Auxiliary contact blocks for AF116 ... AF2650 contactors

CAL19-11

Description

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

Types of auxiliary contact blocks for side mounting:

– CAL 2-pole block, with instantaneous N.O. + N.C. contacts.

For clipping onto the right- and/or left-hand side of the contactors.

The CAL ...-11B is a second block for mounting in addition to a first CAL ...-11 block, right- and/or left-hand of the AF116 ... AF2650 contactors.

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

CAL18-11

Ordering details

For contactors	Auxiliary contacts		Catalog number	Global reference code	Pkg qty	Weight (1 pce)
						kg
Side-mounted instantaneous auxiliary contact blocks						
AF116 ... AF370	1	1	CAL19-11	1SFN010820R1011	2	0.040
	1	1	CAL19-11B	1SFN010820R3311	2	0.040
AF400 ... AF2650	1	1	CAL18-11	1SFN010720R1011	2	0.050
	1	1	CAL18-11B	1SFN010720R3311	2	0.050

(1) For each contactor type, refer to "Accessory fitting details" table.

Auxiliary contact blocks for AF116 ... AF2650 contactors

Technical data

Types		CAL18	CAL19
Contact utilization characteristics according to IEC			
Standards		IEC 60947-5-1 and EN 60947-5-1	
Rated insulation voltage Ui acc. to IEC 60947-5-1		690 V	
Rated impulse withstand voltage Uimp.		6 kV	
Rated operational voltage Ue max.		24...690 V AC	
Conventional thermal current Ith - θ ≤ 40 °C		16 A	
Rated frequency (without derating)		50/60 Hz	
Ie / Rated operational current AC-15			
acc. to IEC 60947-5-1	**24-127 V 50/60 Hz**	6 A	
	220-240 V 50/60 Hz	4 A	
	380-440 V 50/60 Hz	3 A	
	500-690 V 50/60 Hz	2 A	
Making capacity acc. to IEC 60947-5-1		10 x Ie AC-15	
Breaking capacity acc. to IEC 60947-5-1		10 x Ie AC-15	
Ie / Rated operational current DC-13			
acc. to IEC 60947-5-1	**24 V DC**	6 A / 144 W	3 A / 72 W
	48 V DC	2.8 A / 134 W	1.5 A / 72 W
	72 V DC	1 A / 72 W	1 A / 72 W
	110 V DC	0.55 A / 60 W	0.55 A / 60 W
	125 V DC	0.55 A / 69 W	0.55 A / 69 W
	220 V DC	0.3 A / 66 W	0.3 A / 69 W
	250 V DC	0.3 A / 75 W	0.3 A / 75 W
Short-circuit protection device gG type fuse		10 A	
Rated short-time withstand current Icw	**for 1.0 s**	100 A	
θ = 40 °C	**for 0.1 s**	140 A	
Minimum switching capacity		24 V / 50 mA (0.5 million of operating cycles)	24 V / 50 mA
with failure rate acc. to IEC 60947-5-4		≤ 10^{-6}	
Power dissipation per pole at 6 A		0.15 W	
Mechanical durability	Number of operating cycles	3 millions (A/AF400 ... AF750)	
		0.5 million (AF1250 ... AF2050)	5 millions operating cycles
	Max. switching frequency	3600 cycles/h	300 cycles/h
Max. electrical switching frequency	**AC-15**	1200 cycles/h	300 cycles/h
	DC-13	900 cycles/h	300 cycles/h
Mechanically linked contacts acc. to annex L of IEC 60947-5-1		N.O. or N.C. auxiliary contacts are mechanically linked contacts	
Mirror contacts acc. to annex F of IEC 60947-4-1		N.C. auxiliary contacts are mirror contacts	

Contact utilization characteristics according to UL / CSA

Standards		UL 60947-1 / 60947-4-1A and CSA 60947-1 / 60947-4-1A
Max. operational voltage		600 V AC, 250 V DC
Pilot duty		A600, Q300
AC thermal rated current		10 A
AC maximum volt-ampere making		7200 V A
AC maximum volt-ampere breaking		720 V A
DC thermal rated current		2.5 A
DC maximum volt-ampere making-breaking		69 V A

Connecting characteristics

Connection capacity (min. ... max.)		
Solid / stranded	**1 x**	1...4 mm²
	2 x	1...4 mm²
Flexible with non insulated ferrule	**1 x**	0.75...2.5 mm²
	2 x	0.75...2.5 mm²
Flexible with insulated ferrule	**1 x**	0.75...2.5 mm²
	2 x	0.75...2.5 mm²
Lugs	**L ≤**	8 mm
	l >	3.7 mm
Connection capacity acc. to UL/CSA	**1 or 2 x**	AWG18...14
Stripping length		9 mm
Tightening torque		1 Nm
Degree of protection		
acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529		IP20
Screw terminals		Delivered in open position, screws of unused terminals must be tightened
All terminals		M3.5
Screwdriver type		Flat Ø 5.5 / Pozidriv 2