

## Accessories for A/AF/AL & AE contactors



CAL5-11



CA5-10

### Auxiliary contact blocks – Standard

Positioning	Maximum number of contact blocks	Contact Description	Catalog number
Front mounting (single pole)	4 blocks: A9 – A26 AE9 – AE26 AL9 – AL26	1 N.O. 1 N.C.	CA5-10 CA5-01
	5 blocks: A30, A40, AE30, AE40, AL30, AL40 6 blocks: A45 – A110 AE45 – AE110 AF45 – AF110		1 N.O. Early make 1 N.C. Late break
Front mounting (4 pole)	1 block: A9 – A26-40-00 A30 – A110 AE9 – AE110	4 N.O. 3 N.O. & 1 N.C. 2 N.O. & 2 N.C. 4 N.C. 2 N.O./2 N.C. <sup>1</sup>	CA5-40E CA5-31E CA5-22E CA5-04E CA5-11/11E
	1 block: A9 – A40-30-10 AL9 – AL40-30-10		3 N.O. & 1 N.C. 2 N.O. & 2 N.C. 1 N.O. & 3 N.C. 4 N.C. 4 N.O. 2 N.O./2 N.C. <sup>1</sup>
Side mounting (2 pole)	2 blocks: A9 – A75, AE9-AE45 1 block: AE50 – AE75, AL9 – AL40	1 N.O. & 1 N.C.	CAL5-11
	1 block: A/AE/AF95 – A/AE/AF110		CAL18-11
	2 blocks: A145 – A300, AF145-AF2050	1 N.O. & 1 N.C. (inside L or R) 1 N.O. & 1 N.C. (outside, L or R)	CAL18-11
	2 blocks: A145 – A300, AF145-AF2050		CAL18-11B

### Auxiliary contact blocks – Front mounting, switching low voltage and low current

Positioning	Maximum number of contact blocks	Contact Description	Degree of protection	Catalog number
Front mounting (single pole)	4 blocks: A9 – A26 AE9 – AE26 AL9 – AL26	1 N.O. 1 N.C. 1 N.O. 1 N.C.	IP40 IP40 IP40 IP40	CE5-10D0.1 CE5-01D0.1 CE5-10D2 CE5-01D2
	5 blocks: A30, A40, AE30, AE40, AL30, AL40 6 blocks: A45 – A110 AE45 – AE110 AF45 – AF110			1 N.O. 1 N.C. 1 N.O. 1 N.C.

# Accessories

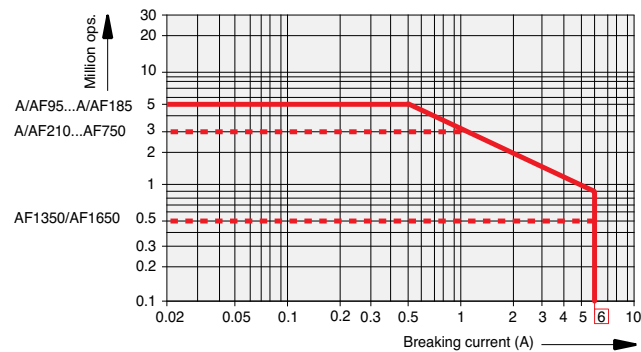
## Auxiliary contact block technical data

### CA5/CAL5-11/CAL18-11/CC5

Across the line  
contactors

Types		1-pole CA5, 4-pole CA5 2-pole CAL5-11 and 1-pole CC5	CAL18-11 CAL18-11B
<b>Standards</b>		IEC 947-5-1 and EN 60947-5-1	
<b>Rated insulation voltage <math>U_i</math></b> according to IEC 947-5-1	V	690	690
according to UL/CSA	V	600	690
<b>Rated operational voltage <math>U_e</math></b>	~ V	24 to 690	
<b>Conventional thermal current <math>I_{th}</math></b>	A	16	
<b>Rated operational current <math>I_e</math></b> in AC-15 acc. to IEC 947-5-1			
	24 to 127 V	A	6
	220 to 240 V	A	4
	380 to 440 V	A	3
	500 to 690 V	A	2
in DC-13 acc. to IEC 947-5-1			
	24 V	A	6
	48 V	A	2.8
	72 V	A	1
	125 V	A	0.55
	250 V	A	0.3
<b>Connecting terminals</b> (delivered in open position. Screws of unused terminals should be tightened).		M 3.5 (+,-) pozidriv 2 screw with cable clamp	
<b>Connecting capacity</b>			
• Rigid solid	1 or 2 x mm <sup>2</sup>	1 to 4	
• Flexible with cable end	1 x mm <sup>2</sup> 2 x mm <sup>2</sup>	0.75 to 2.5 0.75 to 2.5	
<b>Mechanical durability</b>	cycles	10 million, A9 - A75;	5 million, A/AF95 - A/AF185; 3 million, A/AF210 - AF750; 0.5 million, AF1350 & AF1650
<b>Max. switching frequency</b>	cycles/h	3600	
<b>Electrical durability</b>		See curve below	
<b>Max. switching frequency</b>	cycles/h	1200	
<b>Rated making capacity</b>		10 x $I_e$ AC-15	
<b>Rated breaking capacity</b>		10 x $I_e$ AC-15	
<b>Rated short-time withstand current <math>I_{cw}</math></b> q = 40°C	1 s 0.1 s	A	100 140
<b>Min. switching capacity</b>		17 V / 1 mA	24V / 50 mA
<b>Short-circuit protection - gG (gl) fuses</b>	A	10	
<b>Power loss per pole at 6 A</b>	W	0.15	
<b>Degree of protection</b> according to IEC 529, IEC 144, DIN 40 050 and NFC 20-010		IP 20	

#### CAL18



#### Electrical durability

AC-15 according to IEC 947-5-1

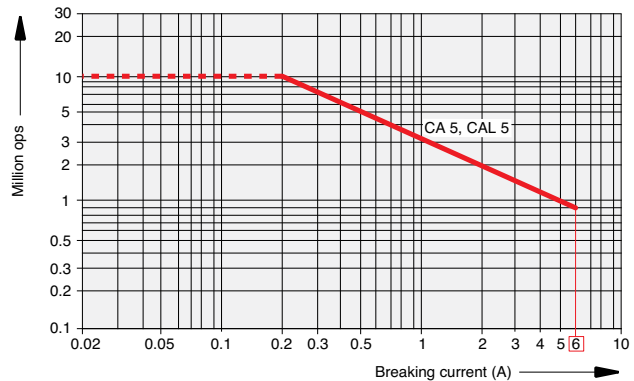
making current: 10 x  $I_e$  where  $\cos \phi = 0.7$  and  $U_e$

breaking current:  $I_e$  where  $\cos \phi = 0.4$  and  $U_e$

The curves opposite show the electrical durability of the auxiliary contact blocks according to breaking current  $I_c$ .

These curves have been plotted for resistive and inductive loads up to 690 V, 40 to 60 Hz.

#### CA5, CAL5



## Accessories

### Auxiliary contact block technical data

#### CE5

#### Auxiliary contact blocks for switching low level voltage and current

Types		CE5-10D0.1 CE5-01D0.1 CE5-10W0.1 CE5-01W0.1 Version 100 mA	CE5-10DZ CE5-01DZ CE5-10WZ CE5-01WZ Version 2 A
<b>Standards</b>		IEC 947-5-1 and EN 60947-5-1	
<b>Approvals</b>		UL / CSA	
<b>Rated insulation voltage <math>U_i</math></b>			
according to IEC 947-5-1	V	250	250
according to UL/CSA	V	125	250
<b>Rated operational voltage <math>U_e</math></b>		125	250
<b>Rated operational current <math>I_e</math></b>			
in AC-15 or AC-14 acc. to IEC 947-5-1	A	0.1	2
in DC-12 acc. to IEC 947-5-1	A	0.1	2
24 V	A	0.1	0.5
60 V	A	0.1	0.2
110 V	A	0.1	0.1
220 V	A	0.1	0.1
<b>Minimal switching</b>		3 V / 1 mA	17 V / 1 mA
<b>Reliability for the minimal switching</b>		10 <sup>-8</sup>	
<b>Connecting terminals</b>		M3.5 (+,-) posidriv 2 screw with cable clamp	
<b>Connecting capacity</b>			
• Rigid solid		1 ou 2 (1...4) mm <sup>2</sup>	
• Flexible with cable end		1 ou 2 (0.75... 2.5) mm <sup>2</sup>	
<b>Short circuit protection</b>		100 mA	10 A
<b>Degree of protection</b>			
according to IEC529, IEC 144, DIN 40 050, NFC 20-010	IP 20		
<b>Mounting</b>		Front mounting on contactors: A, AE, TAE9...110, AL, AF, GA, N, NE	
<b>Dimensions</b>		Identical to those of CA5 single pole	