

Auxiliary contact blocks for AF09(Z)B ... AF370B contactors

Connection with standard ferrules



CA4-10-T



CA4-22E



CAL4-11-T



CAT4-11E

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 front mounting:

- Screw terminals
- Select the 4-pole auxiliary contact blocks CA4-..E, CA4-..M, CA4-..U or CA4-..N type, according to the contactor or contactor relay type for compliance with the standard requirements (see "Terminal marking and positioning").

Types of auxiliary contact blocks for side mounting:

- Screw terminals
- 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 AF116B ... AF370B 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.

| For contactors | Auxiliary contacts | Type | Order code | Pkg qty | Weight (1 pc) |
|----------------|--------------------|------|------------|---------|---------------|
| | Y Y Y Y | | | | kg |

Front-mounted instantaneous auxiliary contact blocks

| | | | | | |
|--|---------|----------|-----------------|----|-------|
| AF09(Z)B ... AF38(Z)B 4-pole NF(Z)B | 1 0 - - | CA4-10-T | 1SBNO10110T1010 | 10 | 0.014 |
| AF45 ... AF95B | 0 1 - - | CA4-01-T | 1SBNO10110T1001 | 10 | 0.014 |
| | 1 0 - - | CA5-10 | 1SBNO10010R1010 | 10 | 0.014 |
| | 0 1 - - | CA5-01 | 1SBNO10010R1001 | 10 | 0.014 |
| AF09(Z)B ... AF16(Z)B-30-10 | 2 2 - - | CA4-22M | 1SBNO10140R1122 | 1 | 0.055 |
| | 3 1 - - | CA4-31M | 1SBNO10140R1131 | 1 | 0.055 |
| | 1 3 - - | CA4-13M | 1SBNO10140R1113 | 1 | 0.055 |
| | 0 4 - - | CA4-04M | 1SBNO10140R1104 | 1 | 0.055 |
| AF26(Z)B ... AF38(Z)B-30-00 | 2 2 - - | CA4-22E | 1SBNO10140R1022 | 1 | 0.055 |
| AF09(Z)B ... AF38(Z)B-40-00 | 3 1 - - | CA4-31E | 1SBNO10140R1031 | 1 | 0.055 |
| AF09(Z)B ... AF38(Z)B-22-00 | 4 0 - - | CA4-40E | 1SBNO10140R1040 | 1 | 0.055 |
| AF26(Z)B ... AF38(Z)B-30-00 | 0 4 - - | CA4-04E | 1SBNO10140R1004 | 1 | 0.055 |
| AF09(Z)B ... AF16(Z)B-40-00 | | | | | |
| AF09(Z)B ... AF16(Z)B-30-01 | 2 2 - - | CA4-22U | 1SBNO10140R1322 | 1 | 0.055 |
| | 3 1 - - | CA4-31U | 1SBNO10140R1331 | 1 | 0.055 |
| | 4 0 - - | CA4-40U | 1SBNO10140R1340 | 1 | 0.055 |
| 4-pole NF(Z)B | 4 0 - - | CA4-40N | 1SBNO10140R1240 | 1 | 0.055 |
| | 3 1 - - | CA4-31N | 1SBNO10140R1231 | 1 | 0.055 |
| | 2 2 - - | CA4-22N | 1SBNO10140R1222 | 1 | 0.055 |
| | 1 3 - - | CA4-13N | 1SBNO10140R1213 | 1 | 0.055 |
| NF(Z)B40E | 0 4 - - | CA4-04N | 1SBNO10140R1204 | 1 | 0.055 |
| AF45 ... AF95B | 2 2 - - | CA5-22E | 1SBNO10040R1022 | 2 | 0.06 |
| | 3 1 - - | CA5-31E | 1SBNO10040R1031 | 2 | 0.06 |

Side-mounted instantaneous auxiliary contact blocks

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|---------------------------------|---------|-----------|-----------------|----|------|
| AF09(Z)B ... AF38(Z)B NF(Z)B | 1 1 - - | CAL4-11-T | 1SBNO10120T1011 | 10 | 0.04 |
| AF45 ... AF75 | 1 1 - - | CAL5-11 | 1SBNO10020R1011 | 2 | 0.05 |
| AF95B | 1 1 - - | CAL18-11 | 1SFNO10720R1011 | 2 | 0.05 |
| AF116B ... AF370B | 1 1 - - | CAL19-11 | 1SFNO10820R1011 | 2 | 0.04 |
| | 1 1 - - | CAL19-11B | 1SFNO10820R3311 | 2 | 0.04 |

Front-mounted instantaneous auxiliary contact and A1/A2 coil terminal blocks

| | | | | | |
|-----------------------------|---------|----------|-----------------|---|------|
| AF09(Z)B ... AF16(Z)B-30-10 | 1 1 - - | CAT4-11M | 1SBNO10151R1111 | 1 | 0.04 |
| AF09(Z)B ... AF38(Z)B-40-00 | 1 1 - - | CAT4-11E | 1SBNO10151R1011 | 1 | 0.04 |
| AF09(Z)B ... AF38(Z)B-22-00 | | | | | |
| AF26(Z)B ... AF38(Z)B-30-00 | | | | | |
| AF09(Z)B ... AF16(Z)B-30-01 | 1 1 - - | CAT4-11U | 1SBNO10151R1311 | 1 | 0.04 |

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

CA4, CAT4, CAL4 auxiliary contact blocks for AF09(Z)B ... AF38(Z)B

Connection with standard ferrules

Contact utilization characteristics according to IEC

| | | |
|---|--|---------------|
| Types | 1-pole CA4, 4-pole CA4, 2-pole CAT4, 2-pole CAL4 | |
| 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 | |
| Conventional thermal current Ith - 0 ≤ 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 |
| | 400-440 V 50/60 Hz | 3 A |
| | Hz | |
| | 500 V 50/60 Hz | 2 A |
| | 690 V 50/60 Hz | 2 A |
| Making capacity | 10 x Ie AC-15 acc. to IEC 60947-5-1 | |
| Breaking capacity | 10 x Ie AC-15 acc. to IEC 60947-5-1 | |
| Ie / Rated operational current DC-13 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 |
| Short-circuit protection device gG type fuse | 10 A | |
| Rated short-time withstand current Icw θ ≤ 40 °C | for 1.0 s | 100 A |
| | for 0.1 s | 140 A |
| Minimum switching capacity with failure rate acc. to IEC 60947-5-4 | 12 V / 3 mA | |
| | 10 ⁻⁷ | |
| Power dissipation per pole at 6 A | 0.1 W | |
| Mechanical durability Number of operating cycles | 10 millions operating cycles | |
| Max. switching frequency | 3600 cycles/h | |
| Max. electrical switching frequency | AC-15 | 1200 cycles/h |
| | DC-13 | 900 cycles/h |
| Mechanically linked contacts acc. to annex L of IEC 60947-5-1 | Additional N.O. or N.C. auxiliary contacts (CA4, CAL4, CAT4) are mechanically linked contacts. | |
| Mirror contacts acc. to annex F of IEC 60947-4-1 | Additional N.C. auxiliary contacts (CA4, CAL4, CAT4) are mirror contacts. | |

Contact utilization characteristics according to UL / CSA

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|--|--|--|
| Types | 1-pole CA4, 4-pole CA4, 2-pole CAT4, 2-pole CAL4 | |
| Standards | UL 508, CSA C22.2 N°14 | |
| Max. operational voltage | 600 V AC, 600 V DC | |
| Pilot duty | 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

| | | |
|---|--|--|
| Types | 1-pole CA4, 4-pole CA4, 2-pole CAT4, 2-pole CAL4 | |
| Connection capacity (min. ... max.) | | |
|  Rigid solid | 1 x | 1...2.5 mm ² |
|  Flexible with non insulated ferrule | 2 x | 1...2.5 mm ² |
|  Flexible with insulated ferrule | 1 x | 0.75...2.5 mm ² |
|  Lugs | 2 x | 0.75...2.5 mm ² |
| | L < | 8 mm |
| Connection capacity acc. to UL/CSA | 1 or 2 x | AWG 18...14 |
| Stripping length | | 10 mm |
| Tightening torque | | 1.2 Nm / 11 lb.in |
| Degree of protection acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529 | | IP20 |
| Screw terminals All terminals | | Delivered in open position, screws of unused terminals must be tightened |
| Surge protection | | M3.5 |