

Control and Automation

For industrial applications ED.03

Contactors and overload relays



GE imagination at work



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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

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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

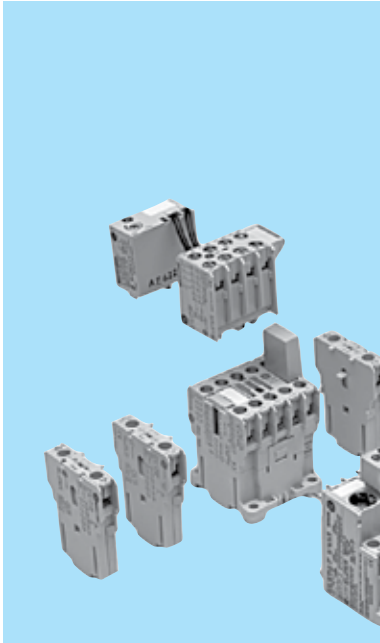
Dimensions

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⁾ (3x440V, 50/60Hz, AC3) | (A) 6 | 9 | 12 |
| 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 |
| | | kW HP | kW HP | kW HP | kW HP | kW HP | | | Ref. no. see bottom | | Ref. no. see bottom | |
| 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 | | |  |  | Cat. no. ⁽¹⁾ | Pack | Cat. no. ⁽¹⁾ | Pack | |
| | | 115V | 220V | 220V | 380V | 500V | | | | | | | |
| 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 0 | 4 | MC1AA00AI ♦ | 20 | |
| | | AC3 | 0.56 | 1.12 | 2.2 | 4 | 4 | | | | | | |
| | | | 0.75 | 1.5 | 3 | 5.5 | 5.5 | | | | | | |
| Spare coil | | | | | | | | | MBOA ♦ | 10 | MBOC ♦ | 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

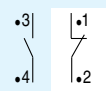
(4) Terminal with wire 1.5 mm²: I_e = 16A
with wire 1 mm²: I_e = 10A
Insulated terminal type B 2.8 × 0.8 and wire of 1 mm² I_e = 8A in accordance with DIN 46247.

(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 |
|-----------------------|--|--------------------------------|--------------------------------|--|---|-----------|----------|------|
| 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 |

• Two or four additional contacts, to cover combinations of 3 or 5 contacts without increasing the surface area of the basic contactor



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 |
|--|---------------------------------------|--------------------------------|--------------------------------|----------------------------|----------|------------|----------|------|
| <ul style="list-style-type: none"> 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 |
| <ul style="list-style-type: none"> 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 | | | | | | | | |
| 1 | | | 10 | 1 | 0 | MARL110ATS | 100519 | 10 |
| 1 | | | 01 | 0 | 1 | MARL101ATS | 100520 | 10 |
| Ring terminal | | | | | | | | |
| 1 | | | 10 | 1 | 0 | MARL110ARS | 103299 | 10 |
| 1 | | | 01 | 0 | 1 | MARL101ARS | 103298 | 10 |
| Terminal: faston 2x2.8 insulated (1) | | | | | | | | |
| 1 | | | 10 | 1 | 0 | MARL110AFS | 100521 | 10 |
| 1 | | | 01 | 0 | 1 | MARL101AFS | 100522 | 10 |
| Terminal: printed circuit | | | | | | | | |
| 1 | | | 10 | 1 | 0 | MARL110AIS | 100523 | 10 |
| 1 | | | 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

A

B

C

D

E

F






G

H

I

X

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> | Mechanical interlock and pole jumpers | | | | | | | |
| | 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

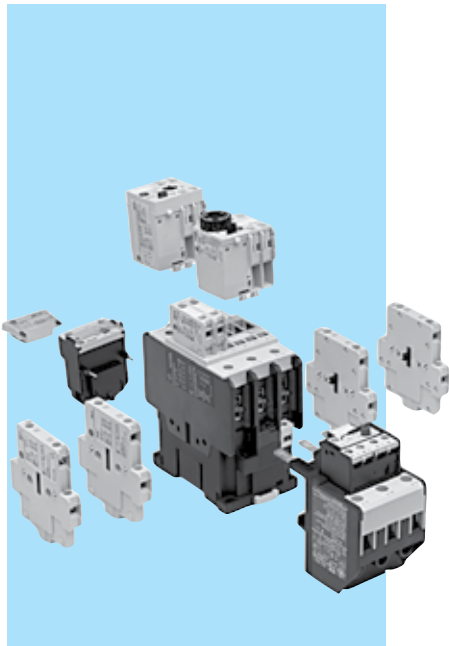
F

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) |
| | | kW HP | kW HP | kW HP | kW HP | | | Ref. no. see bottom | | Ref. no. see bottom | | Ref. no. see bottom | | |
| 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 | | 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 | | 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 | | 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 | | 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 | | 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 | | 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 | | CL45D300M♦ | 10 | |
| 90 | 50 | 15 20 | 22 30 | 25 34 | 30 40 | 1.8x10 ⁶ | 0 1 | 0 1 | CL06A300M♦ CL06A311M♦ (2) | 1 1 | | CL06D300M♦ | 1 | |
| 110 | 65 | 18.5 25 | 30 40 | 37 50 | 40 55 | 1.7x10 ⁶ | 0 1 | 0 1 | CL07A300M♦ CL07A311M♦ (2) | 1 1 | | CL07D300M♦ | 1 | |
| 110 | 80 | 22 30 | 37 50 | 45 60 | 45 60 | 1.5x10 ⁶ | 0 1 | 0 1 | CL08A300M♦ CL08A311M♦ (2) | 1 1 | | CL08D300M♦ | 1 | |
| 140 | 95 | 25 34 | 45 60 | 50 68 | 55 75 | 1.7x10 ⁶ | 0 1 | 0 1 | CL09A300M♦ CL09A311M♦ (2) | 1 1 | | CL09D300M♦ | 1 | |
| 140 | 105 | 30 40 | 55 75 | 55 75 | 65 88 | 1.5x10 ⁶ | 0 1 | 0 1 | CL10A300M♦ CL10A311M♦ (2) | 1 1 | | CL10D300M♦ | 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 | | kW | kW | kW | kW | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ | Cat. no. ⁽¹⁾ |
| 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 | | Motors <440V, 3~ 50/60Hz | | Admissible power AC3 | | | | Power contacts | | Control circuit: Alternating current | | Control circuit: Direct current | | Control circuit: Coil with electronic module (AC/DC) | |
|---|----------|-----------------------------------|------------|-------------------------|--------------|--------------|------|----------------|----------|---|---------------------|------------------------------------|---------------------|---|---------------------|
| AC1 A | AC3 A | kW HP | kW HP | 220V 230V | 380V 400V | 415V 440V | 500V | kW HP | kW HP | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ |
| 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 | | | | | |
|-------------|---|--------|---|--------|----------|
| | 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 | CL01A400R ♦ | 5 | CL01D400R ♦ |
| 32 | 18 | 12 | 22 | 23 | 27.5 | 1.5x10 ⁶ | 4 | 0 | CL02A400R ♦ | 5 | CL02D400R ♦ | 10 |
| 45 | 25 | 17 | 29 | 32 | 39 | 2x10 ⁶ | 4 | 0 | CL03A400R ♦ | 10 | CL03D400R ♦ | 10 |
| 60 | 32 | 22.5 | 39.5 | 43 | 52 | 1.5x10 ⁶ | 4 | 0 | CL04A400R ♦ | 10 | CL04D400R ♦ | 10 |
| 90 | 50 | 34 | 59 | 64 | 78 | 1.5x10 ⁶ | 4 | 0 | CL05A400R ♦ | 1 | CL05D400R ♦ | 1 |
| 110 | 65 | 42 | 72.5 | 79 | 95 | 1.8x10 ⁶ | 4 | 0 | CL07A400R ♦ | 1 | CL07D400R ♦ | 1 |
| 140 | 95 | 53 | 92 | 100 | 121 | 1.8x10 ⁶ | 4 | 0 | CL09A400R ♦ | 1 | CL09D400R ♦ | 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 | | d | b | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ | Cat. no. ⁽¹⁾ | Pack ⁽²⁾ |
| 25 | 12 | 3 4 | 5.5 7.5 | 5.5 7.5 | 7.5 10 | 2 | | | 2 | CL01A800R ♦ | 5 | CL01D800R ♦ |
| 32 | 18 | 4 5.5 | 7.5 10 | 7.5 10 | 10 13.5 | | CL02A800R ♦ | 5 | | CL02D800R ♦ | 5 | |
| 45 | 25 | 7.5 10 | 12 16 | 12 16 | 15 20 | | CL03A800R ♦ | 10 | | CL03D800R ♦ | 10 | |
| 60 | 32 | 9 12 | 16 22 | 16 22 | 18.5 25 | | CL04A800R ♦ | 10 | | CL04D800R ♦ | 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

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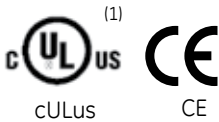
Three and four pole contactors 150 to 825A (AC3) 200 to 1250A (AC1)

- 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



Lloyd's Register



Bureau Veritas



RINA

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 | Operations | | | | | | |
| Non-inductive loads AC1 A | kw | A | kw | kw | kw | kw | | | | | | | |
| 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⁾ | |

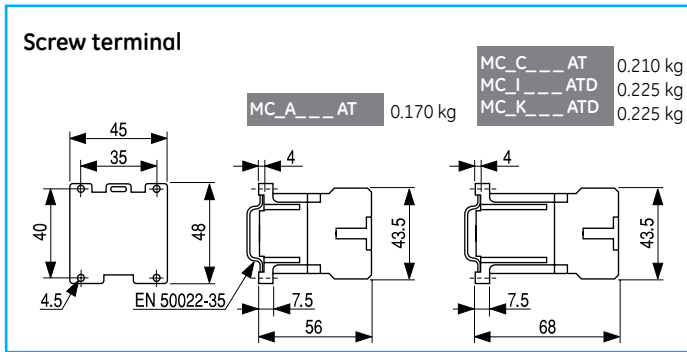
(1) One phase
(2) Three pole

Spares

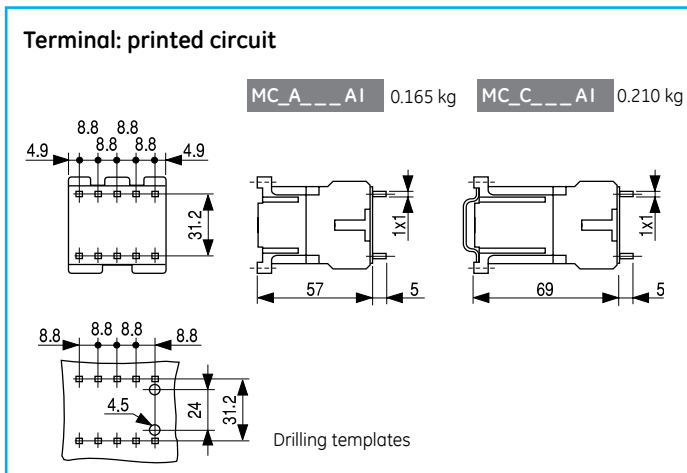
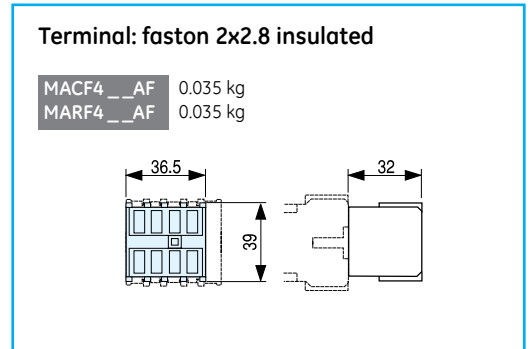
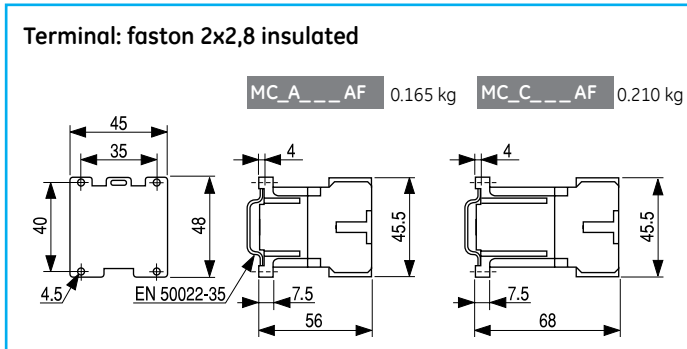
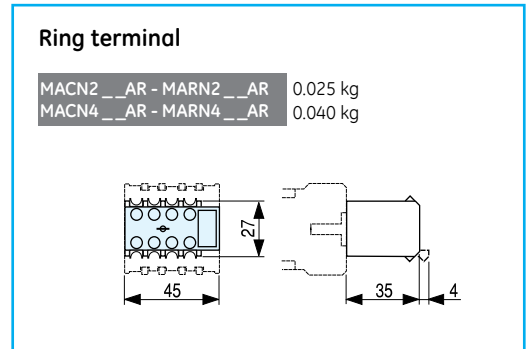
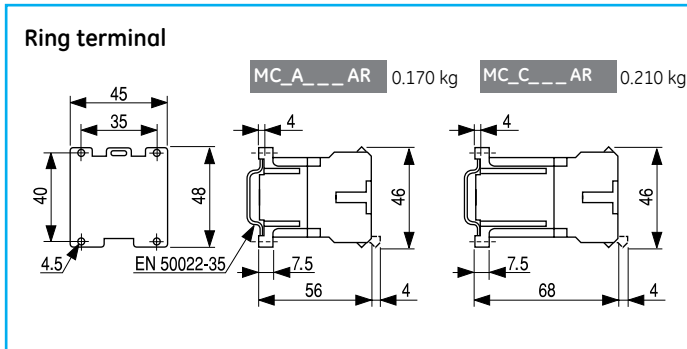
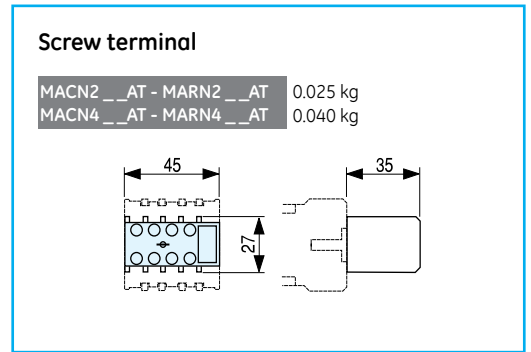
| | For use with: | Type | | Cat. no. | Ref. no. | Pack |
|--|--|------|---------------|----------------|----------|------|
|  <p>Contact kits</p> | One set consists of two fixed contacts, one moving contact and accessory parts. When contact replacement is needed, it is recommended to replace all the contacts at the same time. | | | | | |
| | CK07B | NA | | V1107BA | 113612 | 1 |
| | CK75C | NA | | V1175CA | 113613 | 1 |
| | CK08C | NA | | V1108CA | 113614 | 1 |
| | CK08B | NA | Contactors 4P | V1108B4 | 113505 | 1 |
| | CK85B | NA | | V1185BA | 113615 | 1 |
| | CK09B | NA | | V1109BA | 113616 | 1 |
| | CK09B | NA | Contactors 4P | V1109B4 | 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



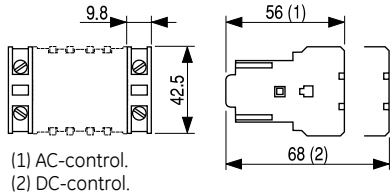
Auxiliary contact block. Lateral mounting



Auxiliary contact blocks. Lateral mounting

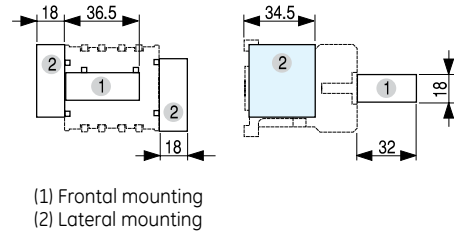
Screw terminal

MACL__AT 0.013 kg
MARL__ATS 0.013 kg



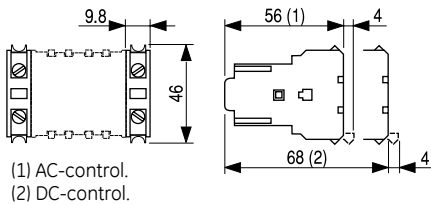
Electronic timer block

MREBC_0AC2 0.040 kg



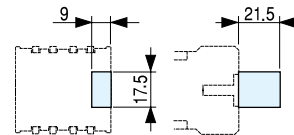
Ring terminal

MACL__AR 0.013 kg
MARL__ARS 0.013 kg



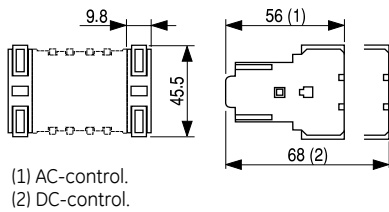
Voltage suppressor block

MP0A_AE 0.010 kg
MPOC_AE3 0.010 kg



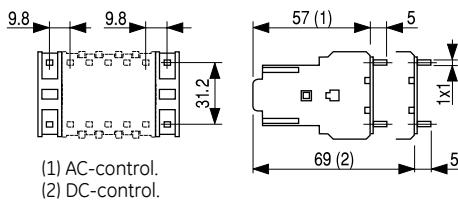
Terminal: faston 2x2.8 insulated

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

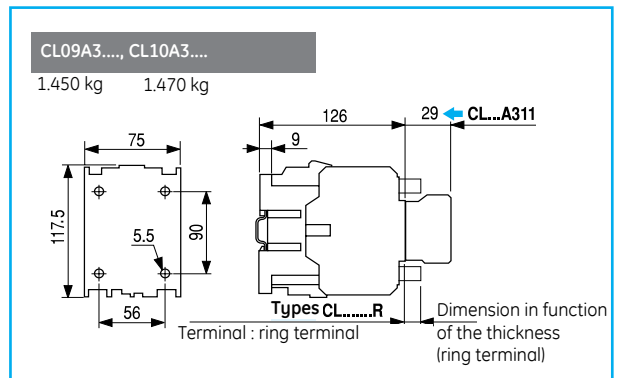
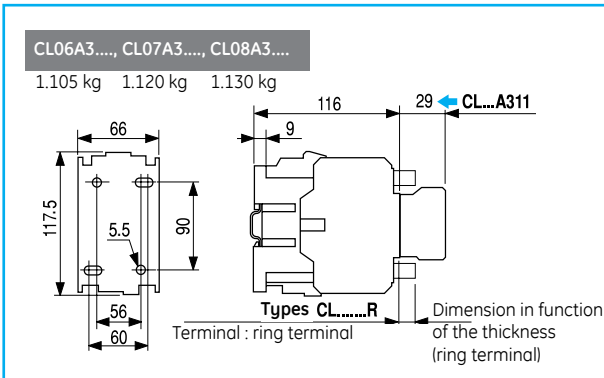
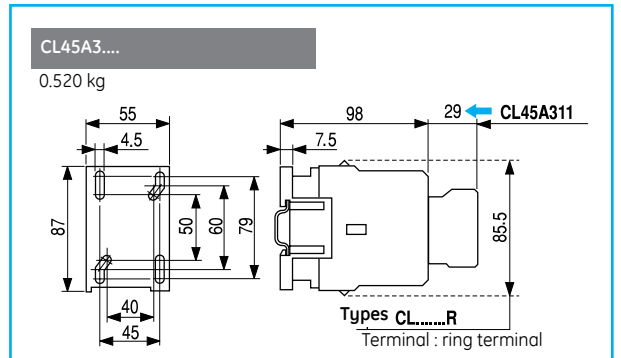
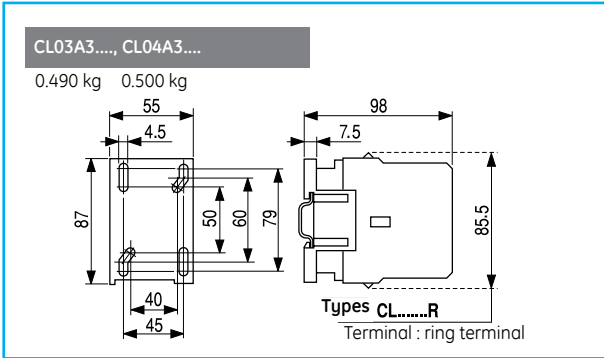
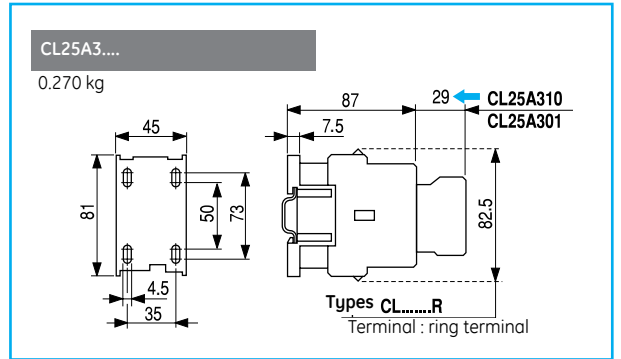
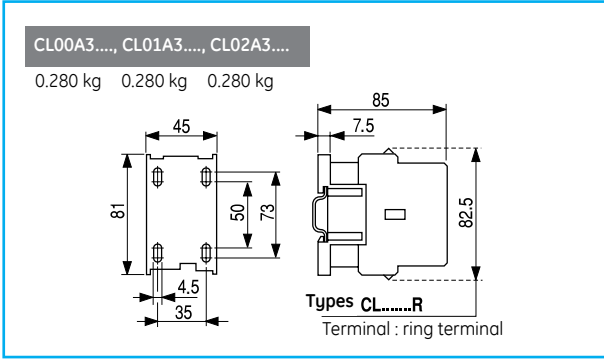
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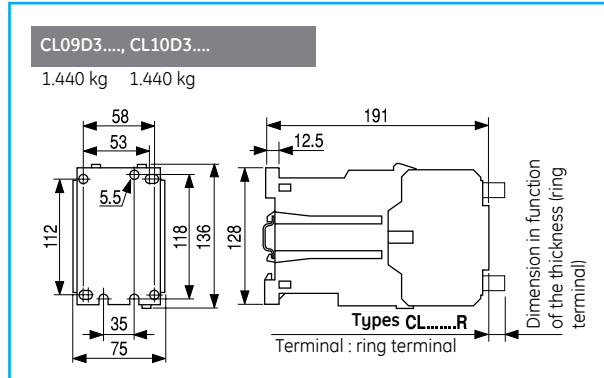
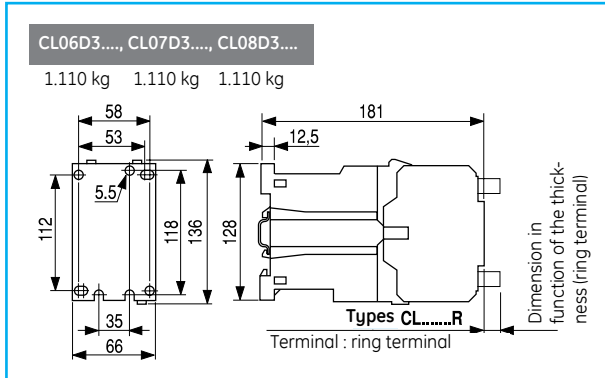
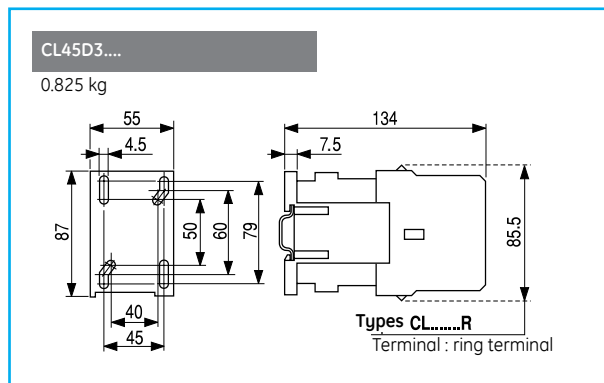
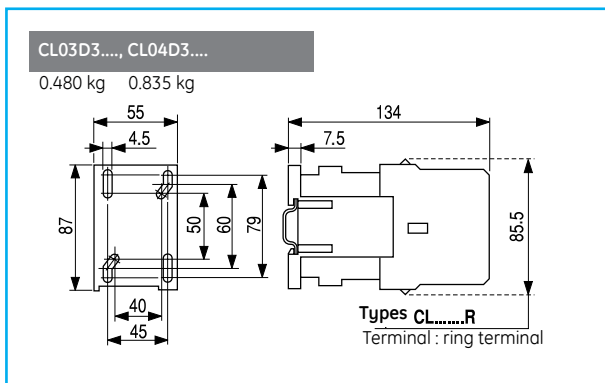
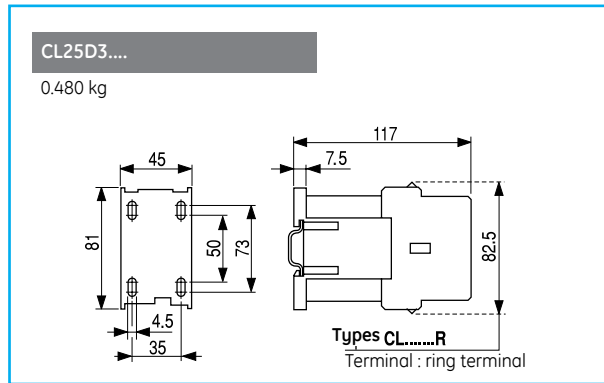
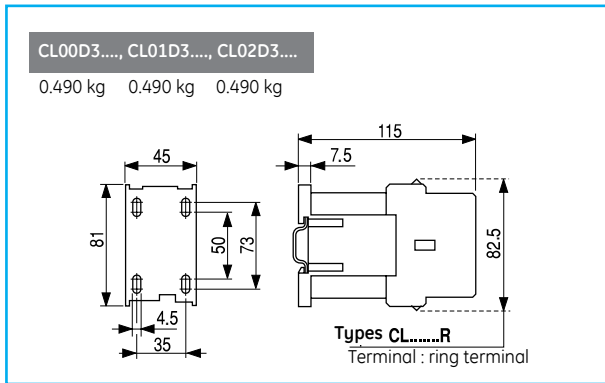
Dimensional drawings. Three pole contactors

Alternating current

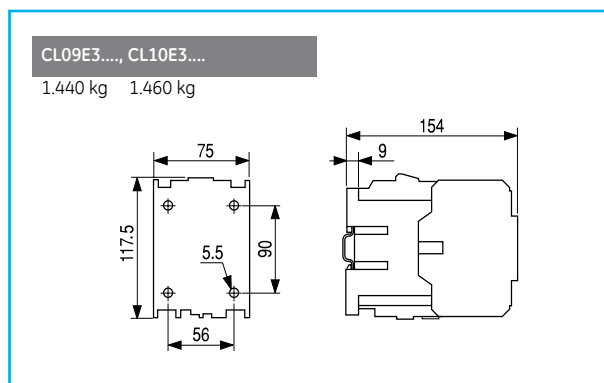
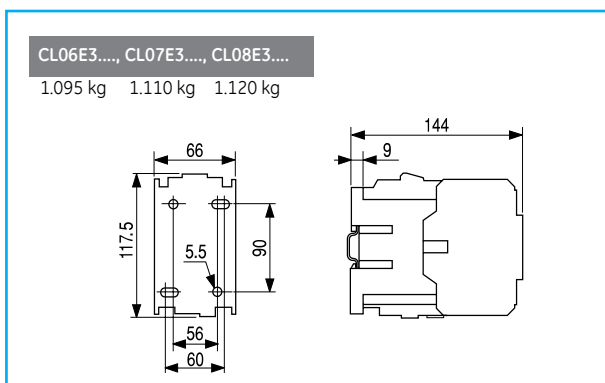


Three pole contactors

Direct current

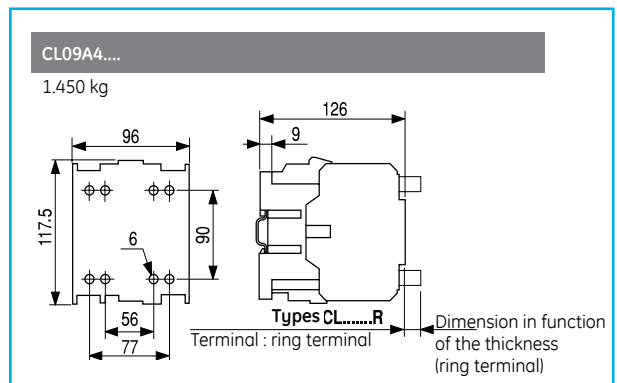
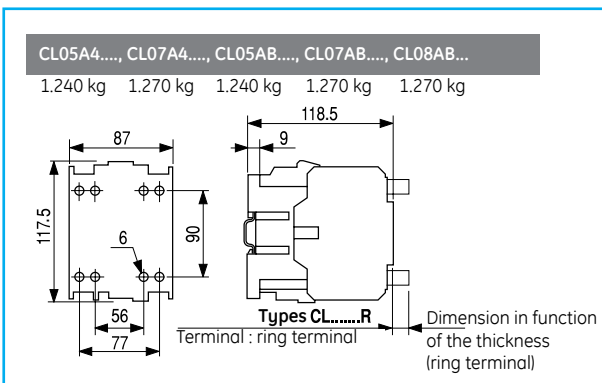
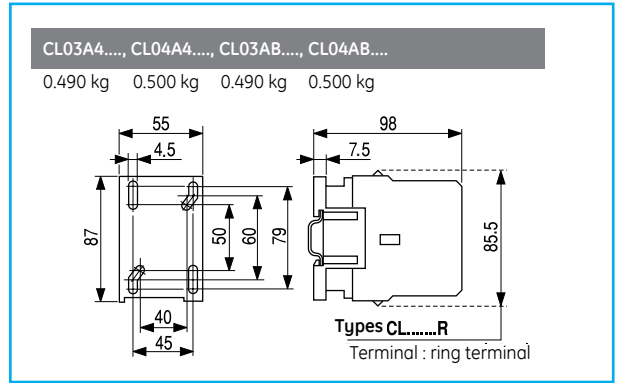
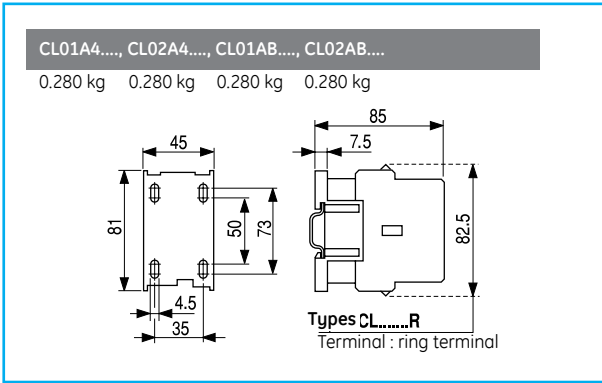


Coil with electronic module

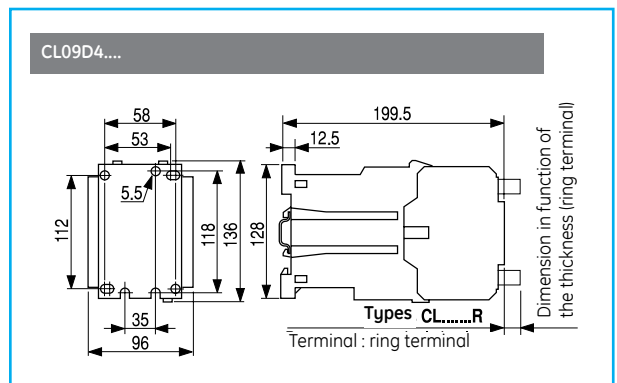
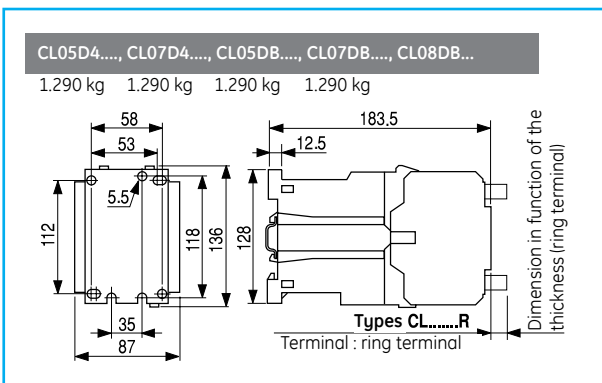
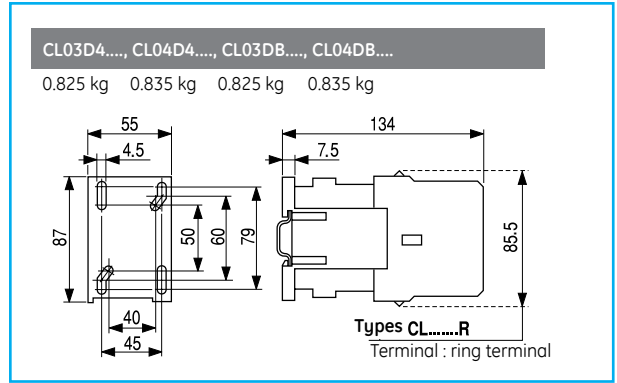
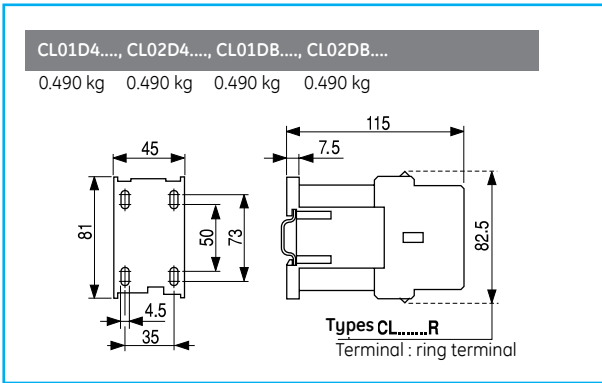


Dimensional drawings. Four pole contactors

Alternating current

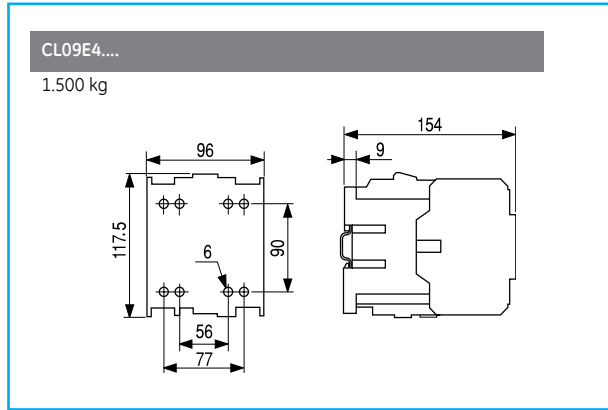
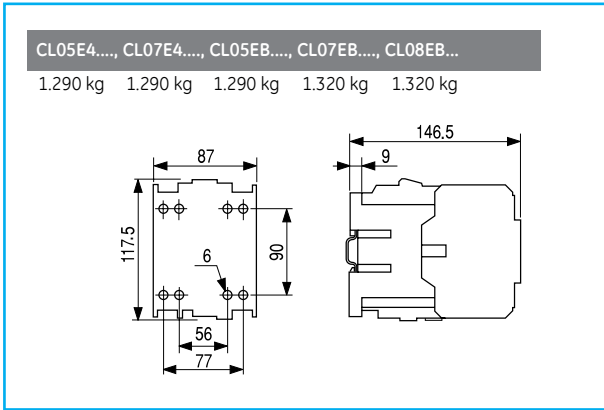


Direct current



Four pole contactors

Coil with electronic module



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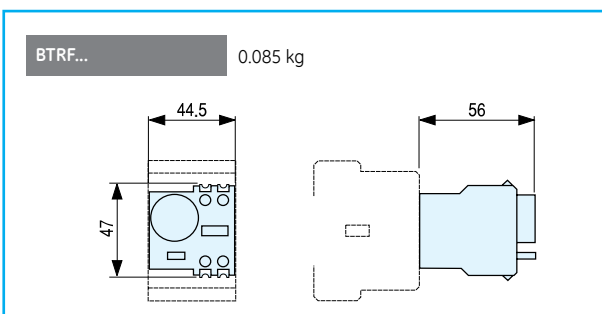
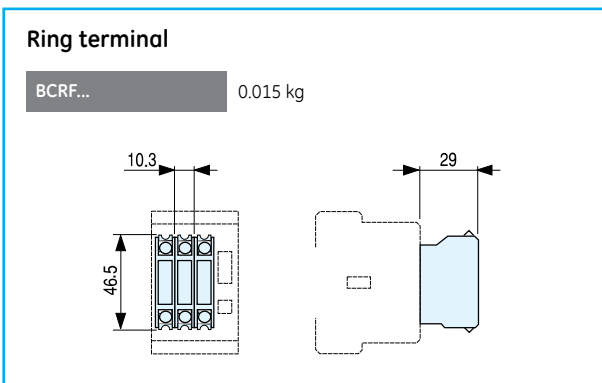
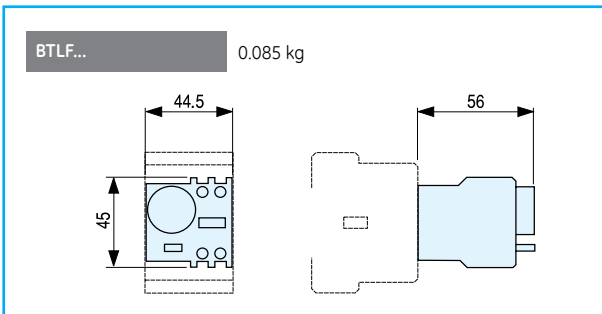
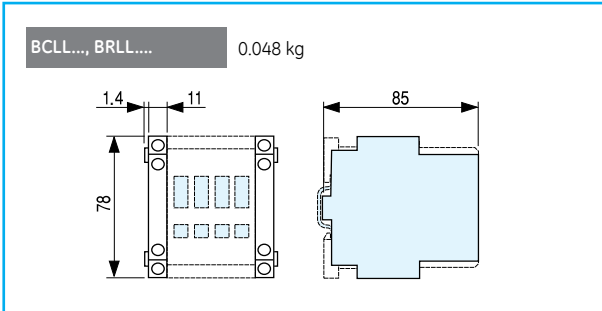
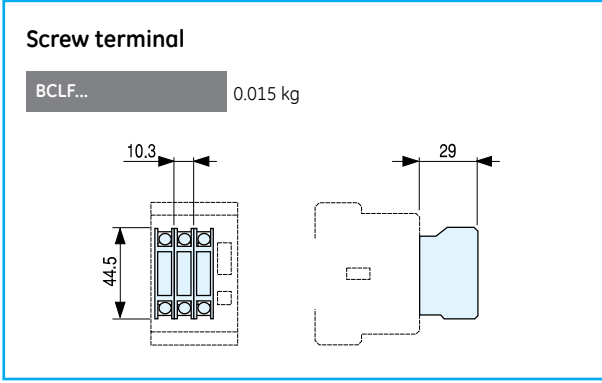
H

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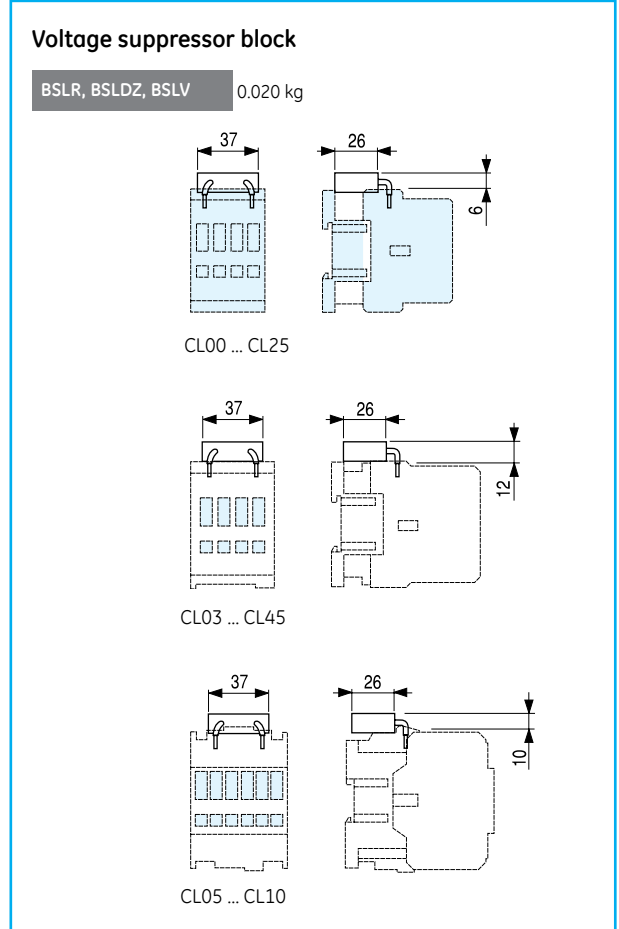
X

Dimensional drawings

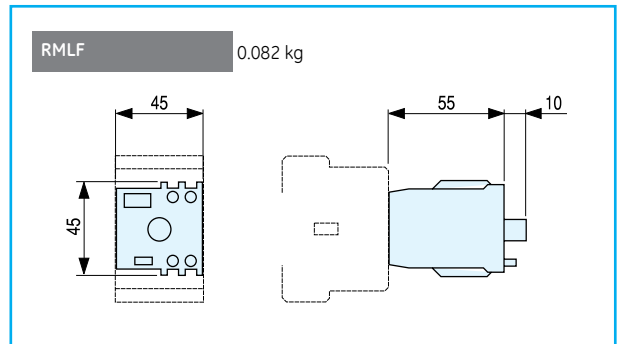
Auxiliary contact blocks



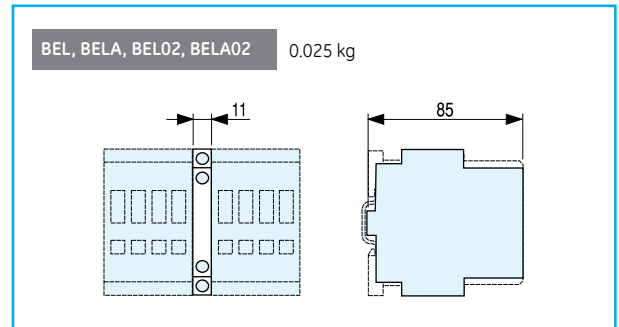
Accessories



Mechanical latch block

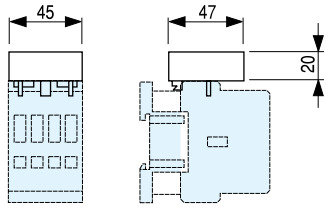


Mechanical / mechanical-electrical interlock

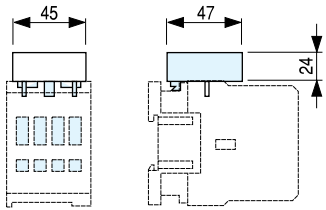


Electronic timer block

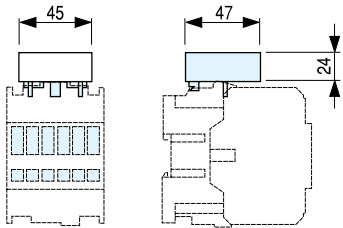
BETL02, BETL45 0.040 kg



CL00 ... CL25



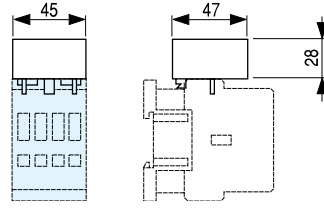
CL03 ... CL45



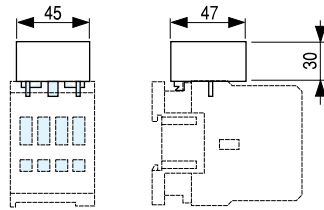
CL05 ... CL10

Interface modules

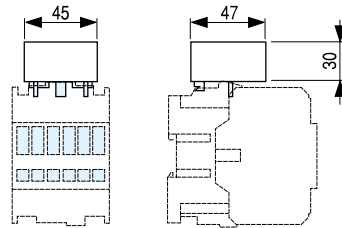
IMR..., IMRF..., IMSSD, IMAMS 0.020 kg



CL00 ... CL25



CL03 ... CL45



CL05 ... CL10

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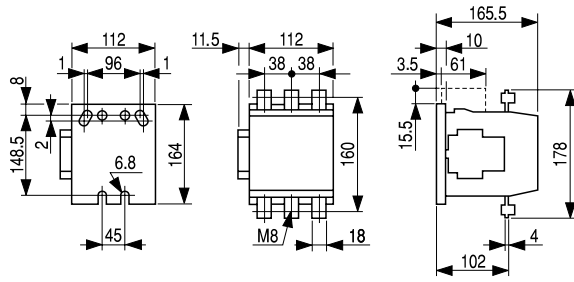
I

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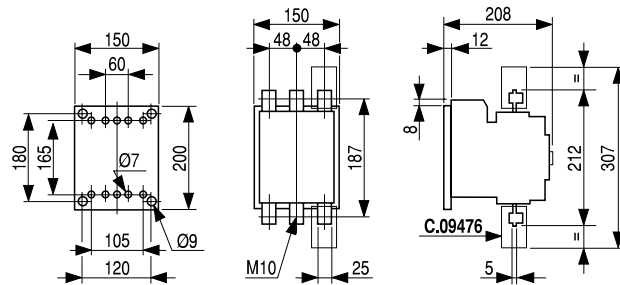
Dimensional drawings

Three pole contactors

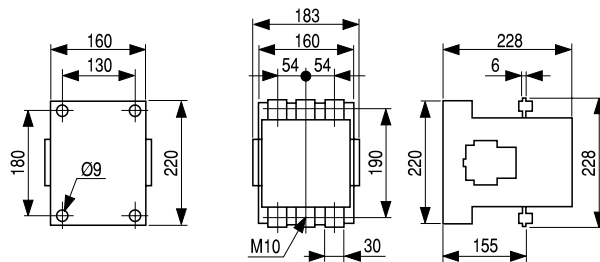
CK75C 3.500 kg
CK08C 3.500 kg



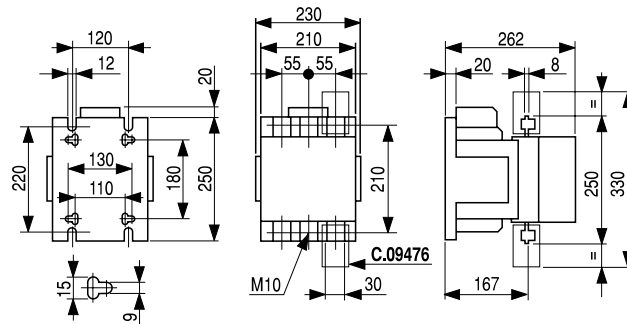
CK85B 6.100 kg
CK09B 6.200 kg
CK95B 6.300 kg



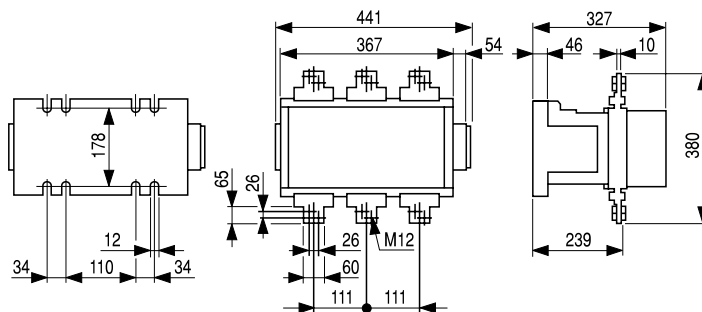
CK10C 11.00 kg
CK11C 11.00 kg



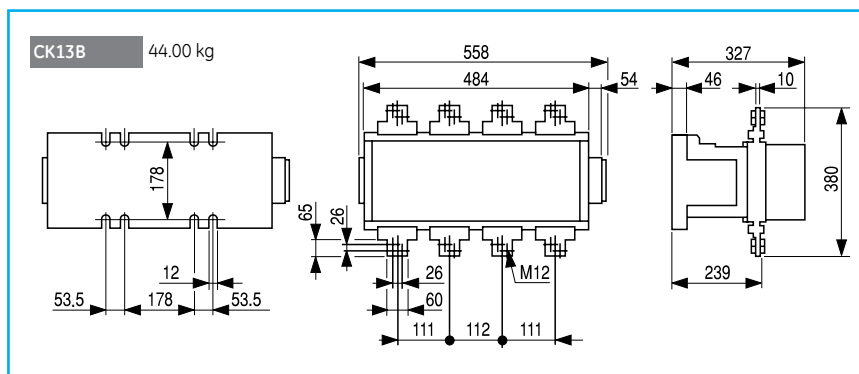
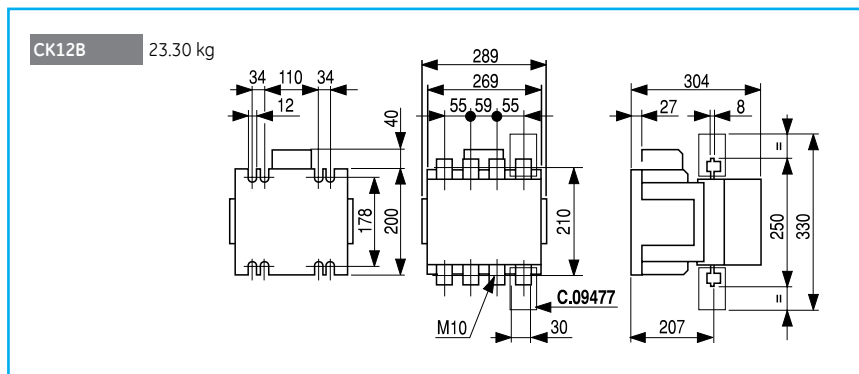
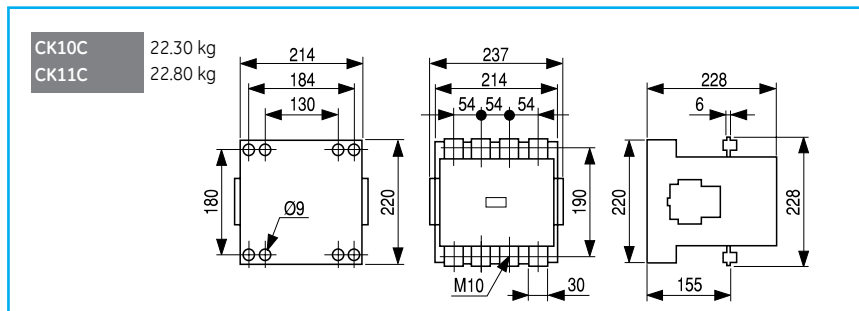
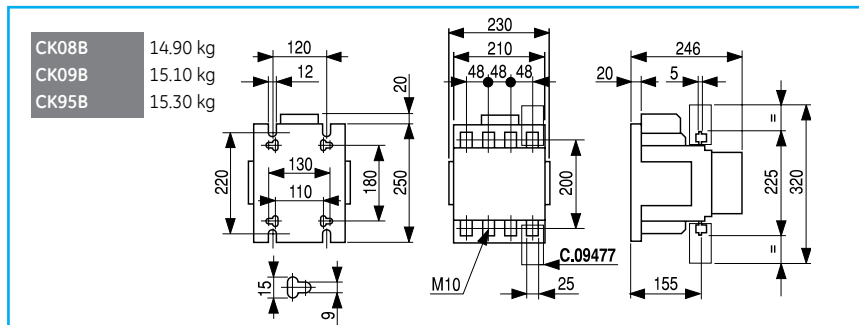
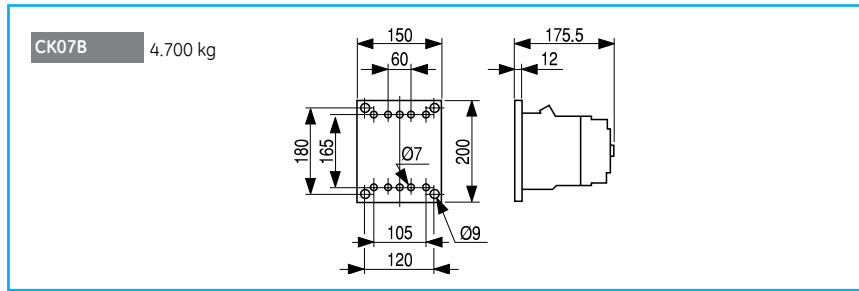
CK12B 18.00 kg



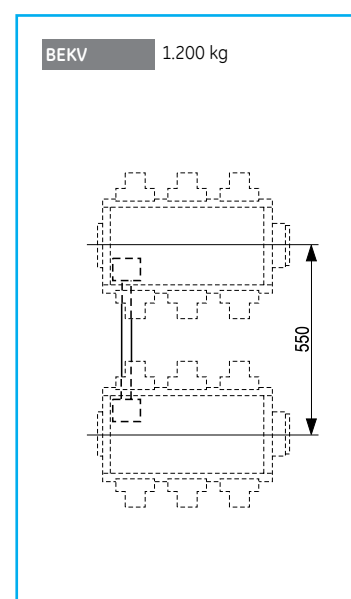
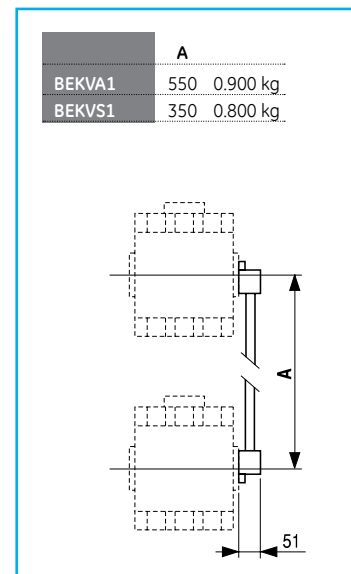
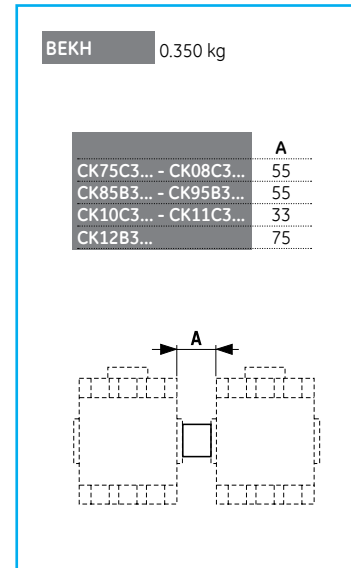
CK13B 35.00 kg



Four pole contactors



Mechanical interlock



3P and 4P contactors

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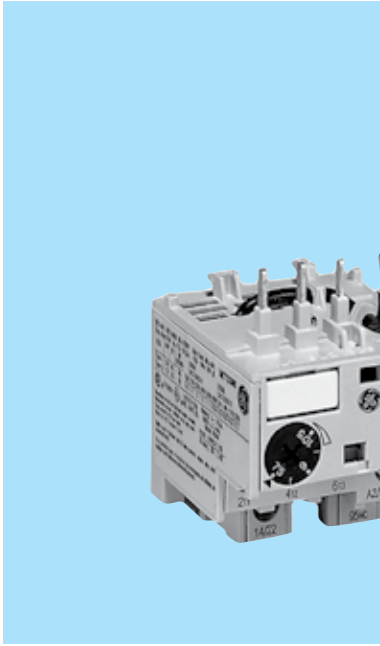
F

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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 |

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.

Approvals



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

| | | Terminal | Cat. no. | Ref. no. | Pack |
|--------------------------------|---|---------------|----------|----------|------|
| <p>Input terminals</p> | | Screw | MVE0T | 101020 | 5 |
| | | Ring terminal | MVE0R | 103562 | 5 |
| | | | | | |
| <p>Base</p> | For separate mounting onto standard EN 50022-35 profile | | MVB0T | 101021 | 5 |
| <p>Auxiliary contact block</p> | 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 |
| | | | | | |
| <p>Identification</p> | 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

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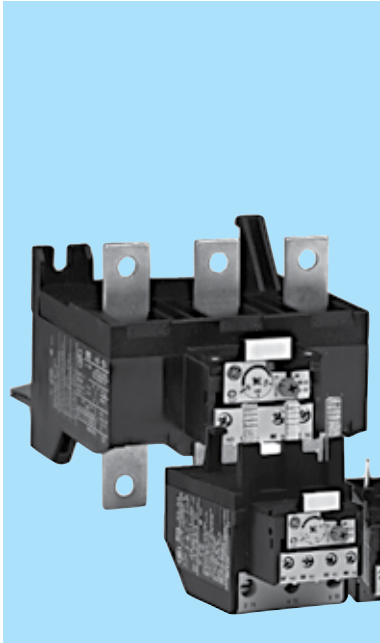
G

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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



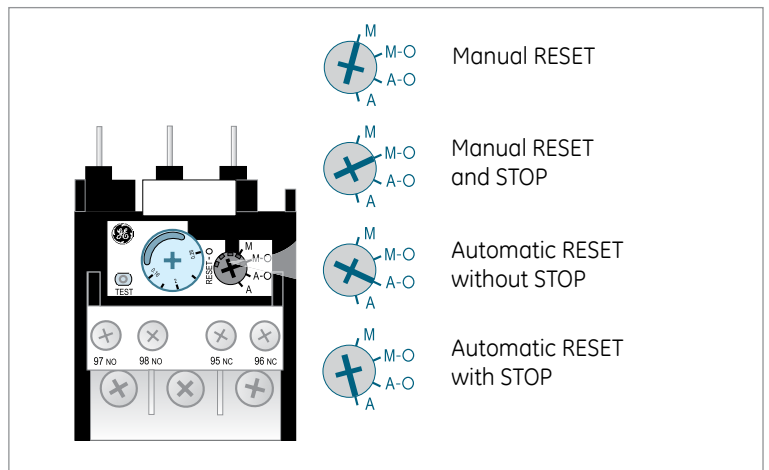
Lloyd's Register



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 |
| 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 | 120 | 190 | | 250 | 315 | RT4LN | 113747 | 1 |
| CK09 | 175 | 280 | | 315 | 400 | RT4LP | 113748 | 1 |
| CK95 ⁽²⁾ | 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 | |



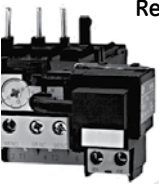
(1) Most suitable fuse in accordance with IEC 60947-4-1.

(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

F

G

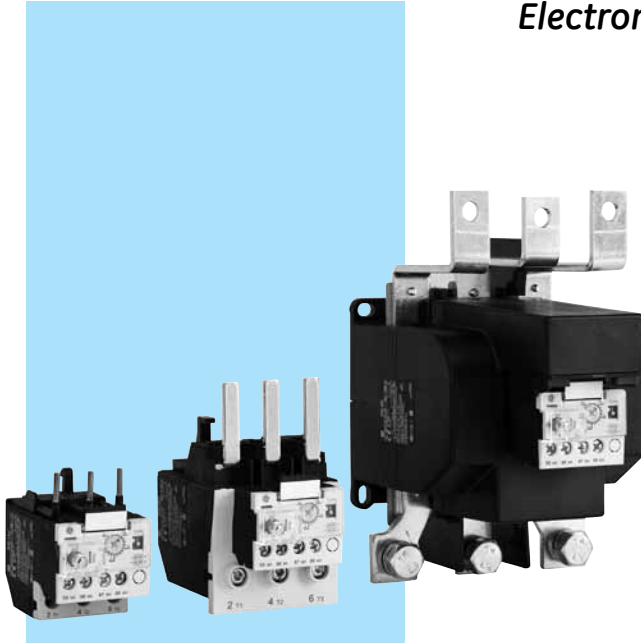
H

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

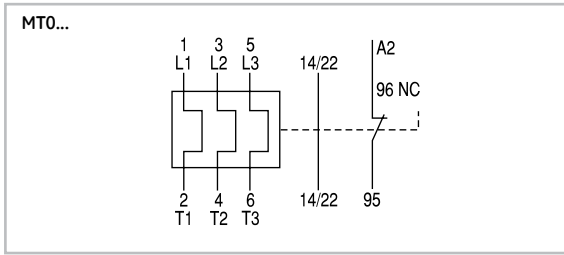
H

I

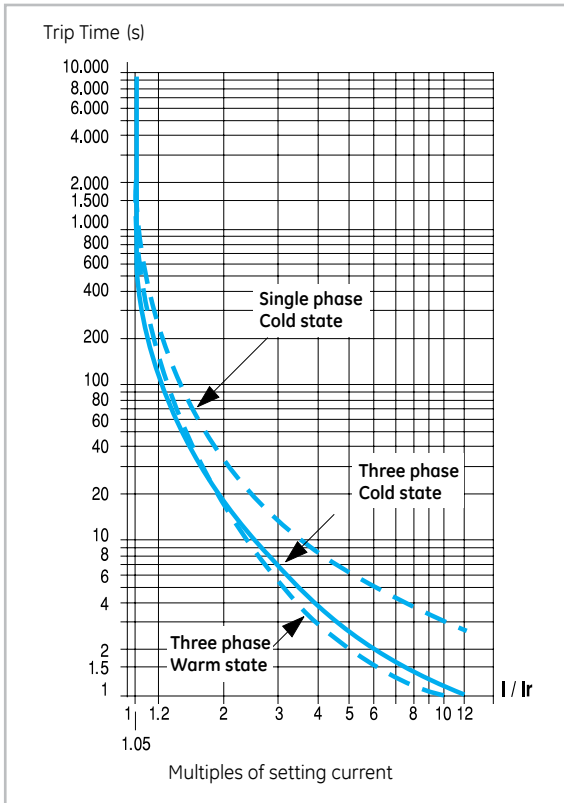
X



Numbering of the terminals

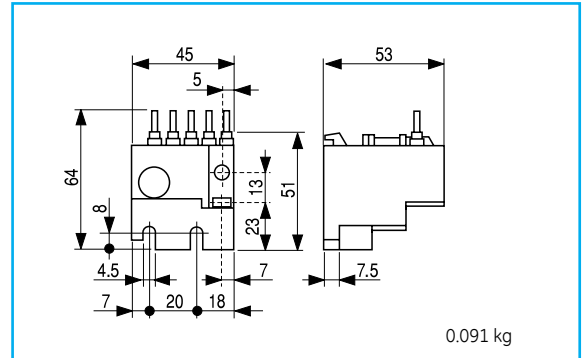


Tripping curves

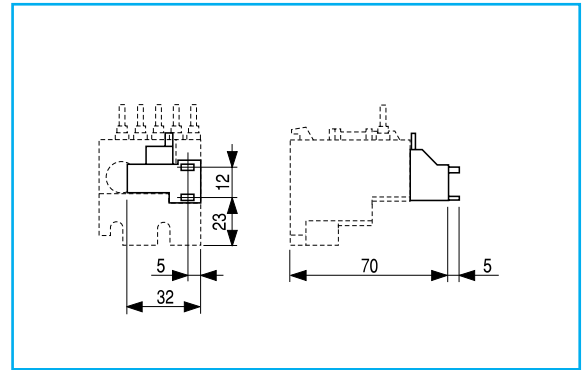


Dimensional drawings

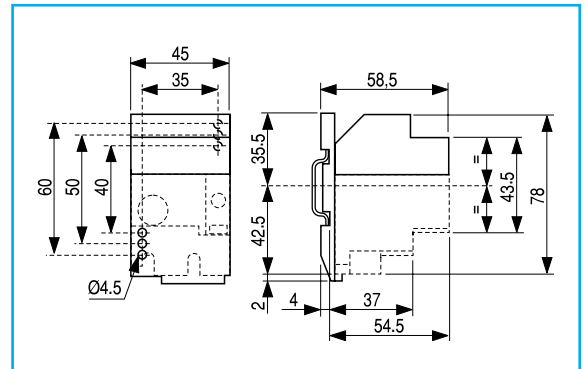
Thermal overload relay



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

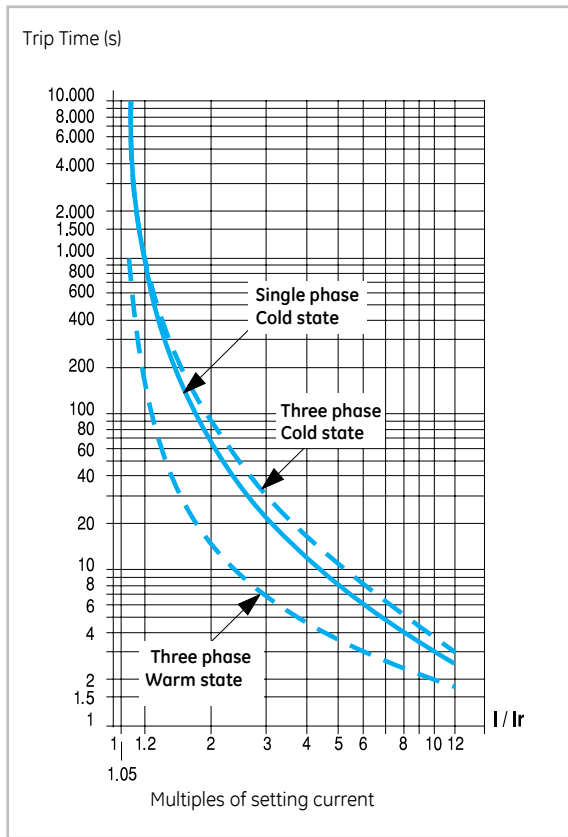


Independent mounting of the thermal overload relay

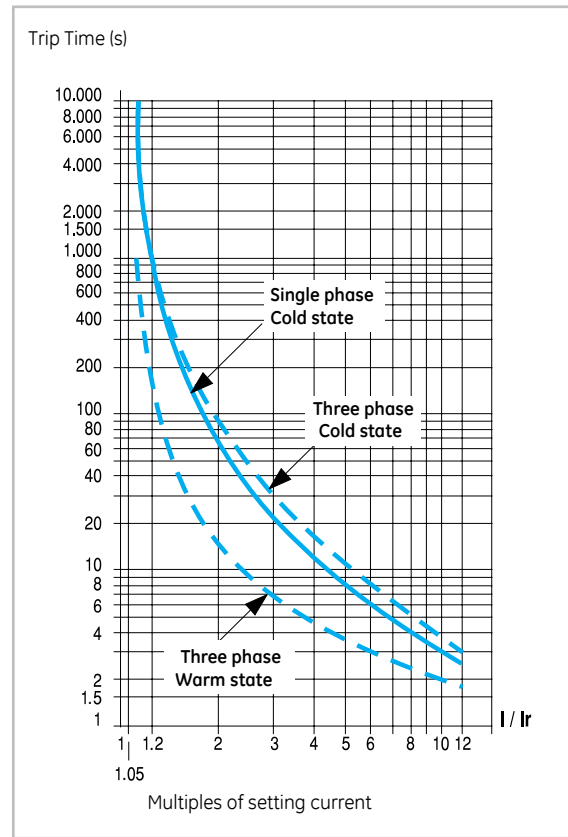


Tripping curves

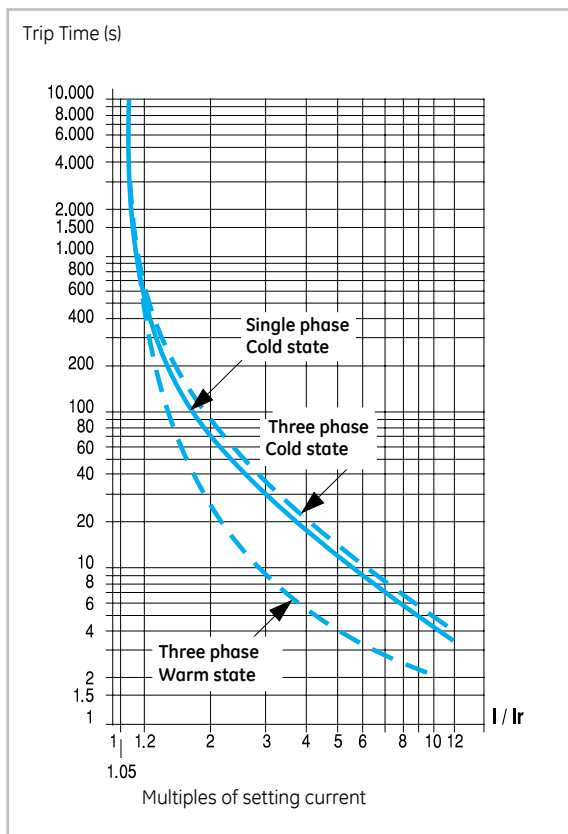
RT1 Class 10A



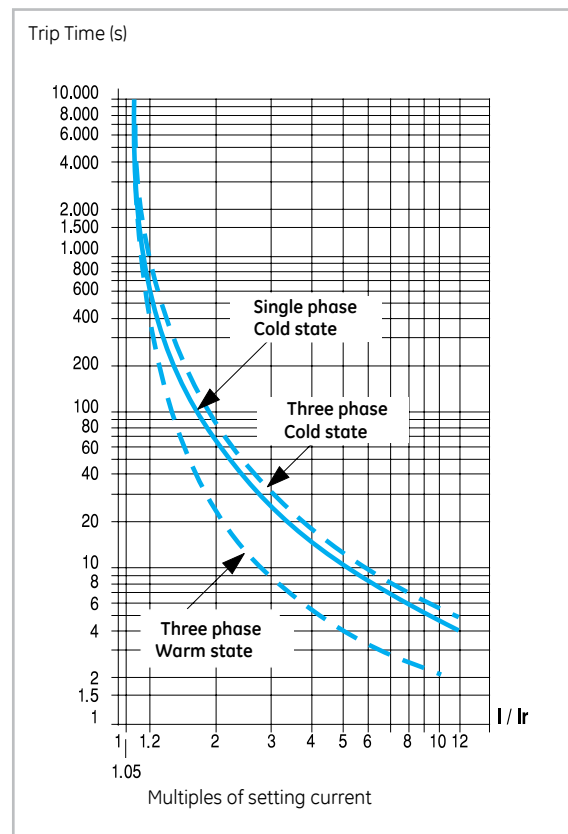
RT2 Class 10



RT12 Class 20



RT22 Class 20



Technical data

A

B

C

D

E

F

G

H

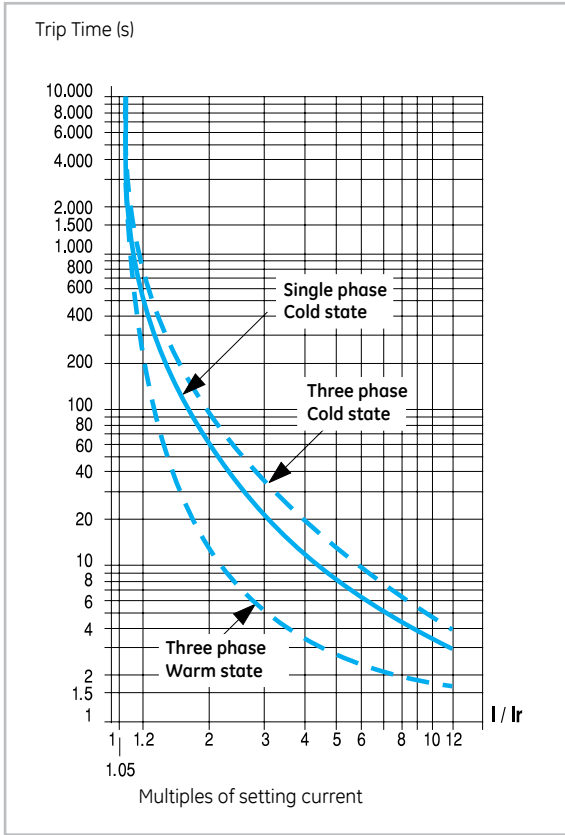
I

X

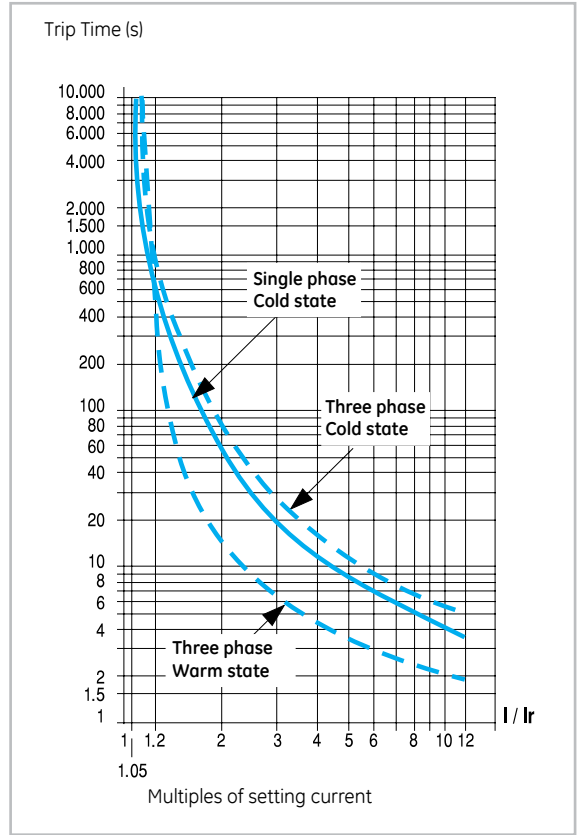


Tripping curves

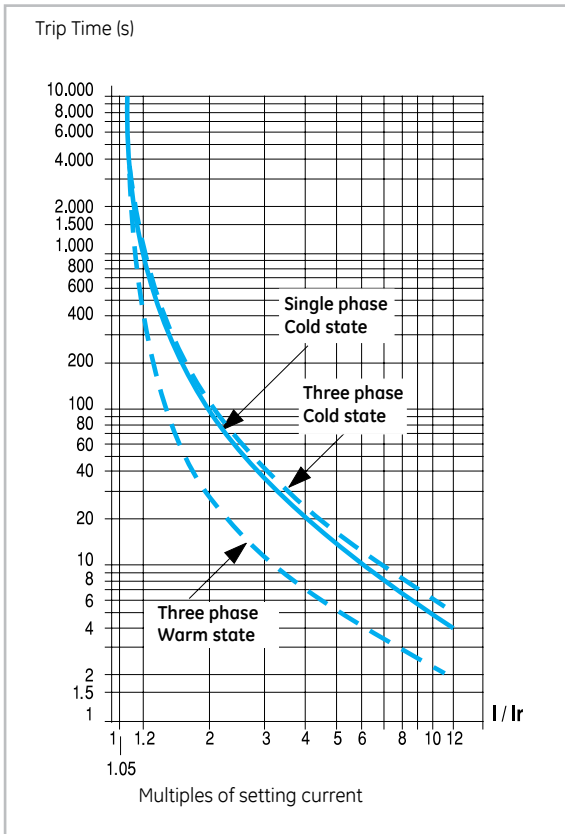
RT3 Class 10



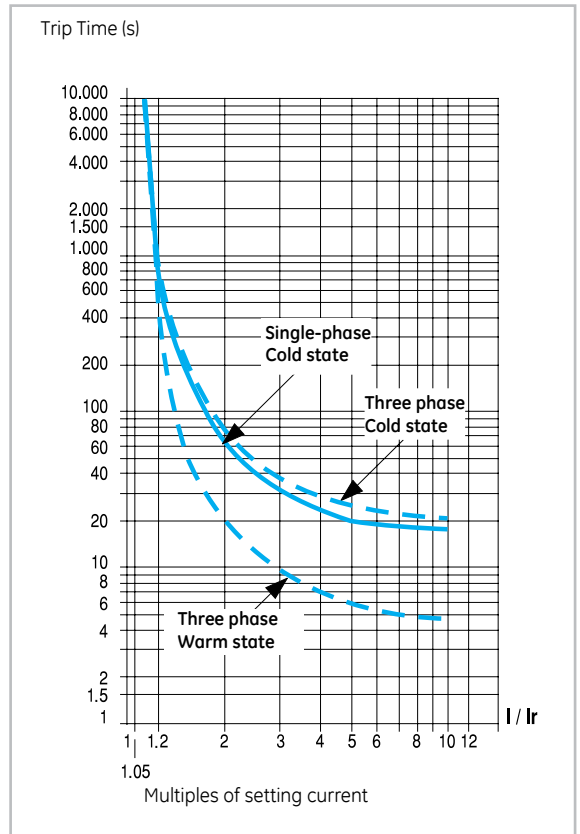
RT4 Class 10



RT32 Class 20

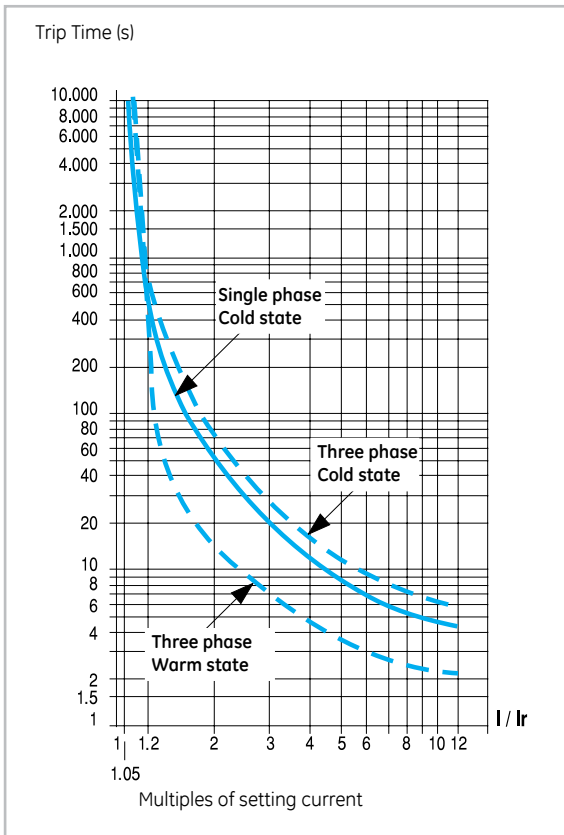


RT4L Class 30

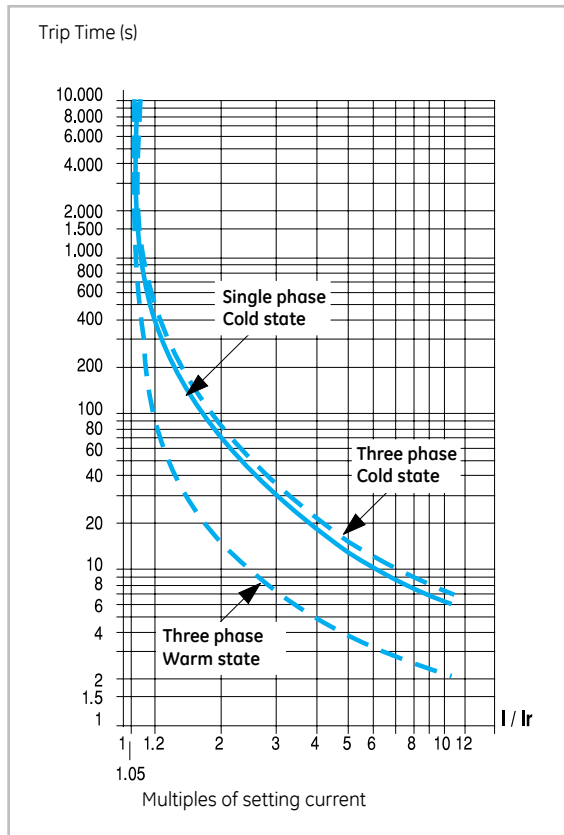


Tripping curves

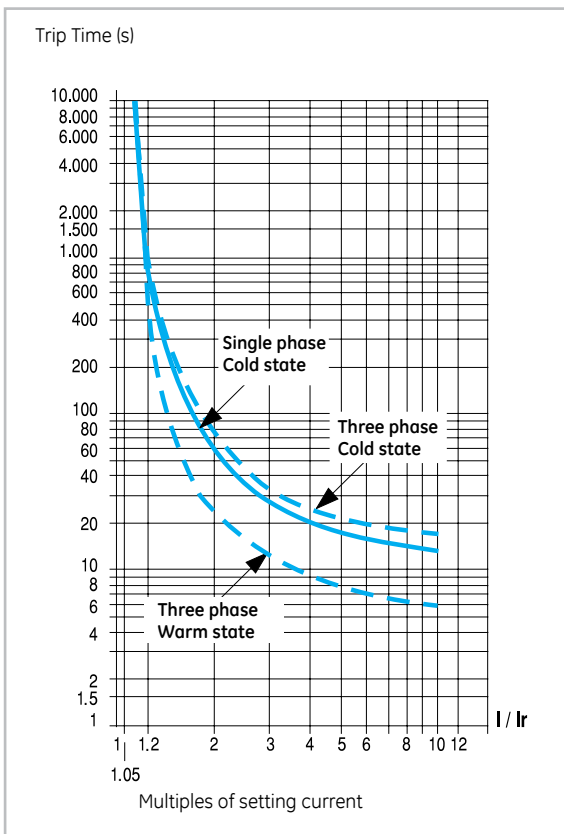
RT5 Class 10



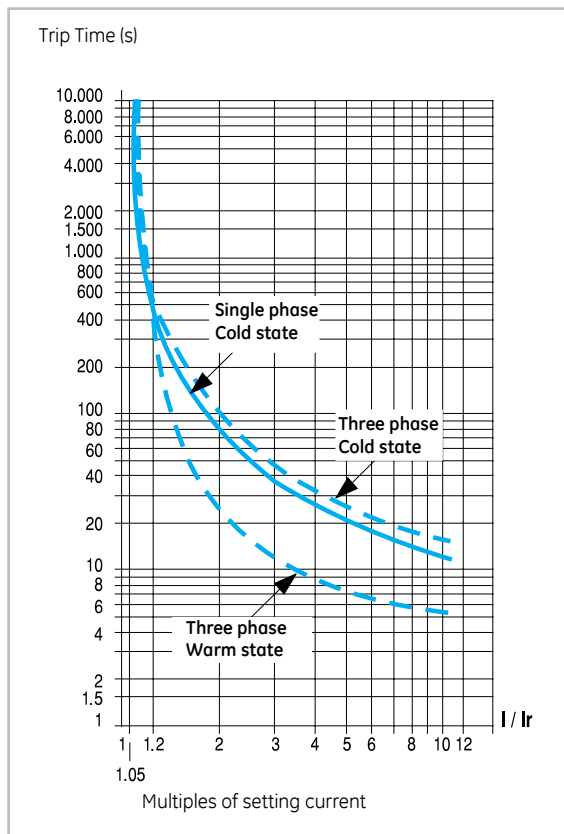
RT6 Class 10



RT5L Class 30



RT6L Class 30



Technical data

A

B

C

D

E

F

G

H

I

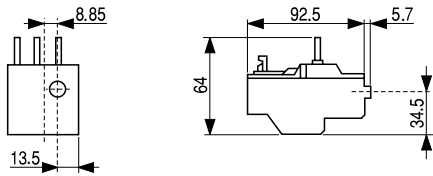
X



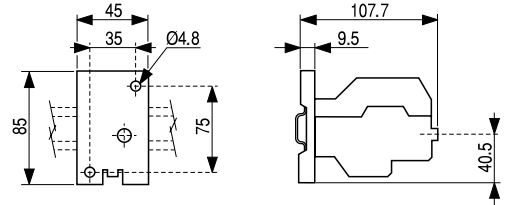
Dimensional drawings

Thermal overload relay for contactors

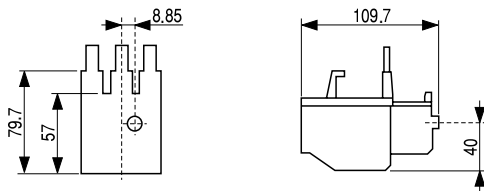
RT1 - RT12
0.190 kg



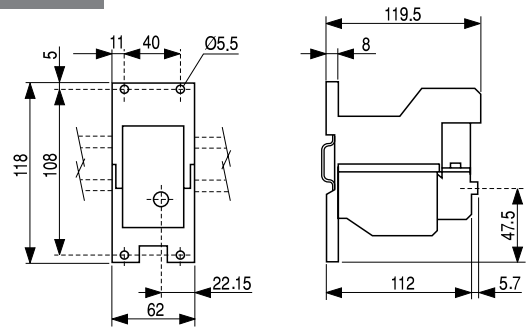
RT1 + RT XP
RT12 + RTXP



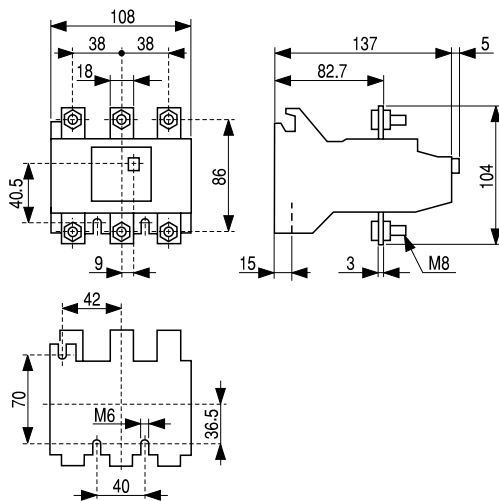
RT2 - RT22
0.400 kg



RT2 + RT XP
RT22 + RTXP



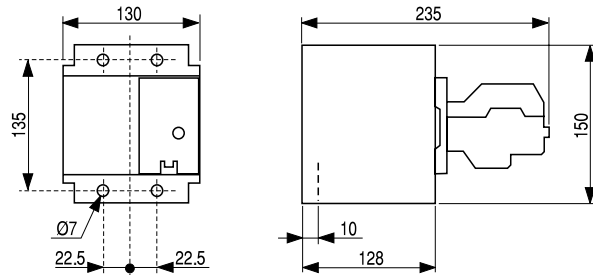
RT3 - RT32
0.900 kg



Thermal overload relay for contactors

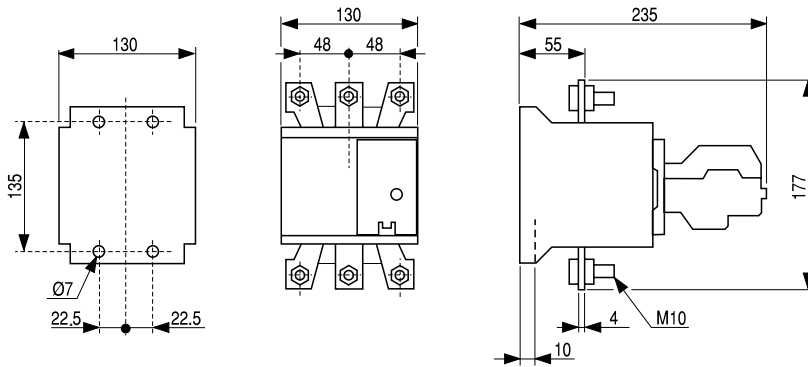
RT4LA...RT4LM

2.400 kg



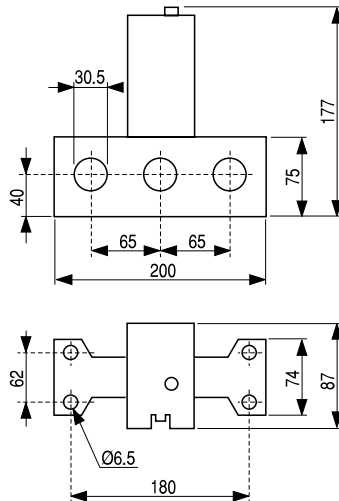
RT4/4LN...RT4/4LR

2.400 kg

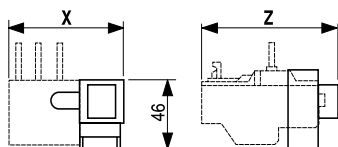


RT5 / 5L

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

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D

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G

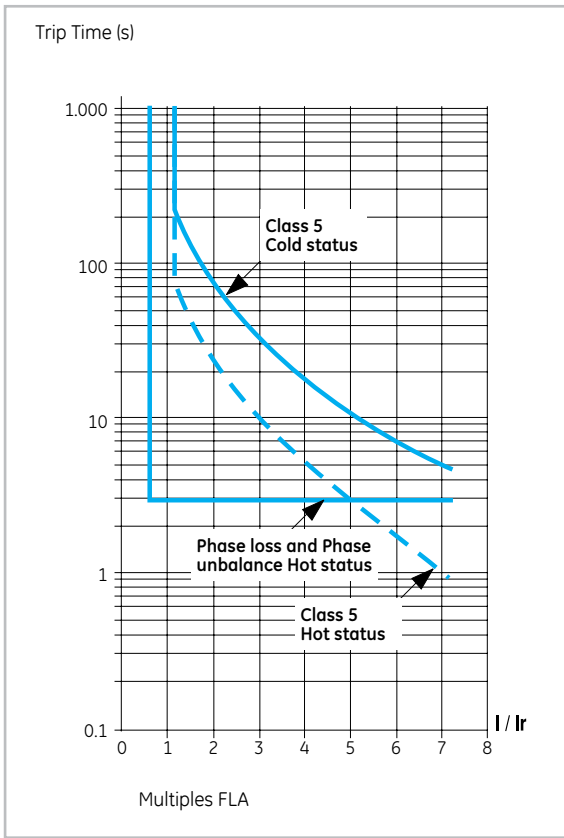
H

I

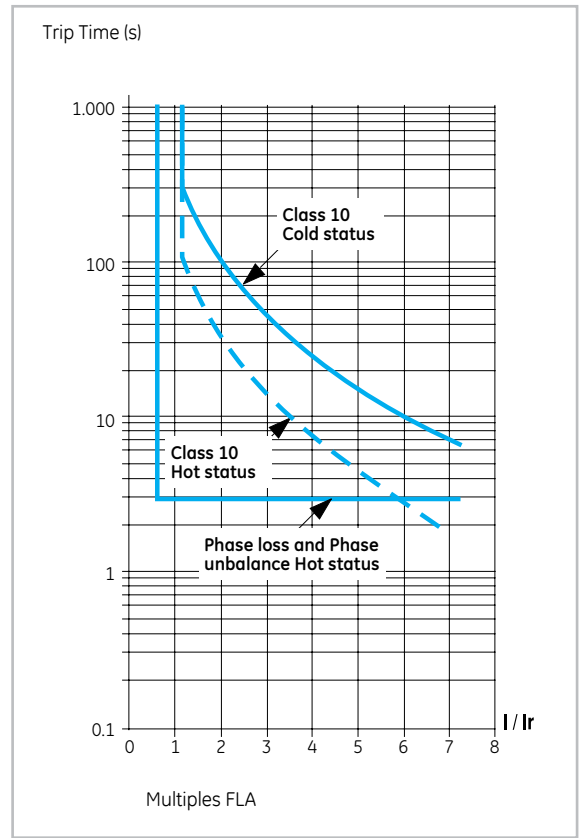
X

Tripping curves

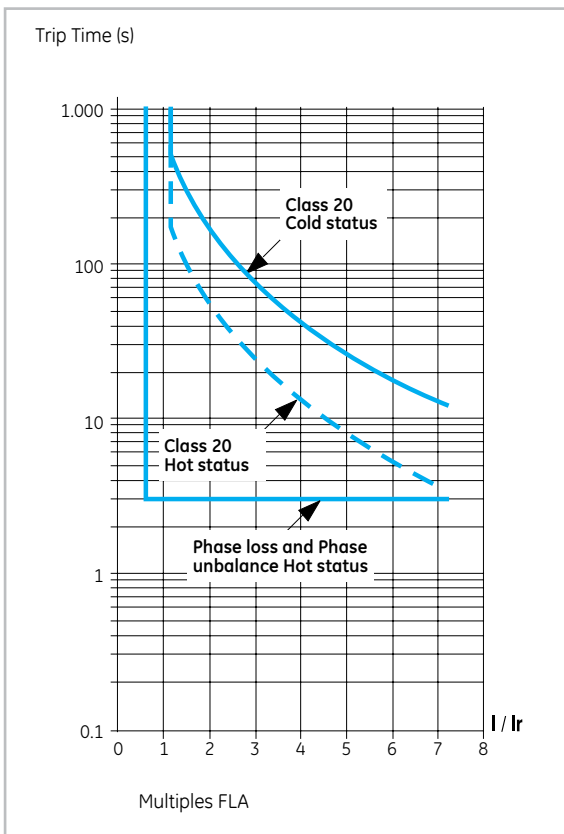
Class 5



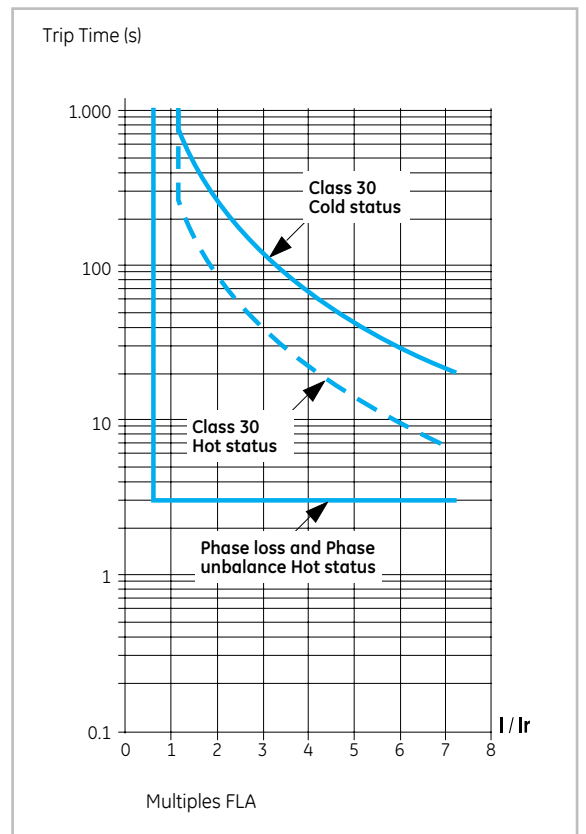
Class 10



Class 20

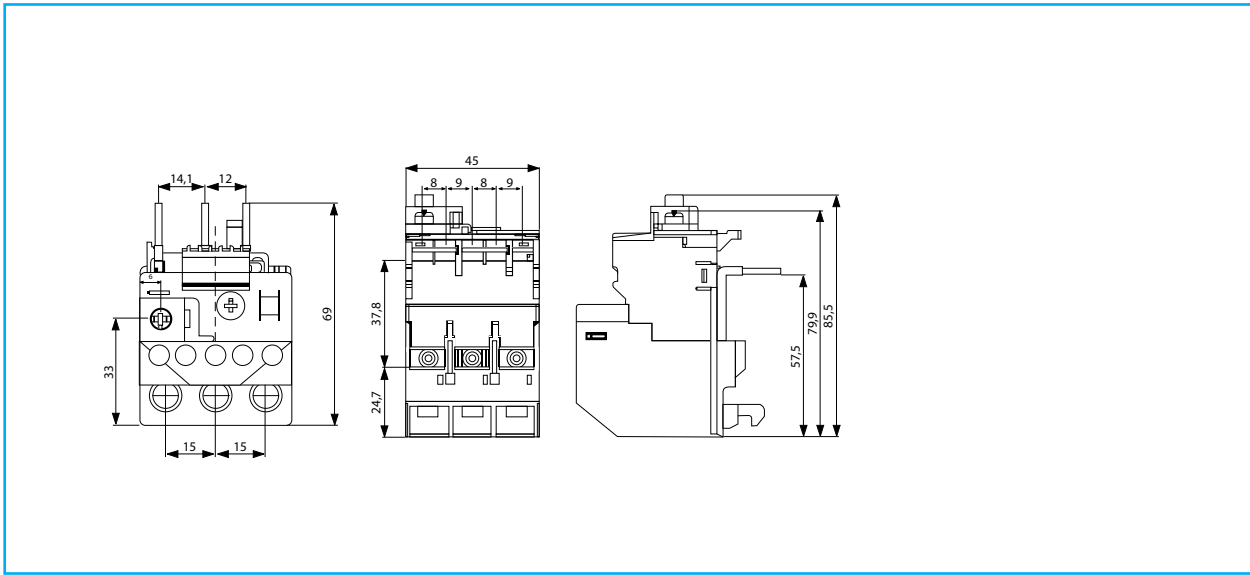


Class 30

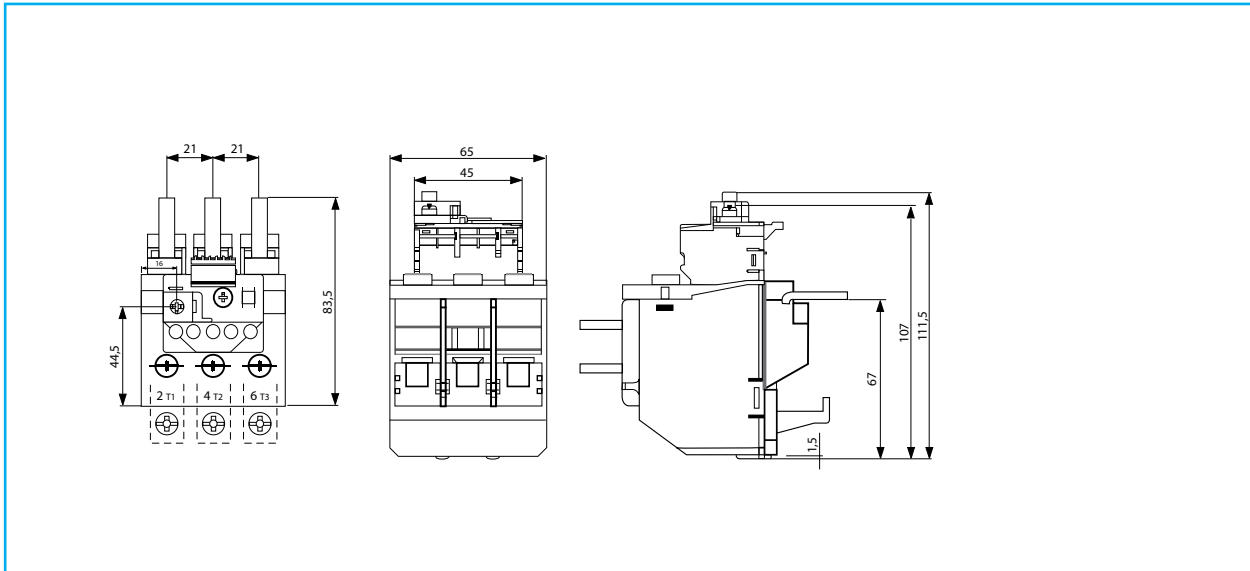


Dimensional drawings

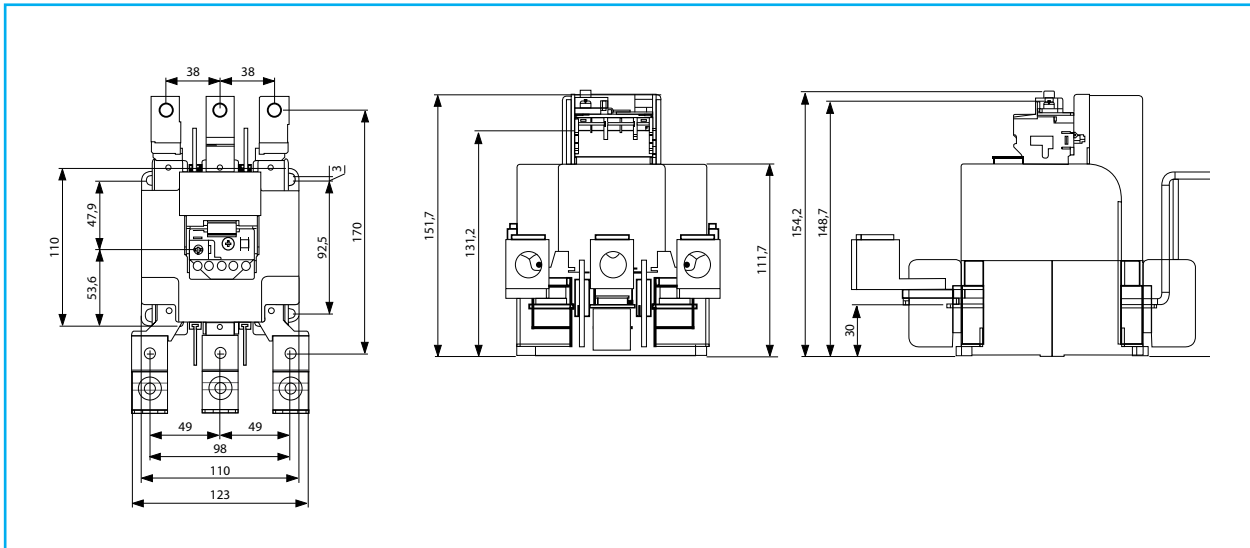
Frame 1

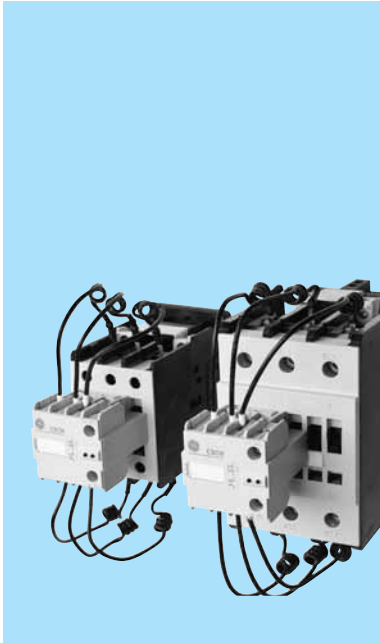


Frame 2



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

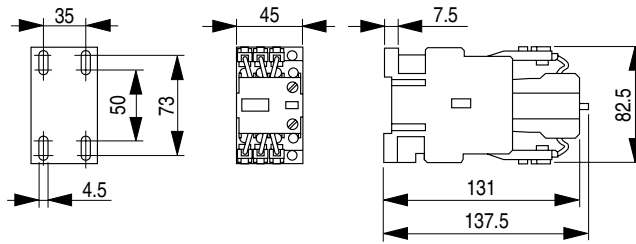
Please Contact GE for CSC type capacitor duty contactors.



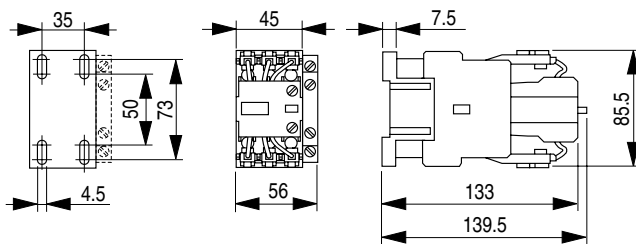
Dimensional drawings

Contactors for capacitors switching

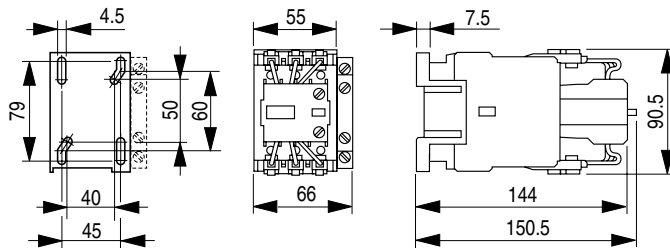
CSCN12..., CSCN16...



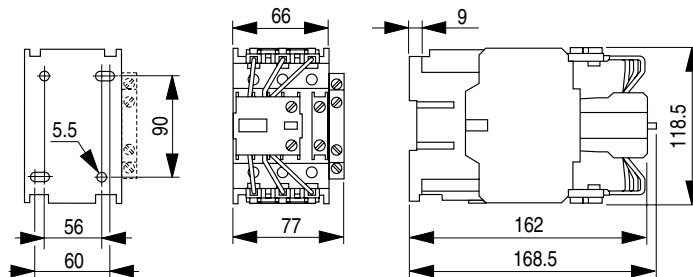
CSCN20..., CSCN25...



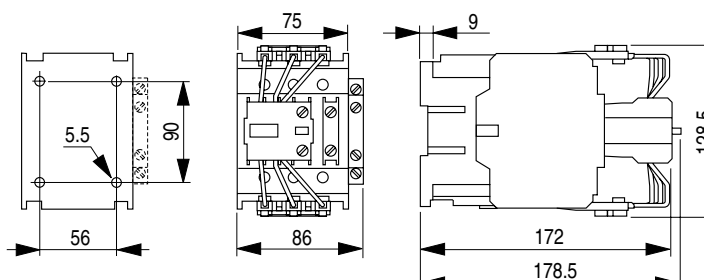
CSCN30...



CSCN45..., CSCN55...



CSCN70...



A

B

C

D

E

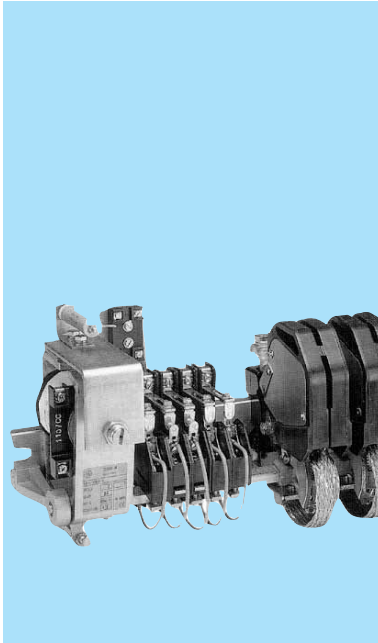
F

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

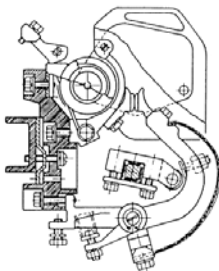
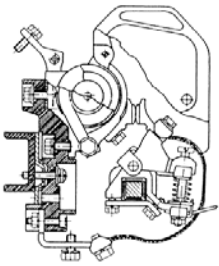
The poles can be constructed as follows, depending on the operating conditions:

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 | Pack. |
|------------------------|---------------------------|------------------------------|-----------|-----------|----------|---|---|-------|
| Resistive loads | Motors <440V, 3 ~ 50/60Hz | 220V 230V | 380V 400V | 415V 440V | 500V | | | |
| AC1 A | AC3 A | kW HP | kW HP | kW HP | kW HP | | See the following pages C.84 and C.85 on how to complete the catalogue number | |
| 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

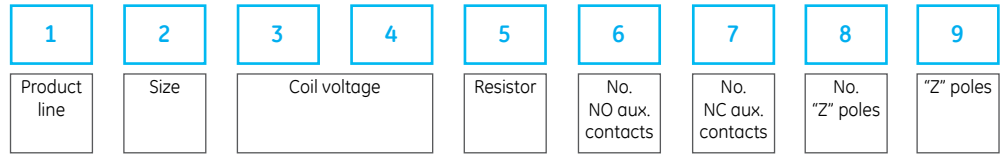
H

I

X



Catalogue number structure



Clapper contactors

A

B

C

D

E

F

G

H

I

X

| 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 |

| "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.

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

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

| 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.

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



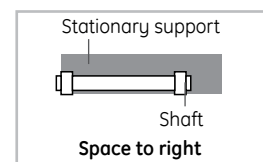
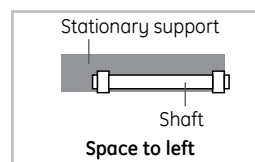
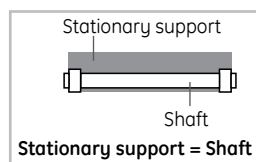
| | | | | | | | | |
|------------------------------|----------------|------------|-------------------------------|------------------|--------------------|-----------|-----------|-----------|
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Arc-quenching coil "Z" poles | No. "RN" poles | "RN" poles | 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 | | | |

| | Schaf (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 | - | | |
| 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



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 | |



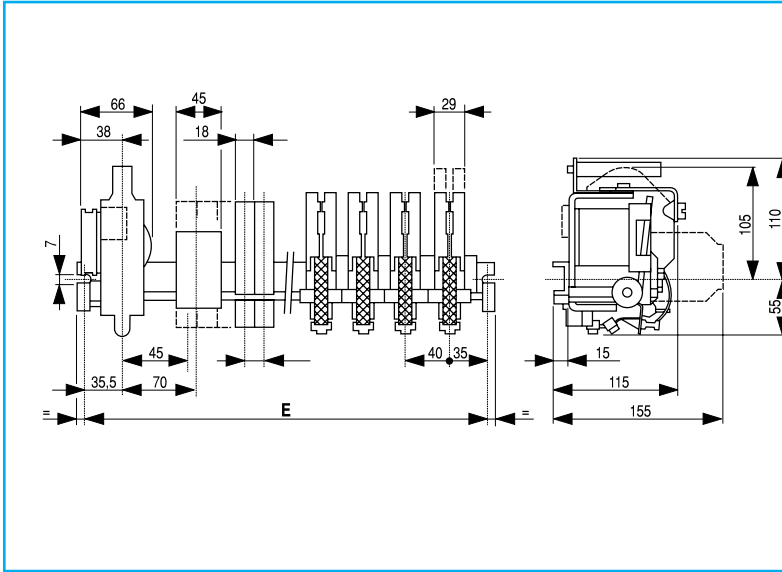
Operating categories

| | | | 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 |
| | 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...

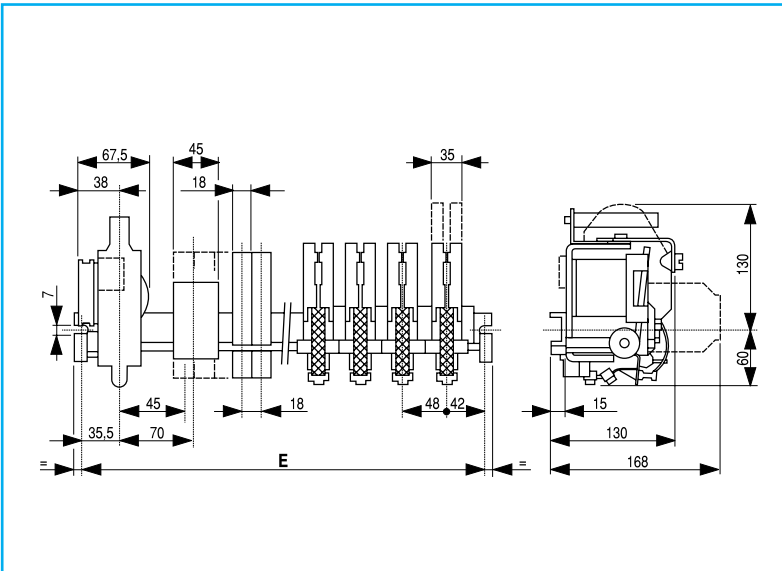


Contact combination

| "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...

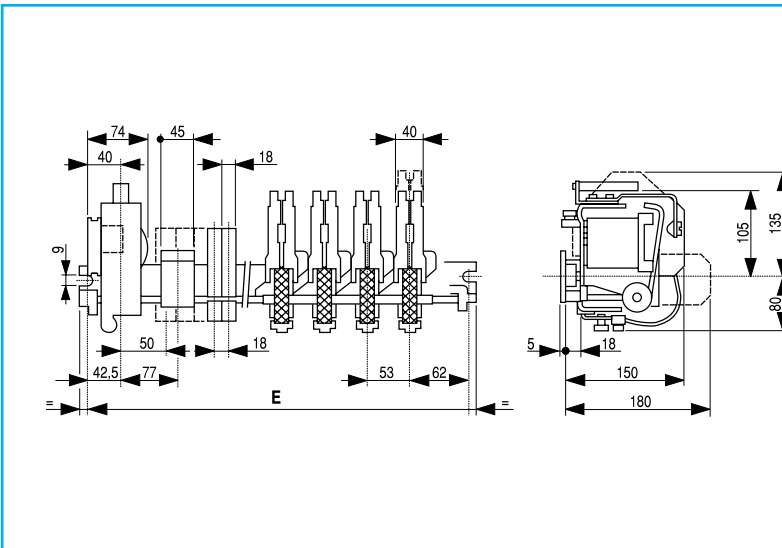


Contact combination

| "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 |
| 3 | 8 | 6 | 4 | 350 |
| | 9 | 6 | 4 | 400 |
| | - | - | - | 250 |
| 4 | 3 | 3 | 3 | 300 |
| | 6 | 6 | 4 | 350 |
| | 7 | 6 | 4 | 400 |
| 4 | - | - | - | 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...



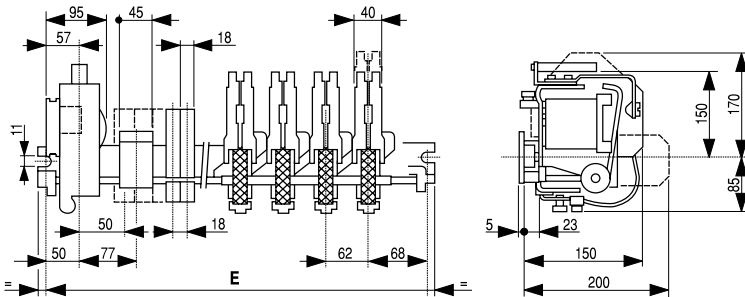
Contact combination

| "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 |
| 3 | 10 | 6 | 4 | 450 |
| | - | - | - | 300 |
| | 3 | 3 | 3 | 350 |
| 4 | 6 | 6 | 4 | 400 |
| | 9 | 6 | 4 | 450 |
| | 3 | 3 | 3 | 400 |
| 4 | 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...

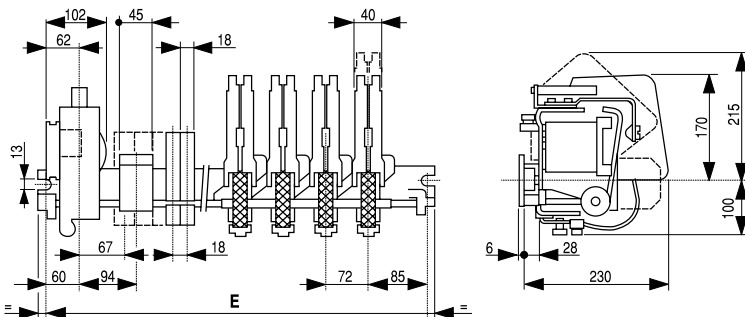


Contact combination

| "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.

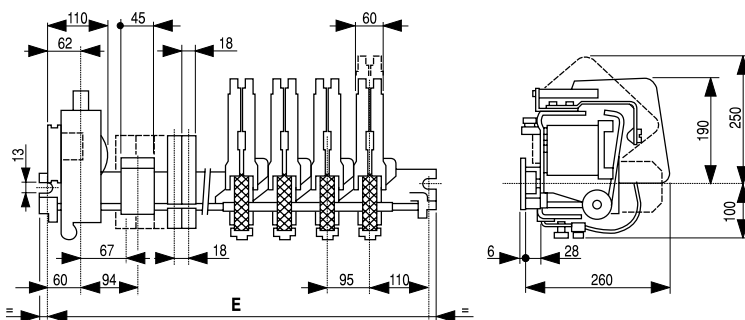
R6...



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...

Front view dimensions: 60, 45, 18, 105, 13, 75, 70, 89, 115, 130, E.

Side view dimensions: 250, 226, 160, 60, 265.

| "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 | - | - | - | 450 |
| | 3 | 3 | 3 | 500 |
| | 8 | 6 | 4 | 600 |
| | 10 | 6 | 4 | 700 |
| 3 | 2 | 2 | 2 | 600 |
| | 8 | 6 | 4 | 700 |
| 4 | 8 | 6 | 4 | 800 |
| | 1 | 1 | 1 | 700 |
| | 4 | 3 | 3 | 800 |

R9...

Front view dimensions: 60, 45, 18, 131, 18, 75, 75, 89, 160, 140, E.

Side view dimensions: 230, 220, 175, 68, 266.

| "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 |
| 3 | 10 | 6 | 4 | 800 |
| | 10 | 6 | 4 | 900 |
| | 10 | 6 | 4 | 1000 |
| | - | - | - | 700 |
| 4 | 6 | 6 | 4 | 800 |
| | 8 | 6 | 4 | 900 |
| | 8 | 6 | 4 | 1000 |
| 4 | 3 | 3 | 3 | 900 |
| | 4 | 3 | 3 | 1000 |

Notes



Notes



Notes



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