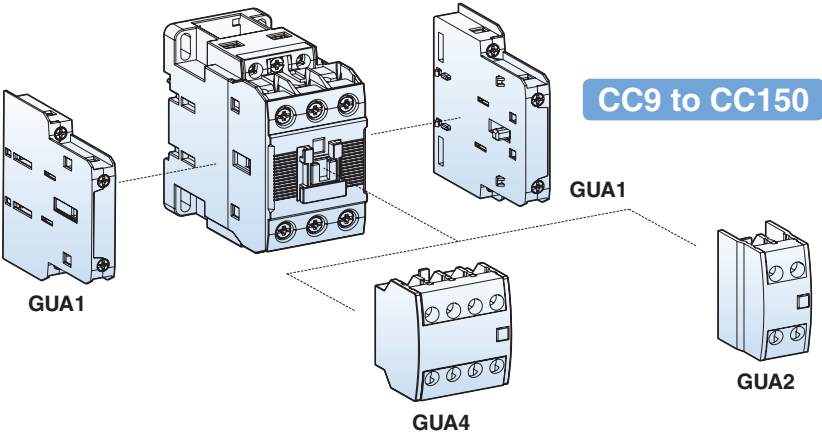


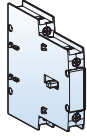
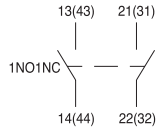
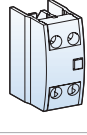
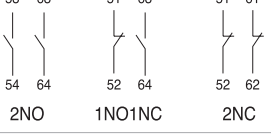
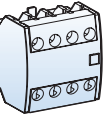
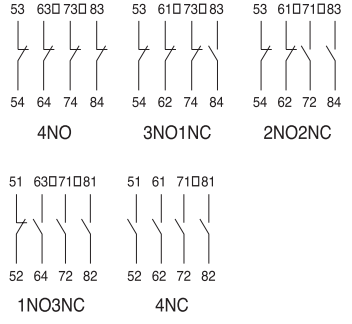
Contactor Accessories

Auxiliary Contact Units

- 2 and 4 pole
- Side or front mountable
- Common use for Metasol contactors from CC9 to CC150



Selection

| Type | Appearance | Pole | Composition | | Contact arrangement | Mount | Weight |
|------|---|------|-----------------------|-----------------------|--|-------|--------|
| | | | NO | NC | | | |
| GUA1 |  | 2 | 1 | 1 |  | Side | 53g |
| GUA2 |  | 2 | 2 1 - | - 1 2 |  | Front | 28g |
| GUA4 |  | 4 | 4 3 2 1 - | - 1 2 3 4 |  | Front | 50g |

Maximum Combination of Contact Units

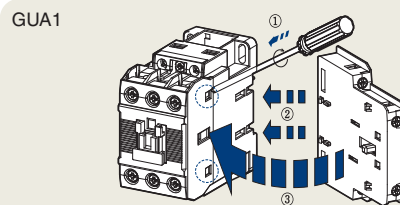
| For contactors with AC coils | For contactors with DC coils |
|--|--|
| GUA4 (on front) + GUA1 × 4EA (2EA on both sides) | GUA4 (on front) + GUA1 × 2EA (1EA on both sides) |
| GUA2 (on front) + GUA1 × 4EA (2EA on both sides) | GUA2 (on front) + GUA1 × 2EA (1EA on both sides) |

Auxiliary contact units

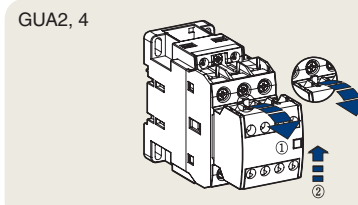
Rating

| Type | | GUA1 | GUA2, 4 | AUX100-11 |
|--|-----------------|---------|---------|-----------|
| Rated operation voltage (Ue) | | 600V | 600V | 600V |
| Rated insulation voltage (Ui) | | 600V | 600V | 600V |
| Rated impulse withstand voltage (Uimp) | | 6kV | 6kV | 6kV |
| Rated frequency | | 50/60Hz | 50/60Hz | 50/60Hz |
| Contact sensibility | | | | |
| | Voltage | DC 17V | DC 24V | DC 24V |
| | Current | DC 5mA | DC 10mA | DC 10mA |
| Rated thermal current (Ith, AC12 duty) | | 10A | 16A | 16A |
| Rated operation current | | | | |
| AC15 duty (A600) | 120V | 6A | 6A | 6A |
| | 240V | 3A | 3A | 3A |
| | 380V | 1.9A | 1.9A | 1.9A |
| | 480V | 1.5A | 1.5A | 1.5A |
| | 500V | 1.4A | 1.4A | 1.4A |
| | 600V | 1.2A | 1.2A | 1.2A |
| DC13 duty (P600) | 125V | 1.1A | 1.1A | 1.1A |
| | 250V | 0.55A | 0.55A | 0.55A |
| | 400V | 0.31A | 0.31A | 0.31A |
| | 500V | 0.27A | 0.27A | 0.27A |
| | 600V | 0.2A | 0.2A | 0.2A |
| Electrical lifetime (mil. operations) | | | | |
| AC15 duty | 220V | 0.5 | 0.5 | 0.5 |
| | 440V | 0.5 | 0.5 | 0.5 |
| DC13 duty | 220V | 0.5 | 0.5 | 0.5 |
| | 440V | 0.5 | 0.5 | 0.5 |
| Maximum operating cycles per hour | | 1800 | 1800 | 1800 |
| Conductor size (Solid, stranded) | AWG | 18~10 | 18~10 | 18~10 |
| | mm ² | 1~2.5 | 1~2.5 | 1~2.5 |

Installation



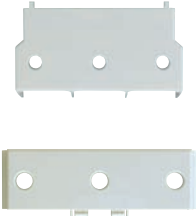
To install side mounting unit remove the indicated part in the circle in the fig. first. And then fit each part as shown. To separate push forward and pull.



To install front mounting unit fit it on the upper part of the front of the contactor and push it down. To separate pull the lever of the unit and push the unit upward.

Contactor Accessories

Terminal Cover Units for Contactors



| Applying contactors | Type | Remarks |
|--------------------------------|-------|----------------|
| MC-185a, 225a (225AF) | AP220 | 2 pcs included |
| MC-265a, 330a, 400a (400AF) | AP400 | |
| MC-500a, 630a, 800a (800AF) | AP800 | |

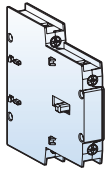
Insulation Barrier Units



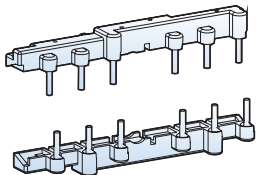
| Applying contactors | Type | Remarks |
|--------------------------------|--------|------------------------------|
| MC-185a, 225a (225AF) | AI-400 | 4 pcs required per contactor |
| MC-265a, 330a, 400a (400AF) | | |
| MC-500a, 630a, 800a (800AF) | AI-800 | |

Interlocks

Component parts for assembling by customer



Interlock unit



Wire kit

Interlock Unit, GUR02

GUR02 is a mechanical interlock unit and provides 2NC contacts for use in electrical interlocking

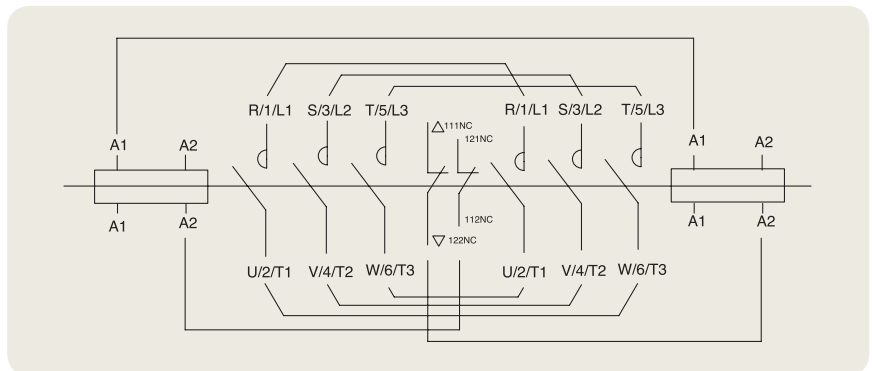
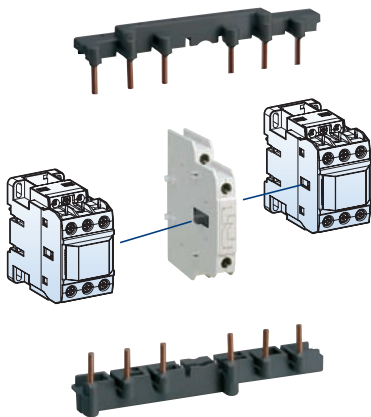
Wire Kit, UW

UW is used for making reversing circuit between two contactors.

| Contactor | Wire kit | | Interlock unit | |
|--------------|----------|--------|----------------|--------|
| | Type | Weight | Type | Weight |
| CC9 ~ CC22 | GUW22 | 0.04kg | GUR02 | 0.06kg |
| CC32 ~ CC40 | GUW32 | 0.05kg | | |
| CC50 ~ CC65 | GUW63 | 0.12kg | | |
| CC75 ~ CC100 | GUW95 | 0.33kg | | |

Rating of the Contacts in the Interlocks

| | | |
|--------------------------|---------|-------|
| Rated operation voltage | 600V | |
| Rated insulation voltage | 600V | |
| Rated frequency | 50/60Hz | |
| Rated thermal current | 10A | |
| Rated operation current | | |
| AC15 duty | 120V | 6A |
| (A600) | 240V | 3A |
| | 380V | 1.9A |
| | 480V | 1.5A |
| | 500V | 1.4A |
| | 600V | 1.2A |
| DC13 duty | 125V | 0.55A |
| | 250V | 0.27A |



Typical circuit diagram for reversing contactor

Contactor Accessories



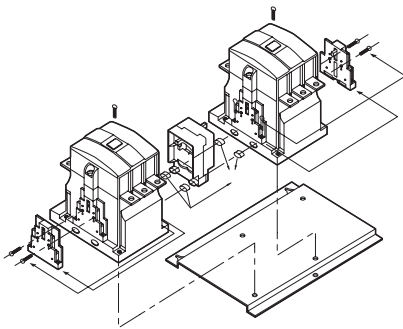
AR-180

Interlock Unit, AR-180 and AR-800

AR-180 and AR-800 are mechanical interlock units in which electrical contacts for use in electrical interlocking are not included. Please use the auxiliary contacts on the sides of the contactors for that purpose.

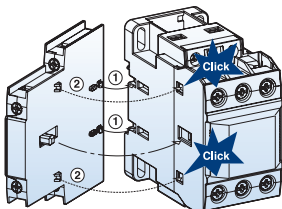


AR-600

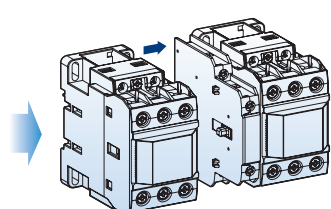


| Contactor | Interlock unit | |
|---|----------------|--------|
| | Type | Weight |
| CC180 CC225 CC265 CC330 CC400 | AR-400 | 0.09kg |
| CC500 CC630 CC800 | AR-800 | 15.2kg |

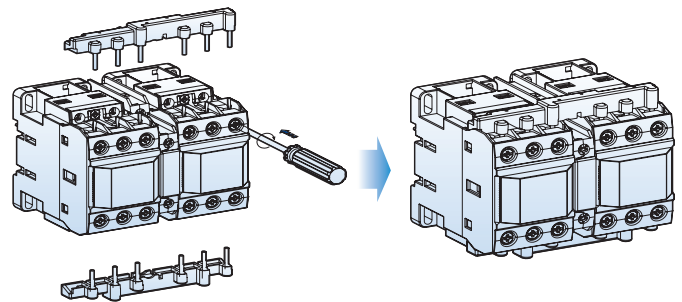
Installation of Interlock and Wire Kits



Install the interlock unit on the side of a contactor first. Fit each part as indicated in the fig.



And then install the other contactor on the other side of the interlock unit as shown.



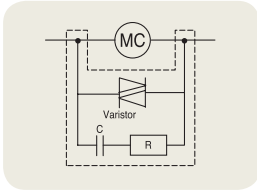
After installing interlock unit wiring kit can be assembled. Wiring kit contains two molded wires - one for line side and the other for load side.

Contactor Accessories

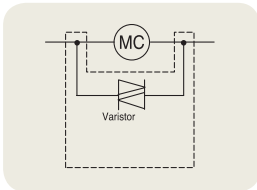
Surge Unit

It absorbs the surge arisen out of the coil of the contactor.
It can be installed simply to the contactor.

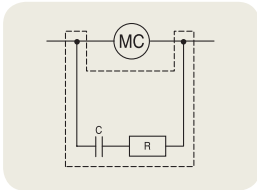
- Rated operation voltage (Ue): AC 24 ~ 440V
DC 24 ~ 125V
- Rated insulation voltage (Ui): 1000V
- Rated impulse withstand voltage (Uimp): 8kV
- Degree of protection: IP20



US-1~6



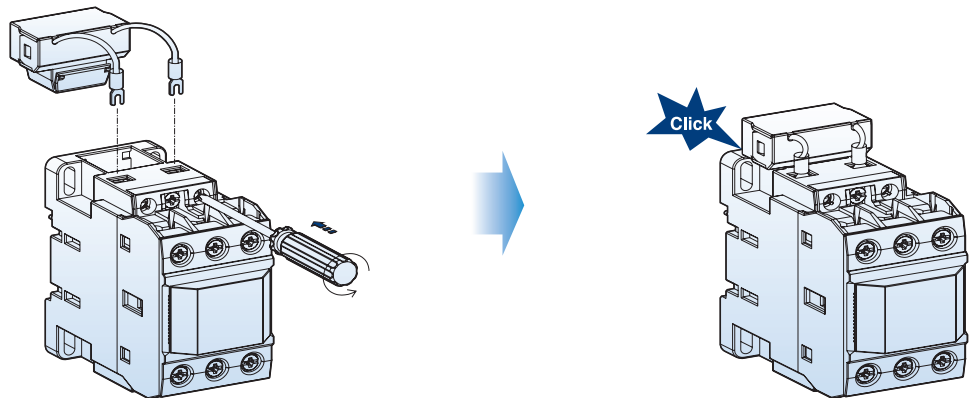
US-11~14



US-22

| Surge unit | | Rated voltage | | Internal elements spec. | | | Weight |
|--------------|-------------|-----------------|----------|-------------------------|-------|---------|--------|
| Type | Composition | | | V | R | C | |
| GUS1 | Varistor+RC | AC | 24~48V | 120V | 100 Ω | 0.1 μF | 29g |
| GUS2 | Varistor+RC | | 100~125V | 270V | 100 Ω | 0.1 μF | |
| GUS3 | Varistor+RC | | 200~240V | 470V | 100 Ω | 0.1 μF | |
| GUS4 | Varistor+RC | DC | 24~48V | 120V | 100 Ω | 0.47 μF | |
| GUS5 | Varistor+RC | | 100~125V | 270V | 100 Ω | 0.47 μF | |
| GUS6 | Varistor+RC | | 200~220V | 470V | 100 Ω | 0.47 μF | |
| GUS11 | Varistor | AC/DC common | 24~48V | 120V | - | - | |
| GUS12 | Varistor | | 100~125V | 270V | - | - | |
| GUS13 | Varistor | | 200~240V | 470V | - | - | |
| GUS14 | Varistor | | 380~440V | 1000V | - | - | |
| GUS22 | RC | AC | 100~125V | - | 56 Ω | 1 μF | |

Installation



Connect the lead wires to the coil terminals of the contactor first.
And then insert the body into the space of the contactor as shown above.

Capacitor Unit

Capacitor unit is connected to the terminals of the contactor to reduce the high inrush current.



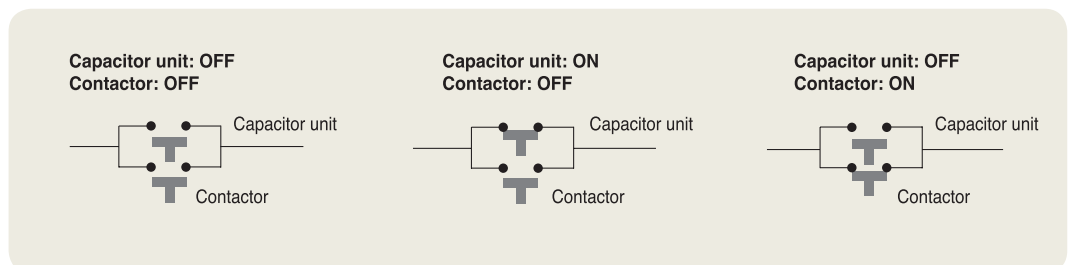
| Type | Contactor | Maximum operating power (kvar) | | | Rated current (A) |
|------|-----------|--------------------------------|------------|------------|-------------------|
| | | 220 ~ 240V | 400 ~ 440V | 500 ~ 550V | |
| AC9 | CC9 | 5 | 9,7 | 14 | 14 |
| | CC12 | 6,7 | 12,5 | 18 | 18 |
| | CC18 | 8,5 | 16,7 | 24 | 24 |
| | CC22 | 10 | 18 | 26 | 26 |
| | CC32 | 15 | 25 | 36 | 36 |
| | CC40 | 20 | 33,3 | 48 | 48 |
| AC50 | CC50 | 20 | 40 | 58 | 58 |
| | CC65 | 25 | 45,7 | 66 | 66 |
| | CC75 | 29,7 | 54 | 78 | 78 |
| | CC85 | 35 | 60 | 92 | 92 |
| | CC100 | 37 | 62 | 94 | 94 |

Note) - When the switch is closed condenser must be discharged before recharged. (Maximum residual voltage at terminals $\leq 50V$)
 prevent short current, gG type fuse must be 1.5-2 times than rated current

Features of Capacitor Unit (Pre-loading Resistor)

- Damping resistor that can limit the inrush current upto $60 \times I_n$ is connected to the mechanism that closed earlier than the main contact of the contactor
- No heat loss by the serial resistor
- Eliminate the switching surge
- Improving the performance of the capacitor system

Operation Sequence



Note) Closing sequence: Fig.1 \Rightarrow Fig.2 \Rightarrow Fig.3
 Opening sequence: Fig.3 \Rightarrow Fig.1

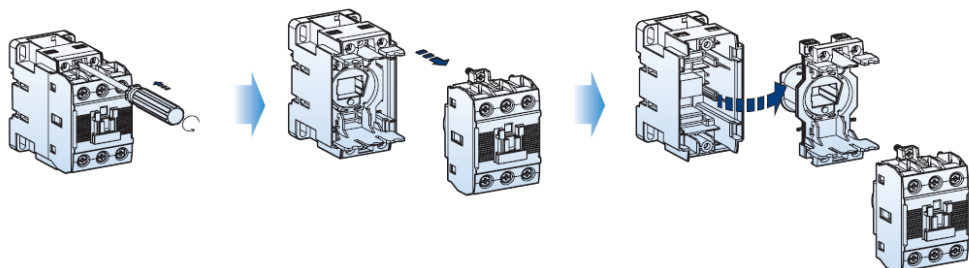
Replacement Coil Part Numbers

Refer to contactor data sheets for full coil specifications

| Contactors (3-pole only): | Coil Part Number | Nominal Coil Voltage | Coil Part Number | Nominal Coil Voltage |
|--|------------------------------|----------------------|----------------------|----------------------|
| CC9, CC12, CC18, CC22 | no replacement coils offered | | | |
| CC32SA CC40SA | GCA32A24VAC50/60HZ | 24 VAC 50/60Hz | GCA32A230VAC50/60HZ | 230 VAC 50/60Hz |
| | GCA32A48VAC60HZ | 48 VAC 60Hz | GCA32A240VAC50/60HZ | 240 VAC 50/60Hz |
| | GCA32A110VAC50/60HZ | 110 VAC 50/60Hz | GCA32A277VAC60HZ | 277 VAC 60Hz |
| | GCA32A120VAC50/60HZ | 120 VAC 50/60Hz | GCA32A440VAC60HZ | 440 VAC 60Hz |
| | GCA32A208VAC60HZ | 208VAC 60Hz | GCA32A480VAC60HZ | 480 VAC 60Hz |
| | GCA32A220VAC50/60HZ | 220 VAC 50/60Hz | GCA32A600VAC60HZ | 600 VAC 60Hz |
| CC32SD CC40SD | GCA32A12VDC | 12 VDC | GCA32A48VDC | 48VDC |
| | GCA32A24VDC | 24VDC | GCA32A110VDC | 110VDC |
| CC50LA, CC50SA CC65LA, CC65SA | GCA63A24VAC50/60HZ | 24 VAC 50/60Hz | GCA63A230VAC50/60HZ | 230 VAC 50/60Hz |
| | GCA63A48VAC60HZ | 48 VAC 60Hz | GCA63A240VAC50/60HZ | 240 VAC 50/60Hz |
| | GCA63A110VAC50/60HZ | 110 VAC 50/60Hz | GCA63A277VAC60HZ | 277 VAC 60Hz |
| | GCA63A120VAC50/60HZ | 120 VAC 50/60Hz | GCA63A440VAC60HZ | 440 VAC 60Hz |
| | GCA63A208VAC60HZ | 208VAC 60Hz | GCA63A480VAC60HZ | 480 VAC 60Hz |
| | GCA63A220VAC50/60HZ | 220 VAC 50/60Hz | GCA63A600VAC60HZ | 600 VAC 60Hz |
| CC50LD, CC50SD CC65LD, CC65SD | GCA63A12VDC | 12 VDC | GCA63A48VDC | 48VDC |
| | GCA63A24VDC | 24VDC | GCA63A110VDC | 110VDC |
| CC75LA, CC75SA CC85LA, CC85SA CC100LA, CC100SA | GCA95A24VAC50/60HZ | 24 VAC 50/60Hz | GCA95A230VAC50/60HZ | 230 VAC 50/60Hz |
| | GCA95A48VAC60HZ | 48 VAC 60Hz | GCA95A240VAC50/60HZ | 240 VAC 50/60Hz |
| | GCA95A110VAC50/60HZ | 110 VAC 50/60Hz | GCA95A277VAC60HZ | 277 VAC 60Hz |
| | GCA95A120VAC50/60HZ | 120 VAC 50/60Hz | GCA95A440VAC60HZ | 440 VAC 60Hz |
| | GCA95A208VAC60HZ | 208VAC 60Hz | GCA95A480VAC60HZ | 480 VAC 60Hz |
| | GCA95A220VAC50/60HZ | 220 VAC 50/60Hz | GCA95A600VAC60HZ | 600 VAC 60Hz |
| CC75LA, CC75SA CC85LA, CC85SA CC100LA, CC100SA | GCA95A12VDC | 12 VDC | GCA95A48VDC | 48 VDC |
| | GCA95A24VDC | 24 VDC | GCA95A110VDC | 110 VDC |
| CC130LA, CC130SA CC150LA, CC150SA | GCA150A24VAC50/60HZ | 24 VAC 50/60Hz | GCA150A220VAC50/60HZ | 220 VAC 50/60Hz |
| CC130LD, CC130SD CC150LD, CC150SD | GCA150A48VAC50/60HZ | 48 VAC 50/60Hz | GCA150A500VAC50/60HZ | 500 VAC 50/60Hz |
| CC185 CC225 | GCA225A24VACDC | 24 VAC and VDC | GCA225A500VAC50/60HZ | 500 VAC 50/60Hz |
| | GCA225A100/200VACDC | 100/200 VAC and VDC | | |
| CC265 CC330 CC400 | GCA400A100/200VACDC | 100/200 VAC and VDC | GCA400A500VAC50/60HZ | 500 VAC 50/60Hz |
| | GCA400A400VAC50/60HZ | 400 VAC 50/60Hz | | |
| CC500 CC630 CC800 | GCA800A100VACDC | 100 VAC and VDC | GCA800A500VAC50/60HZ | 500 VAC 50/60Hz |
| | GCA800A200VACDC | 200 VAC and VDC | | |



Replacement Process



To instantly view a data sheet and specify products, visit www.GavazziOnline.com