

# Auxiliary Contact Blocks

## Accessories for AF09 ... AF30 3-pole Contactors



CA4-10



CA4-22M



CAL4-11



CAT4-11E

### Application

The auxiliary contact blocks are used for the operation of auxiliary circuits and control circuits.

### Description

Types of auxiliary contact blocks for standard industrial environments:

- **CA4** 1 or 4-pole block, front-mounted, instantaneous with N.O., N.C. contacts
- **CC4** 1-pole block, front-mounted, with N.O. leading contact or N.C. lagging contact
- **CAT4** 2-pole block, front-mounted, instantaneous N.O. + N.C. contacts with A1 / A2 coil terminal connection on front face
- **CAL4** 2-pole block instantaneous N.O. + N.C. contacts clipped onto the right and/or left side of the contactors.

Select the type of 2 or 4-pole auxiliary contact blocks CAT4 or CA4-..E, CA 4-..M or CA 4-..U, according to the contactor type for compliance with the standard requirements (see terminal and marking positioning).

The auxiliary contact blocks are equipped with screw type connecting terminals delivered open, protected against accidental direct contact and bear the corresponding function marking.

Fitting Details - For each contactor refer to "Accessory Fitting Details" table.

### Ordering Details

For contactors	Auxiliary contacts	Catalog number	List price	Pack <sup>(log)</sup> pieces	Weight kg/lbs (1 pce)

#### Front-mounted instantaneous auxiliary contact blocks

AF09 ... AF30	1 0 - -	CA4-10		1	0.014/0.03
	0 1 - -	CA4-01		1	0.014/0.03
AF09 ... AF16..-30-10	2 2 - -	CA4-22M		1	0.055/0.12
	3 1 - -	CA4-31M		1	0.055/0.12
	1 3 - -	CA4-13M		1	0.055/0.12
	0 4 - -	CA4-04M		1	0.055/0.12
AF26 ... AF30..-30-00	2 2 - -	CA4-22E		1	0.055/0.12
	3 1 - -	CA4-31E		1	0.055/0.12
	4 0 - -	CA4-40E		1	0.055/0.12
	0 4 - -	CA4-04E		1	0.055/0.12
AF09 ... AF16..-30-01	2 2 - -	CA4-22U		1	0.055/0.12
	3 1 - -	CA4-31U		1	0.055/0.12
	4 0 - -	CA4-40U		1	0.055/0.12

#### Front-mounted auxiliary contact blocks with N.O. leading contact and N.C. lagging contact

AF09 ... AF30	- - 1 0	CC4-10		1	0.014/0.03
	- - 0 1	CC4-01		1	0.014/0.03

#### Side-mounted instantaneous auxiliary contact blocks

AF09 ... AF30	1 1 - -	CAL4-11		1	0.040/0.09
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#### Front-mounted instantaneous auxiliary contact and A1/A2 coil terminal blocks

AF09 ... AF16..-30-10	1 1 - -	CAT4-11M		1	0.040/0.09
AF26 ... AF30..-30-00	1 1 - -	CAT4-11E		1	0.040/0.09
AF09 ... AF16..-30-01	1 1 - -	CAT4-11U		1	0.040/0.09

Note: CAT4 not fittable on AF.Z contactors with DC control voltage 12...20 V DC.

# Auxiliary Contact Blocks

## Accessories for AF09 ... AF30 3-pole Contactors



### Technical Data

**Types** : 1-pole CA4, 1-pole CC4, 4-pole CA4, 2-pole CAT4, 2-pole CAL4








#### Contact Utilization Characteristics according to IEC

<b>Standards</b>	IEC 60947-5-1 and EN 60947-5-1	
<b>Rated insulation voltage <math>U_i</math></b> acc. to IEC 60947-5-1	690 V	
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>	6 kV	
<b>Rated operational voltage <math>U_o</math> max.</b>	24 ... 690 V	
<b>Conventional thermal current <math>I_{th}</math></b> - $\theta \leq 40$ °C	16 A	
<b>Rated frequency limits</b>	25 ... 400 Hz	
<b>Rated operational current <math>I_o</math> / AC-15</b> acc. to IEC 60947-5-1	24-127 V 50/60 Hz	6 A
	220-240 V 50/60 Hz	4 A
	400-440 V 50/60 Hz	3 A
	500 V 50/60 Hz	2 A
	690 V 50/60 Hz	2 A
<b>Making capacity</b> acc. to IEC 60947-5-1	10 x $I_o$ AC-15 acc. to IEC 60947-5-1	
<b>Breaking capacity</b> acc. to IEC 60947-5-1	10 x $I_o$ AC-15 acc. to IEC 60947-5-1	
<b>Rated operational current <math>I_o</math> / DC-13</b> acc. to IEC 60947-5-1	24 V DC	6 A / 144 W
	48 V DC	2.8 A / 134 W
	72 V DC	1 A / 72 W
	110 V DC	0.55 A / 60 W
	125 V DC	0.55 A / 69 W
	220 V DC	0.27 A / 60 W
	250 V DC	0.27 A / 68 W
	400 V DC	0.15 A / 60 W
	500 V DC	0.13 A / 65 W
	600 V DC	0.1 A / 60 W
	<b>Short-circuit protection gG type fuse</b>	10 A
<b>Rated short-time withstand current <math>I_{sc}</math></b> $\theta = 40$ °C	for 1.0 s	100 A
	for 0.1 s	140 A
<b>Minimum switching capacity</b> with failure rate acc. to IEC 60947-5-4	12 V / 3 mA	
<b>Heat dissipation per pole at 6 A</b>	10 <sup>7</sup>	
<b>Mechanical durability</b>	Number of operating cycles	10 millions operating cycles
	Max. switching frequency	3600 cycles/h
<b>Max. electrical switching frequency</b>	for AC-15	1200 cycles/h
	for DC-13	900 cycles/h

#### Contact Utilization Characteristics according to UL / CSA

<b>Standards</b>	UL 508, CSA C22.2 N°14
<b>Rated insulation voltage <math>U_i</math></b>	600 V
<b>Max. rated voltage</b>	600 V AC, 600 V DC
<b>Pilot duty</b>	A600, Q600
AC thermal rated current	10 A
AC maximum volt-ampere making	7200 VA
AC maximum volt-ampere breaking	720 VA
DC thermal rated current	2.5 A
DC maximum volt-ampere making-breaking	69 VA

#### Connecting Characteristics

<b>Screw terminals</b>	(delivered in open position, screws of unused terminals must be tightened)	
All terminals	M3.5	
<b>Connecting capacity (min. ... max.)</b>		
 Rigid solid	1 x	1 ... 2.5 mm <sup>2</sup>
 Flexible with non insulated ferrule	2 x	1 ... 2.5 mm <sup>2</sup>
 Flexible with insulated ferrule	1 x	0.75 ... 2.5 mm <sup>2</sup>
 Flexible with insulated ferrule	2 x	0.75 ... 2.5 mm <sup>2</sup>
 Flexible with insulated ferrule	1 x	0.75 ... 2.5 mm <sup>2</sup>
 Flexible with insulated ferrule	2 x	0.75 ... 1.5 mm <sup>2</sup>
 Bars or lugs	L <	8 mm
Capacity acc. to UL/CSA	1 or 2 x	AWG 18 ... 14
Stripping length	10 mm	
<b>Degree of protection</b> acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529	IP20	
<b>Screwdriver type</b>	Flat Ø5.5 / Pozidriv 2	
<b>Tightening torque</b>	1.2 Nm / 11 lb.in	