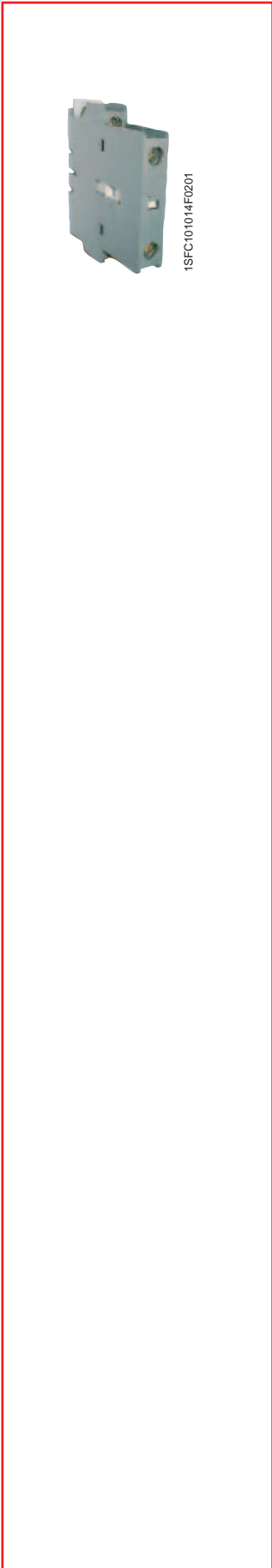


Auxiliary Contact Blocks

Side Mounting

New CAL18



Application

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

Description

Type of auxiliary contact block in standard version for general use:

- **CAL18** 2-pole block instantaneous N.O. + N.C. contacts.

The auxiliary contact block is:

- Equipped with screw type connecting terminals delivered open.
- Protected against accidental direct contact.
- Marked in accordance with relevant standards.

Mirror contacts

The auxiliary contact block is designed to meet the requirements in IEC 60947-4-1.

In short this means: A normally closed auxiliary contact which can not be in closed position simultaneously with the normally open main contact.

(AF1350/1650: Use two N.C. auxiliary contacts in series for mirror contacts, one block on each side of the contactor).

Fitting Details

Clipped onto the right and/or lefthand side of the contactors.

The **CAL18-11B** is a second block for mounting in addition to a first **CAL18-11** block, right and/or lefthand of the A145 ... A300 and AF145 ... AF1650 contactors.

Ordering Details

For contactors	Max. number of blocks	Contacts blocks	Type	Order code	Pack ^{ing} pieces	Weight kg
						1 piece
2-pole auxiliary contacts		N.O. N.C.				
A95 ... A300	2 blocks	} 1 1	CAL18-11	1SFN010720R1011	2	0.050
AF95 ... AF1650	2 blocks					
UA95 ... UA110	2 blocks					
A145 ... A300	2 blocks ⁽¹⁾	} 1 1	CAL18-11B	1SFN010720R3311	2	0.050
AF145 ... AF1650	2 blocks ⁽¹⁾					
UA95 ... UA110	2 blocks ⁽¹⁾					

⁽¹⁾ 2 blocks CAL 18-11 + 2 blocks CAL 18-11B

Auxiliary device including an insertion contact and a varistor.

To be used only with AE 95/110 and TAE 95/110.




AE95, AE110	}	CCL18-01	1SFN014328R1001	1	0,040
TAE95, TAE110					

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Technical Data

Types	CAL18-11	CAL18-11B	
Compliance with standards	IEC 60947-5-1, EN 60947-5-1		
Certification and approvals	CE, UL, CSA, CCC		
Rated insulation voltage U_i according to IEC 60947-5-1	V	690	
according to UL/CSA	V	690	
Rated operational voltage U_e	V a.c.	24 to 690	
Conventional free air thermal current I_{th}	A	16	
Rated operational current I_e acc. to IEC 60947-5-1			
AC-15	24-127 V a.c.	A	6
	220-240 V a.c.	A	4
	380-440 V a.c.	A	3
	500-690 V a.c.	A	2
DC-13	24 V d.c.	A	6
	48 V d.c.	A	2.8
	72 V d.c.	A	1
	125 V d.c.	A	0.55
	250 V d.c.	A	0.3
Short-circuit protection - gG type fuses	A	10	
Rated making capacity		10 x I_e AC-15	
Rated breaking capacity		10 x I_e AC-15	
Rated short-time withstand current I_{cw} 1 s	A	100	
$\theta = 40\text{ }^\circ\text{C}$ 0.1 s	A	140	
Power loss per pole at 6 A	W	0.15	
Min. switching capacity	V / mA	24 / 50 (0.5 millions of operating cycles)	
Mechanical durability – millions of operating cycles – max. mech. switching frequency	cycles / h	5 (A/AF95 ... A/AF185), 3 (A/AF210 ... AF750), 0.5 (AF1350/AF1650) 3600	
Electrical durability – millions of operating cycles – max. elec. switching frequency	cycles / h	see diagram below 1200	
Connecting terminals (Delivered in open position. Terminal screws not used should be tightened.)		M3.5 (+,-) pozidriv 2 screw with cable clamp	
Tightening torque – recommended – max.	Nm Nm	1.00 1.20	
Connecting capacity (min. ... max.)			
Rigid solid	 1 or 2 x mm ²	1 ... 4	
Flexible with cable end	 1 or 2 x mm ²	0.75 ... 2.5	
Lugs	 L mm ≤ l mm >	8 3.7	
Degree of protection according to IEC 60529, IEC 60144		IP 20	

Electrical Durability for AC-15 Utilization Category

AC-15 utilization category according to IEC 60947-5-1 / EN 60947-5-1:

– making current: $10 \times I_e$ with $\cos \varphi = 0.7$ and U_e

– breaking current: I_e with $\cos \varphi = 0.4$ and U_e

These curves represent the electrical durability of the add-on auxiliary contacts in relation to the breaking current.

These curves are valid for resistive and inductive loads up to 690 V, 40 ... 60 Hz.

