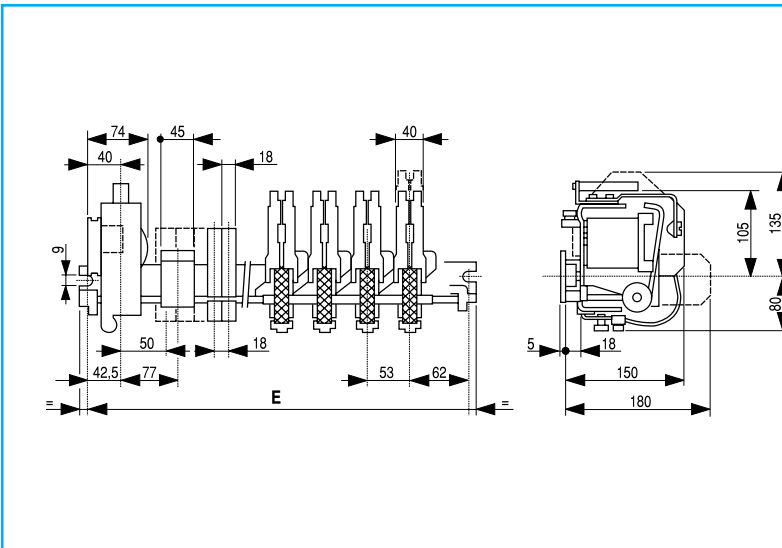


Contact combination

"Z" main pole (1)	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	-	-	-	150
	3	3	3	200
	6	6	4	250
	9	6	4	300
	10	6	4	350
2	10	6	4	400
	-	-	-	200
	3	3	3	250
	6	6	4	300
	8	6	4	350
3	9	6	4	400
	-	-	-	250
	3	3	3	300
4	6	6	4	350
	7	6	4	400
	-	-	-	300
	3	3	3	350
4	4	4	400	

(1) A "RN" pole can be used to replace one of the "Z" poles. To use a higher number of "RN" poles, contact the manufacturer.

R4...



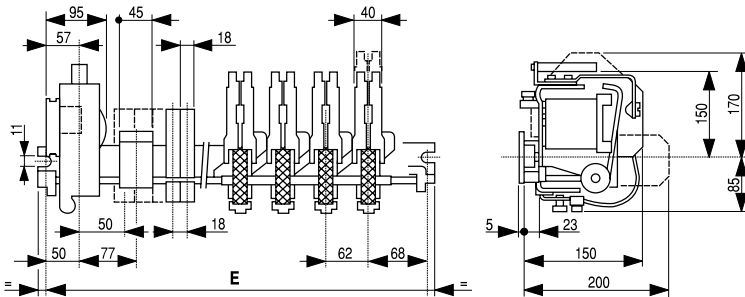
Contact combination

"Z" main pole (1)	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	3	3	3	250
	6	6	4	300
	9	6	4	350
	10	6	4	400
	10	6	4	450
2	-	-	-	250
	3	3	3	300
	6	6	4	350
	9	6	4	400
	10	6	4	450
3	-	-	-	300
	3	3	3	350
	6	6	4	400
4	9	6	4	450
	3	3	3	400
	4	4	3	450

(1) A "RN" pole can be used to replace one of the "Z" poles. To use a higher number of "RN" poles, contact the manufacturer.



R5...

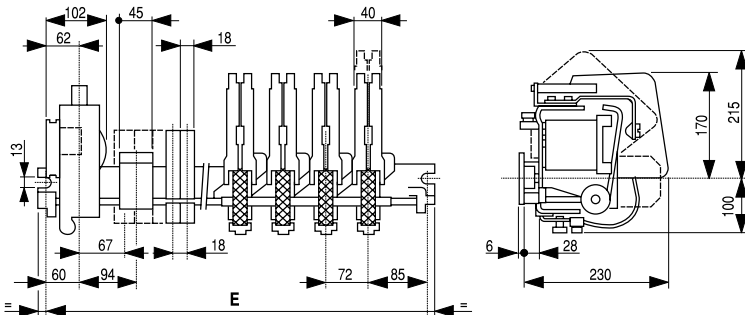


Contact combination

"Z" main pole (1)	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	2	2	2	250
	5	5	4	300
	8	6	4	350
	10	6	4	400
	10	6	4	450
2	10	6	4	500
	2	2	2	300
	4	4	4	350
	7	6	4	400
3	10	6	4	450
	10	6	4	500
	1	-	-	350
	4	4	4	400
4	6	6	4	450
	7	6	4	500
	-	-	-	400
	3	3	3	450
	3	3	3	500

(1) A "RN" pole can be used to replace one of the "Z" poles. To use a higher number of "RN" poles, contact the manufacturer.

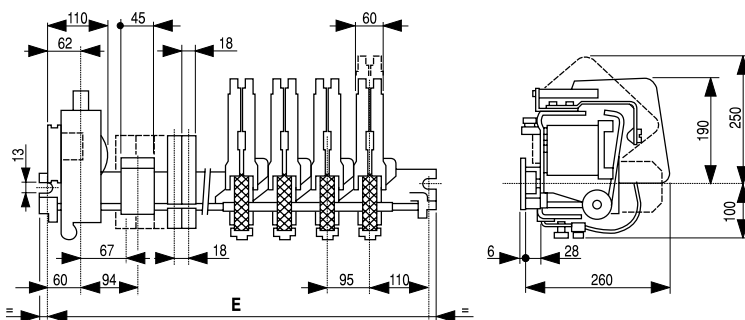
R6...



Contact combination

"Z" main pole	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	5	2	4	350
	8	6	4	400
	10	6	4	450
	10	6	4	500
	10	6	4	600
2	10	6	4	700
	1	1	1	350
	4	4	4	400
	7	6	4	450
3	9	6	4	500
	10	6	4	600
	10	6	4	700
	2	2	2	450
4	5	5	4	500
	7	6	4	600
	7	6	4	700
	1	1	1	500
	2	2	2	600
	2	2	2	700

R7...



Contact combination

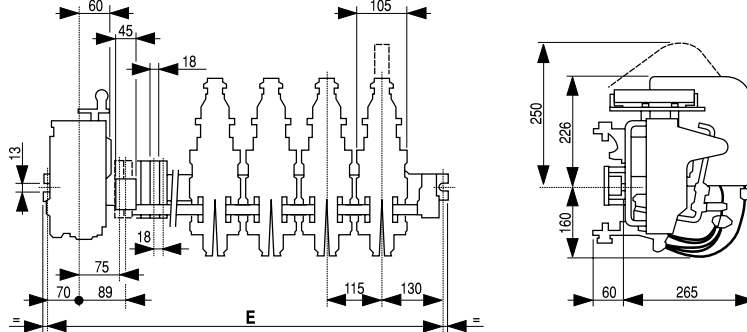
"Z" main pole (1)	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	4	4	4	350
	6	6	4	400
	9	6	4	450
	10	6	4	500
	10	6	4	600
2	10	6	4	700
	1	1	1	400
	4	4	4	450
	7	6	4	500
3	10	6	4	600
	10	6	4	700
	1	1	1	500
	7	6	4	600
4	8	6	4	700
	2	2	2	600
	5	5	3	700

(1) A "RN" pole can be used to replace one of the "Z" poles. To use a higher number of "RN" poles, contact the manufacturer.



Dimensional drawings

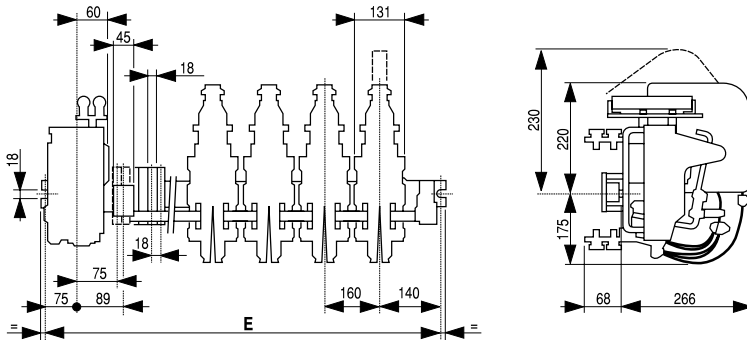
R8...



Contact combination

"Z" main pole	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	1	1	1	350
	4	4	4	400
	6	6	4	450
	9	6	4	500
	10	6	4	600
	10	6	4	700
2	10	6	4	800
	-	-	-	450
	3	3	3	500
	8	6	4	600
10	6	4	700	
	6	4	800	
	6	4	800	
3	2	2	2	600
	8	6	4	700
4	8	6	4	800
	1	1	1	700
	4	3	3	800

R9...



Contact combination

"Z" main pole	Max. no. of aux. contacts	Max. NO	Max. NC	Center-to-center spacing
1	2	2	2	400
	4	4	4	450
	7	6	4	500
	10	6	4	600
	10	6	4	700
	10	6	4	800
2	10	6	4	900
	10	6	4	1000
	4	4	4	600
	9	6	4	700
10	6	4	800	
	10	6	4	900
	10	6	4	1000
3	-	-	-	700
	6	6	4	800
4	8	6	4	900
	8	6	4	1000
3	3	3	3	900
	4	3	3	1000

Notes



Notes



Notes



REGIONAL OFFICES**BRANCH OFFICES****NORTH****Gurgaon**

GE India Industrial Pvt. Ltd.
5th Floor, Building No.7A
DLF Cyber City, DLF Phase-III
Sector 25 A, Gurgaon
Haryana - 122002
Ph: (0124) 4808000
Fax: (0124) 4226911 / 4226912

Chandigarh

GE India Industrial Pvt. Ltd.
SCO No. 72 & 73, First Floor
Sector 8/C, Madhya Marg
Chandigarh-160008
Ph: (0172) 3982908-10
Fax: (0172) 3982905

Jaipur

GE India Industrial Pvt. Ltd.
448, 4th Floor, Ganapati Plaza
M.I. Road, Jaipur-302001
Ph: (0141) 5112802
Fax: (0141) 2389012

Lucknow

GE India Industrial Pvt. Ltd.
101, Ace Business Center
19, Vidhan Sabha Marg
Lucknow-226001
Ph: (0522) 3203808, 3012444/666
Fax: (0522) 4045909

SOUTH**Bangalore**

GE India Industrial Pvt. Ltd.
The Millenia, Level-6, Tower B
1 & 2, Murphy Road, Ulsoor
Bangalore-560008
Ph: (080) 41434000
Fax: (080) 41434199

Chennai

GE India Industrial Pvt. Ltd.
Temple Tower, 6th Floor
476, (New No. 672) Anna Salai
Nandanam
Chennai-600035
Ph: (044) 45070470-84
Fax: (044) 45070474

Coimbatore

GE India Industrial Pvt. Ltd.
No.36/6 & 7, 1st Floor
Ashirwad Building
D.B.Road, R.S. Puram
Coimbatore-641002
Ph: (0422) 4393520 / 4393529

Cochin

GE India Industrial Pvt. Ltd.
Mayur Business Center & Motel
Chittur Road, Pullepadi Junction
Cochin-682035
Ph: (0484) 2364139
Fax: (0484) 4031400

Hyderabad

GE India Industrial Pvt. Ltd.
5-2-45, Hyderabasti, RP Road
Near Gujarati High School
Secunderabad-500003
Ph: (040) 27543162, 66311264
Fax: (040) 66339272

WEST**Mumbai**

GE India Industrial Pvt. Ltd.
361/362, Solitaire Corporate Park
M. Vasarji Road, Chakala
Andheri (E), Mumbai-400093
Ph: (022) 40101610
Fax: (022) 40101611

Ahmedabad

GE India Industrial Pvt. Ltd.
405-406, Kirtiman Complex
Kinariwala House, Behind Citibank
Off C.G. Road, Ahmedabad-380006
Ph: (079) 65427385/55427389
Fax: (079) 26460637

Pune

GE Money Financial Services Limited
Shop No. 405-410, 4th Floor
City Point, Dhole Patil Road
Pune-411001
Ph: (020) 41266999
Fax: (020) 41266109

EAST**Kolkata**

GE India Industrial Pvt. Ltd.
Horizon Building, 4th Floor
57, Chowringhee Road
Kolkata-700071
Ph: (033) 40034056
Fax: (033) 40034071

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Works:

GE India Industrial Pvt. Ltd.
Plot No. 42/1 & 45/14
Electronic City - Phase II
Bangalore-560100
Ph: (080) 41113000
Fax: (080) 28528469/552

HO:

GE India Industrial Pvt. Ltd.
The Millenia, Level-6, Tower B
1 & 2, Murphy Road, Ulsoor
Bangalore-560008
Ph: (080) 41434000
Fax: (080) 41434199
Email: query@ge.com

Toll Free No:

18001024343

Customer Care:

gecustomer.care@ge.com



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