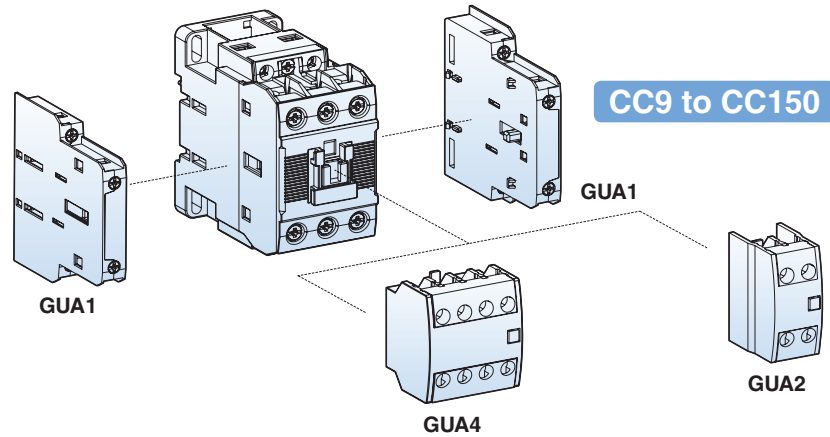
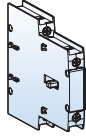
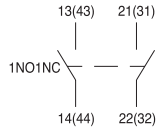
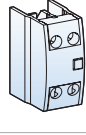
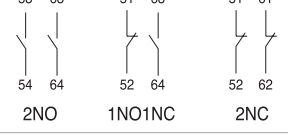
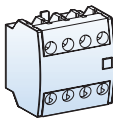
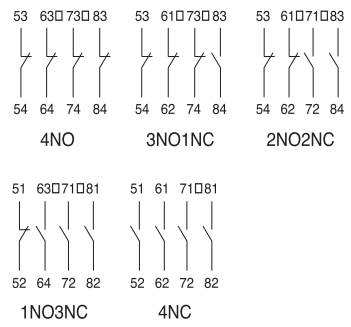


## Auxiliary Contact Units

- 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

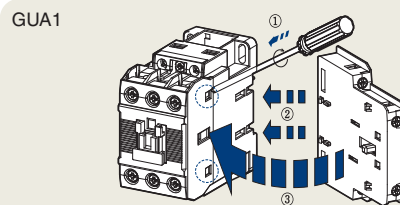
For contactors with AC coils	For contactors with DC coils
GUA4 (on front) + GUA1 × 4EA (2EA on both sides)	GUA4 (on front) + GUA1 × 2EA (1EA on both sides)
GUA2 (on front) + GUA1 × 4EA (2EA on both sides)	GUA2 (on front) + GUA1 × 2EA (1EA on both sides)

## Auxiliary contact units

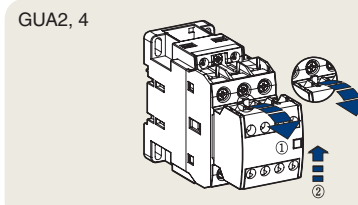
### Rating

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	120V	6A	6A	6A
(A600)	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	125V	1.1A	1.1A	1.1A
(P600)	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
(the max. number of conducts: 2)	mm <sup>2</sup>	1~2.5	1~2.5	1~2.5

### Installation



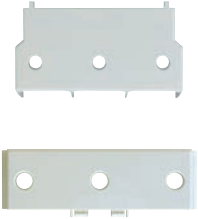
To install side mounting unit remove the indicated part in the circle in the fig. first. And then fit each part as shown. To separate push forward and pull.



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)	AP-220	2 pcs included
MC-265a, 330a, 400a (400AF)	AP-400	
MC-500a, 630a, 800a (800AF)	AP-800	

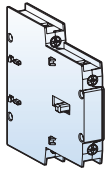
## Insulation Barrier Units



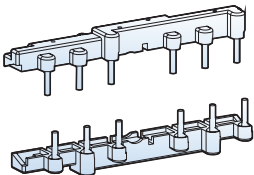
Applying contactors	Type	Remarks
MC-185a, 225a (225AF)	AI-400	4 pcs required per contactor
MC-265a, 330a, 400a (400AF)		
MC-500a, 630a, 800a (800AF)	AI-800	

## 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

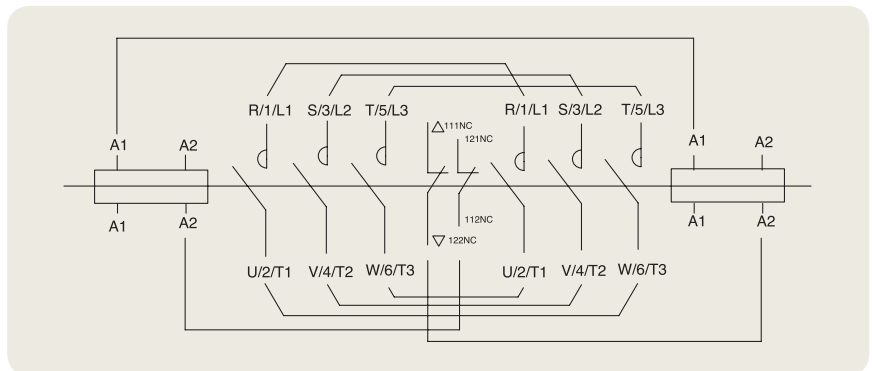
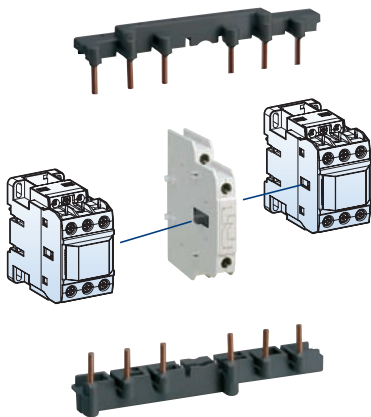
### Wire Kit, UW

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

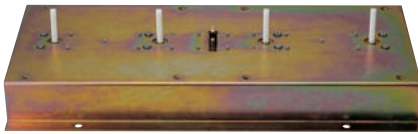
# Contactor Accessories



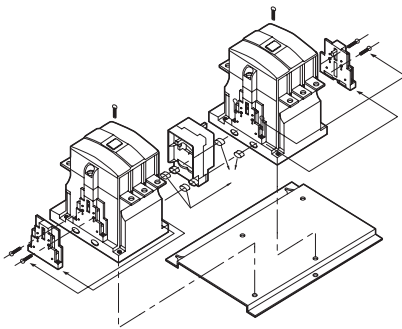
AR-180

## 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.

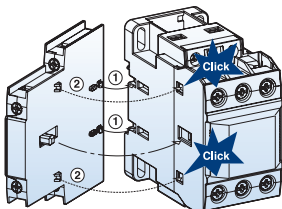


AR-600

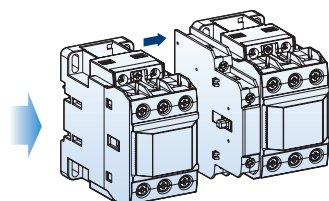


Contactor	Interlock unit	
	Type	Weight
CC180 CC225 CC265 CC330 CC400	AR-180	0.09kg
CC500 CC630 CC800	AR-800	15.2kg

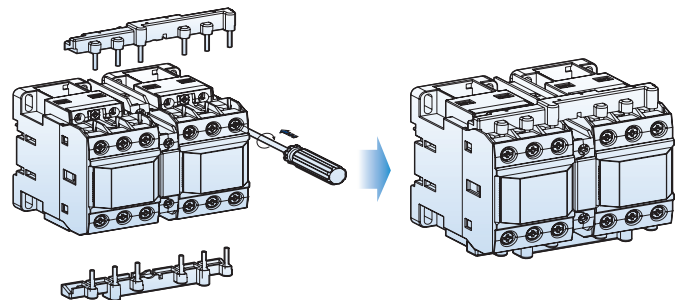
## Installation of Interlock and Wire Kits



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.



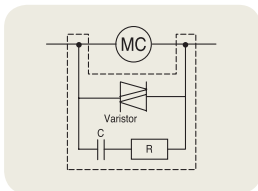
After installing interlock unit wiring kit can be assembled. Wiring kit contains two molded wires - one for line side and the other for load side.

# Contactor Accessories

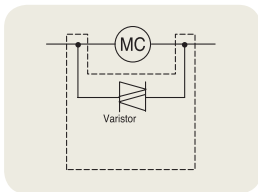
## Surge Unit

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

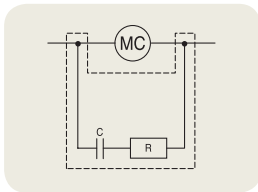
- Rated operation voltage (Ue): AC 24 ~ 440V  
DC 24 ~ 125V
- Rated insulation voltage (Ui): 1000V
- Rated impulse withstand voltage (Uimp): 8kV
- Degree of protection: IP20



US-1~6



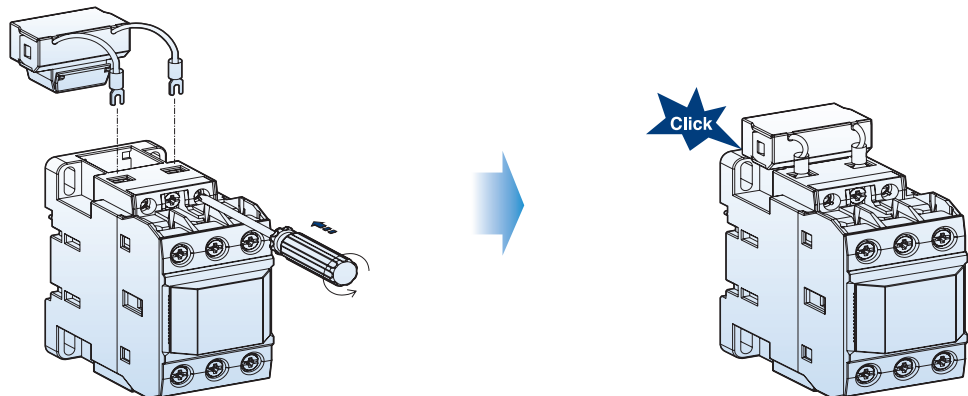
US-11~14



US-22

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



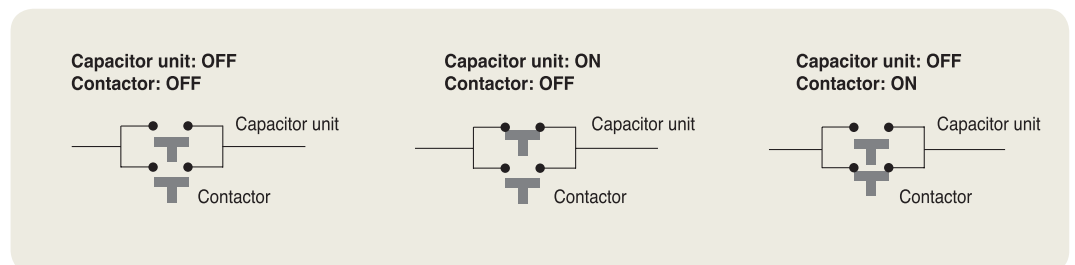
Type	Contactor	Maximum operating power (kvar)			Rated current (A)
		220 ~ 240V	400 ~ 440V	500 ~ 550V	
AC9	CC9	5	9,7	14	14
	CC12	6,7	12,5	18	18
	CC18	8,5	16,7	24	24
	CC22	10	18	26	26
	CC32	15	25	36	36
	CC40	20	33,3	48	48
AC50	CC50	20	40	58	58
	CC65	25	45,7	66	66
	CC75	29,7	54	78	78
	CC85	35	60	92	92
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

# Contactors Accessories

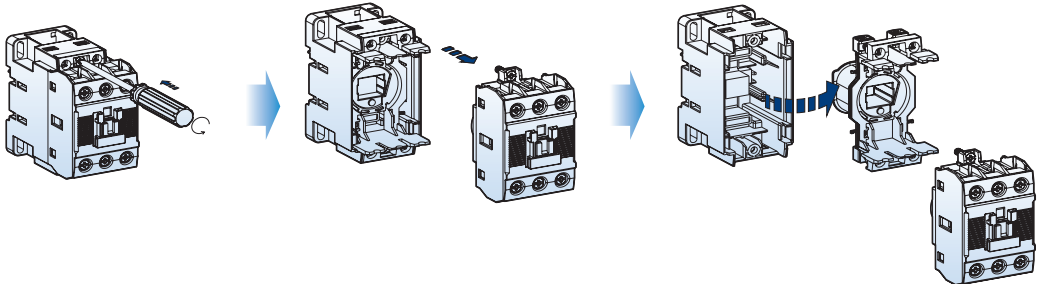
## Replacement Coils

To replace the existing coil to change voltage or repair.



Contactor	Coil voltage							
	AC coil						DC coil	
	AC 60Hz (V)		AC 50Hz (V)		AC 50/60Hz (V)		DC (V)	
<b>CC9</b> <b>CC12</b> <b>CC18</b> <b>CC22</b>	24	230	24	230	24	240	12	110
	48	240	36	240	48	380	20	125
	100	277	42	380	100	415	24	200
	110	380	48	400	110	440	48	220
	120	440	80	415	120	500	60	250
	200	480	100	440	200	550	80	
	208	600	110	500	220		100	
220		220	550	230				
<b>CC32</b> <b>CC40</b>	24	230	24	230	24	240	12	110
	48	240	36	240	48	380	20	125
	100	277	42	380	100	415	24	200
	110	380	48	400	110	440	48	220
	120	440	80	415	120	500	60	250
	200	480	100	440	200	550	80	
	208	600	110	500	220		100	
220		220	550	230				
<b>CC50</b> <b>CC65</b>	24	230	24	230	24	240	12	110
	48	240	36	240	48	380	20	125
	100	277	42	380	100	415	24	200
	110	380	48	400	110	440	48	220
	120	440	80	415	120	500	60	250
	200	480	100	440	200	550	80	
	208	600	110	500	220		100	
220		220	550	230				
<b>CC75</b> <b>CC85</b> <b>CC100</b>	24	230	24	230	24	240	12	110
	48	240	36	240	48	380	20	125
	100	277	42	380	100	415	24	200
	110	380	48	400	110	440	48	220
	120	440	80	415	120	500	60	250
	200	480	100	440	200	550	80	
	208	600	110	500	220		100	
220		220	550	230				
<b>CC130</b> <b>CC150</b>					24	300	24	110
					48	400	48	220
					110	500		
					220			

## Replacement Process



To instantly view a data sheet and specify products, visit [www.GavazziOnline.com](http://www.GavazziOnline.com)