

# AF38-30-00-.. / AF38Z-30-00-.. 3-pole Contactors AC / DC Operated - with Screw Terminals

AF38(Z) contactors are used for controlling power circuits up to 690 V AC and 220 V DC. They are mainly used for controlling 3-phase motors, non-inductive or slightly inductive loads.

- AF..(Z) contactors include an electronic coil interface providing reduced pull-in and holding consumption, particularly for AC control circuits
- Only four coils are needed to cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC.
- AF..(Z) offer extended operating limits and are suitable worldwide for different control voltages. e.g.: the coil 100...250 V 50/60 Hz - DC is suitable for Europe (230 V 50 Hz) and for North America (120 V 60 Hz and 208 V 60 Hz).
- AF..(Z) contactors can manage large control voltage variations
- AF.Z contactors equipped with a 24...60 V 50/60 Hz - 20...60 V DC coil allow direct control by 24 V DC 500 mA PLC-output
- AF.Z contactors withstand short voltage dips and voltage sags (SEMI F47-0706 compliance)
- AF..(Z) contactors have built-in surge protection and do not require additional surge suppressors.



|  |  |         |  |
|--|--|---------|--|
|  |  | 18.5 kW |  |
|  |  | 20 hp   |  |

3D CAD outline drawings available on «Control Product 3D» portal

### Ordering Details

| IEC         | UL/CSA               | Control voltage     |      | Main contacts | Auxiliary contacts fitted | Type | Order code | EAN | Weight                |
|-------------|----------------------|---------------------|------|---------------|---------------------------|------|------------|-----|-----------------------|
| Rated power | 3-phase motor rating | Uc min. ... Uc max. |      |               |                           |      |            |     | Pack <sup>(ing)</sup> |
| 400 V       | 480 V                | V 50/60 Hz          | V DC |               |                           |      |            |     | 1 piece               |
| AC-3        | hp                   |                     |      |               |                           |      |            |     | kg                    |
| kW          |                      |                     |      |               |                           |      |            |     |                       |

### 3-pole Contactors

|      |    |           |           |   |   |   |   |               |                    |               |       |
|------|----|-----------|-----------|---|---|---|---|---------------|--------------------|---------------|-------|
| 18.5 | 20 | 24...60   | 20...60   | 3 | 0 | 0 | 0 | AF38-30-00-11 | 1SBL 297 001 R1100 | 3471523111516 | 0.310 |
|      |    | 48...130  | 48...130  | 3 | 0 | 0 | 0 | AF38-30-00-12 | 1SBL 297 001 R1200 | 3471523111523 | 0.310 |
|      |    | 100...250 | 100...250 | 3 | 0 | 0 | 0 | AF38-30-00-13 | 1SBL 297 001 R1300 | 3471523111530 | 0.310 |
|      |    | 250...500 | 250...500 | 3 | 0 | 0 | 0 | AF38-30-00-14 | 1SBL 297 001 R1400 | 3471523111547 | 0.350 |

Note: AF38-30-00-11 not suitable for a direct control by PLC-output. AF38-30-00-11 available in some countries: please consult your ABB representative.

### 3-pole Contactors - Low Consumption



|      |    |           |           |   |   |   |   |                |                    |               |       |
|------|----|-----------|-----------|---|---|---|---|----------------|--------------------|---------------|-------|
| 18.5 | 20 | -         | 12...20   | 3 | 0 | 0 | 0 | AF38Z-30-00-20 | 1SBL 296 001 R2000 | 3471523114708 | 0.350 |
|      |    | 24...60   | 20...60   | 3 | 0 | 0 | 0 | AF38Z-30-00-21 | 1SBL 296 001 R2100 | 3471523114715 | 0.350 |
|      |    | 48...130  | 48...130  | 3 | 0 | 0 | 0 | AF38Z-30-00-22 | 1SBL 296 001 R2200 | 3471523114722 | 0.350 |
|      |    | 100...250 | 100...250 | 3 | 0 | 0 | 0 | AF38Z-30-00-23 | 1SBL 296 001 R2300 | 3471523114739 | 0.350 |

Note: Only AF.Z contactors with DC control voltage 12...20 V DC need to respect the connection polarities indicated close to the coil terminals: A1+ for the positive pole and A2- for the negative pole

### Certifications and Approvals

|    |       |     |    |        |  |  |  |  |  |  |  |
|----|-------|-----|----|--------|--|--|--|--|--|--|--|
|    |       |     |    |        |  |  |  |  |  |  |  |
| CE | cULus | CCC | PG | C-Tick |  |  |  |  |  |  |  |

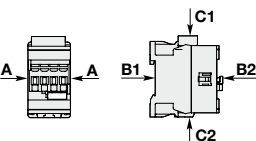
## Main Pole - Utilization Characteristics according to IEC

|   |  |                                       |
|---|--|---------------------------------------|
| <b>Standards</b>  | IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1 |                                       |
| <b>Rated operational voltage <math>U_e</math> max.</b>  | 690 V  |                                       |
| <b>Rated frequency limits</b>   | 25 ... 400 Hz                                      |                                       |
| <b>Conventional free-air thermal current <math>I_{th}</math></b><br>acc. to IEC 60947-4-1, open contactors, $\theta \leq 40^\circ\text{C}$                                  | 50 A   |                                       |
| with conductor cross-sectional area   | 10 mm <sup>2</sup>                                 |                                       |
| <b>AC-1 Utilization category</b><br>for air temperature close to contactor  |  |                                       |
| <b><math>I_e</math> / AC-1 rated operational current</b>  | $\theta \leq 40^\circ\text{C}$                     | 50 A                                  |
| $U_e$ max. $\leq 690\text{ V}$ , 50/60 Hz   | $\theta \leq 60^\circ\text{C}$                     | 42 A                                  |
|   | $\theta \leq 70^\circ\text{C}$                     | 37 A                                  |
| with conductor cross-sectional area   | 10 mm <sup>2</sup>                                 |                                       |
| <b>AC-3 Utilization category</b><br>for air temperature close to contactor $\theta \leq 60^\circ\text{C}$<br>(for 1500 r.p.m., 50 Hz or 1800 r.p.m., 60 Hz, 3-phase motors) |  |                                       |
| <b><math>I_e</math> / AC-3 max. rated operational current</b>   | <b>220-230-240 V</b>                               | 40 A                                  |
|  3-phase motors  | <b>380-400 V</b>                                   | 38 A                                  |
|   | <b>415 V</b>                                       | 38 A                                  |
|   | <b>440 V</b>                                       | 38 A                                  |
|   | <b>500 V</b>                                       | 33 A                                  |
|   | <b>690 V</b>                                       | 24 A                                  |
|   | <b>AC-3 rated operational power</b>                | <b>220-230-240 V</b>                  |
|  1500 r.p.m. 50 Hz<br>1800 r.p.m. 60 Hz<br>3-phase motors                                  | <b>380-400 V</b>                                   | 18.5 kW                               |
|   | <b>415 V</b>                                       | 18.5 kW                               |
|   | <b>440 V</b>                                       | 22 kW                                 |
|   | <b>500 V</b>                                       | 22 kW                                 |
|   | <b>690 V</b>                                       | 22 kW                                 |
|   | <b>Rated making capacity AC-3</b>                  | 10 x $I_e$ AC-3 acc. to IEC 60947-4-1 |
| <b>Rated breaking capacity AC-3</b>   | 8 x $I_e$ AC-3 acc. to IEC 60947-4-1               |                                       |
| <b>AC-8a Utilization category</b><br>(without thermal overload relay - $U_e 400\text{ V}$ - $\theta \leq 40^\circ\text{C}$ )  |  |                                       |
| <b><math>I_e</math> / AC-8a rated operational current</b>   | 50 A   |                                       |
| <b>AC-8a rated operational power</b>  | 25 kW  |                                       |
| <b>Short-circuit protection for contactors</b><br>without thermal O/L relay - Motor protection excluded<br>$U_e \leq 500\text{ V AC}$ - gG type fuse                        | 63 A   |                                       |
| <b>Rated short-time withstand current <math>I_{cw}</math></b><br>at $40^\circ\text{C}$ ambient temperature, in free air from a cold state                                   | <b>1 s</b>   | 700 A                                 |
|   | <b>10 s</b>  | 350 A                                 |
|   | <b>30 s</b>  | 225 A                                 |
|   | <b>1 min</b>                                       | 150 A                                 |
|   | <b>15 min</b>                                      | 50 A                                  |
| <b>Maximum breaking capacity</b><br>$\cos \phi = 0.45$  | <b>at 440 V</b>                                    | 500 A                                 |
|   | <b>at 690 V</b>                                    | 200 A                                 |
| <b>Heat dissipation per pole</b>  | <b><math>I_e</math> / AC-1</b>                     | 2.4 W                                 |
|   | <b><math>I_e</math> / AC-3</b>                     | 1.3 W                                 |
| <b>Max. electrical switching frequency</b>  | <b>AC-1</b>  | 600 cycles/h                          |
|   | <b>AC-3</b>  | 1200 cycles/h                         |
|   | <b>AC-2, AC-4</b>                                  | 150 cycles/h                          |

## Main Pole - Utilization Characteristics according to UL / NEMA / CSA

|  |                        |              |
|--|------------------------|--------------|
| <b>Standards</b>   | UL 508, CSA C22.2 N°14 |              |
| <b>Rated operational voltage Ue max.</b>                             | 600 V                  |              |
| <b>NEMA size</b>   | -                      |              |
| <b>NEMA continuous amp rating</b>                                    | <b>thermal current</b> |              |
| <b>NEMA maximum H.P. ratings 1-phase, 60 Hz</b>                      | 115 V AC               |              |
|  | 230 V AC               |              |
| <b>NEMA maximum H.P. ratings 3-phase, 60 Hz</b>                      | 200 V AC               |              |
|  | 230 V AC               |              |
|  | 460 V AC               |              |
|  | 575 V AC               |              |
| <b>UL General use rating</b>   |                        |              |
| 600 V AC   | 50 A                   |              |
| With conductor cross-sectional area                                  | AWG 8                  |              |
| 80 V DC - 1-pole   | 50 A                   |              |
| With conductor cross-sectional area                                  | AWG 8                  |              |
| <b>UL maximum 1-phase motor rating</b>                               |                        |              |
| Amp-rating   | 120 V AC               | 24 A         |
|  | 240 V AC               | 28 A         |
| Motor power  | 120 V AC               | 2 hp         |
|  | 240 V AC               | 5 hp         |
| <b>UL maximum 3-phase motor rating</b>                               |                        |              |
| Amp-rating   | 200-208 V AC           | 32.2 A       |
|  | 220-240 V AC           | 28 A         |
|  | 440-480 V AC           | 27 A         |
|  | 550-600 V AC           | On request   |
|  | Motor power            | 200-208 V AC |
| (for 1500 r.p.m., 50 Hz or 1800 r.p.m., 60 Hz 3-phase motors)        | 220-240 V AC           | 10 hp        |
|  | 440-480 V AC           | 20 hp        |
|  | 550-600 V AC           | On request   |
| <b>Short-circuit protection</b>                                      |                        |              |
| for contactors without thermal O/L relay - Motor protection excluded |                        |              |
| Fuse rating  | 150 A                  |              |
| Fuse type, 600 V   | NTD                    |              |
| <b>Max. electrical switching frequency</b>                           |                        |              |
| for general use  | 600 cycles/h           |              |
| for motor use  | 1200 cycles/h          |              |

## General Technical Data

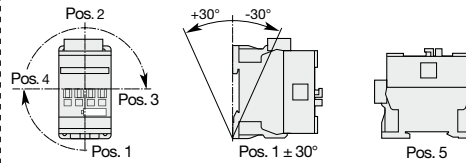
|  |                                    |   |
|--|------------------------------------|---|
| <b>Rated insulation voltage <math>U_i</math></b>                                 |                                    |   |
| acc. to IEC 60947-4-1  |                                    | 690 V   |
| acc. to UL /CSA  |                                    | 600 V   |
| <b>Rated impulse withstand voltage <math>U_{imp}</math></b>                      |                                    | 6 kV  |
| <b>Electromagnetic compatibility</b>   |                                    | Devices complying with IEC 60947-1 / EN 60947-1 - Environment A   |
| <b>Ambient air temperature</b> close to contactor                                |                                    |   |
| Operation  | fitted with thermal overload relay | -25 ... +60 °C  |
|  | without thermal overload relay     | -40 ... +70 °C  |
| Storage  |                                    | -60 ... +80 °C  |
| <b>Climatic withstand</b>  |                                    | Category B according to IEC 60947-1 Annex Q   |
| <b>Operating altitude</b>  |                                    | ≤ 3000 m  |
| <b>Mechanical durability</b>   |                                    |   |
| Number of operating cycles   |                                    | 10 millions operating cycles  |
| Max. switching frequency   |                                    | 3600 cycles/h   |
| <b>Shock withstand</b>   |                                    |   |
| acc. IEC 60068-2-27 and EN 60068-2-27  |                                    |   |
| Mounting position 1  |                                    |   |
|  |                                    | <b>Shock direction</b> 1/2 sinusoidal shock for 11 ms: no change in contact position<br><b>A</b> 30 g<br><b>B1</b> 25 g Closed position / 5 g Open position<br><b>B2</b> 15 g<br><b>C1</b> 25 g<br><b>C2</b> 25 g |
| <b>Vibration withstand</b>   |                                    | 5 ... 300 Hz  |
| acc. to IEC 60068-2-6  |                                    | 4 g Closed position / 2 g Open position   |

## Magnet System Characteristics

|  |                                     |                              |   |
|--|-------------------------------------|------------------------------|---|
| <b>Coil operating limits</b>   |                                     | <b>AC supply</b>             | at $\theta \leq 60$ °C 0.85 x $U_c$ min ... 1.1 x $U_c$ max<br>at $\theta \leq 70$ °C 0.85 x $U_c$ min ... $U_c$ max  |
| acc. to IEC 60947-4-1  |                                     | <b>DC supply</b>             | at $\theta \leq 60$ °C 0.85 x $U_c$ min ... 1.1 x $U_c$ max<br>at $\theta \leq 70$ °C (AF) 0.85 x $U_c$ min ... $U_c$ max - (AF.Z) 0.85 x $U_c$ min ... 1.1 x $U_c$ max |
| <b>AC control voltage</b><br>50/60 Hz  | Rated control circuit voltage $U_c$ |                              | 24 ... 500 V AC   |
|  | Coil consumption                    | <b>Average pull-in value</b> | (AF) 50 VA - (AF.Z) 16 VA   |
|  |                                     | <b>Average holding value</b> | (AF) 2.2 VA / 2 W - (AF.Z) 1.7 VA / 1.5 W   |
| <b>DC control voltage</b>  | Rated control circuit voltage $U_c$ |                              | 12 ... 500 V DC   |
|  | Coil consumption                    | <b>Average pull-in value</b> | (AF) 50 W - (AF.Z) 12 ... 16 W  |
|  |                                     | <b>Average holding value</b> | (AF) 2 W - (AF.Z) 1.7 W   |
| <b>PLC-Output control</b>  |                                     |                              | (AF.Z) ≥ 500 mA 24 V DC   |
| <b>Drop-out voltage in % of <math>U_c</math> min.</b>                                      |                                     |                              | ≤ 60 % $U_c$ min  |
| <b>Voltage sag immunity</b> according to SEMI F47-0706                                     |                                     |                              | (AF.Z) conditions of use on request   |
| <b>Dips withstand</b> (level 0% according to IEC 61000-4-11)<br>-20 °C ≤ $\theta$ ≤ +60 °C |                                     |                              | (AF.Z) 22 ms average for $U_c = 24$ ... 250 V 50/60Hz   |
| <b>Operating time</b>  |                                     |                              |   |
| between coil energization and:   | <b>N.O. contact closing</b>         |                              | 40 ... 95 ms  |
|  | <b>N.C. contact opening</b>         |                              | 38 ... 90 ms  |
| between coil de-energization and:  | <b>N.O. contact opening</b>         |                              | 11 ... 95 ms  |
|  | <b>N.C. contact closing</b>         |                              | 13 ... 98 ms  |

## Mounting Characteristics

### Mounting positions



Max. N.C. built-in and add-on N.C. auxiliary contacts: see accessory fitting details for a 3-pole contactor AF09 ... AF38

### Mounting distances

The contactors can be assembled side by side.

### Fixing

on rail according to IEC 60715, EN 60715  
by screws (not supplied)

35 x 7.5 mm or 35 x 15 mm  
2 x M4 screws placed diagonally

## Connecting Characteristics

### Main terminals



Screw terminals with cable clamp

### Connecting capacity (min. ... max.)

#### Main conductors (poles)

|  |                                     |                                    |     |                            |
|--|-------------------------------------|------------------------------------|-----|----------------------------|
|  | Rigid                               | solid ( $\leq 4 \text{ mm}^2$ )    | 1 x | 2.5 ... 10 mm <sup>2</sup> |
|  |                                     | stranded ( $\geq 6 \text{ mm}^2$ ) | 2 x | 2.5 ... 10 mm <sup>2</sup> |
|  | Flexible with non insulated ferrule |                                    | 1 x | 1.5 ... 10 mm <sup>2</sup> |
|  |                                     |                                    | 2 x | 1.5 ... 10 mm <sup>2</sup> |
|  | Flexible with insulated ferrule     |                                    | 1 x | 1.5 ... 10 mm <sup>2</sup> |
|  |                                     |                                    | 2 x | 1.5 ... 4 mm <sup>2</sup>  |
|  | Bars or lugs                        |                                    | L < | 12.5 mm                    |

Capacity according to UL/CSA 1 or 2 x AWG 14 ... 8

Stripping length 14 mm

#### Auxiliary conductors

(built-in auxiliary terminals + coil terminals)

|  |                                     |  |     |                              |
|--|-------------------------------------|--|-----|------------------------------|
|  | Rigid solid                         |  | 1 x | 1 ... 2.5 mm <sup>2</sup>    |
|  |                                     |  | 2 x | 1 ... 2.5 mm <sup>2</sup>    |
|  | Flexible with non insulated ferrule |  | 1 x | 0.75 ... 2.5 mm <sup>2</sup> |
|  |                                     |  | 2 x | 0.75 ... 2.5 mm <sup>2</sup> |
|  | Flexible with insulated ferrule     |  | 1 x | 0.75 ... 2.5 mm <sup>2</sup> |
|  |                                     |  | 2 x | 0.75 ... 1.5 mm <sup>2</sup> |
|  | Bars or lugs                        |  | L < | 8 mm                         |

Capacity according to UL/CSA 1 or 2 x AWG 18 ... 14

Stripping length 10 mm

### Degree of protection

acc. to IEC 60947-1 / EN 60947-1 and IEC 60529 / EN 60529

Main terminals IP20

Coil terminals IP20

Built-in auxiliary terminals

### Screw terminals

(delivered in open position, screws of unused terminals must be tightened)

Main terminals M4

Coil terminals M3.5

Built-in auxiliary terminals

### Screwdriver type

Flat  $\varnothing 5.5$  / Pozidriv 2

### Tightening torque

Main pole terminals 2.5 Nm / 22 lb.in

Coil terminals 1.2 Nm / 11 lb.in

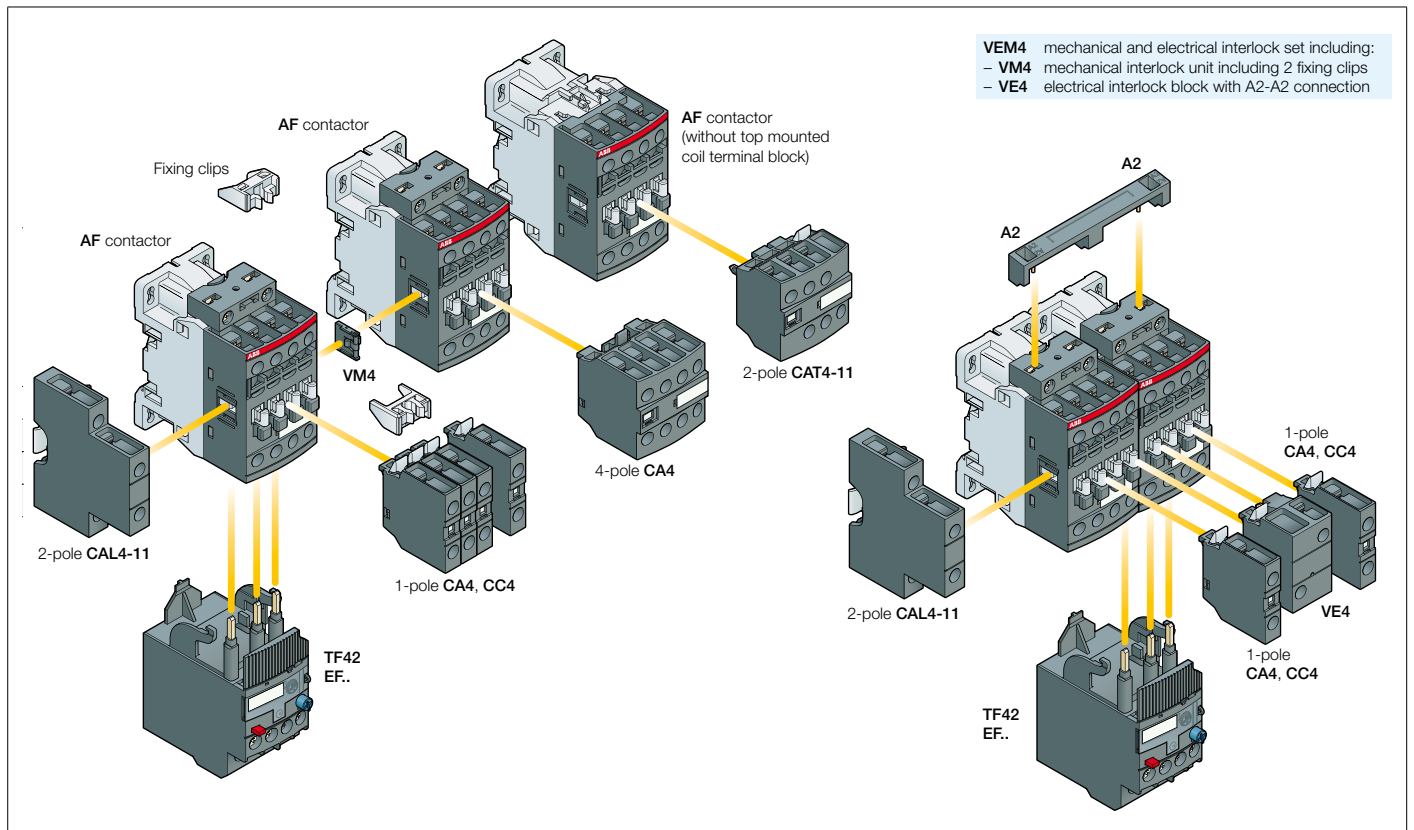
Built-in auxiliary terminals

## Accessory Fitting Details for a 3-pole Contactor

Many configurations of accessories are possible depending on whether these are front-mounted or side-mounted.

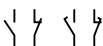
| Main poles  | Built-in auxiliary contacts | Front-mounted accessories |      |                |            | Electrical and mechanical interlock set<br>(between 2 contactors) | Side-mounted accessories |            |
|---|-----------------------------|---------------------------|------|----------------|------------|---|--------------------------|------------|
|   |                             | Auxiliary contact blocks  |      |                |            |   | Auxiliary contact blocks |            |
|   |                             | 1-pole CA4                |      | 2-pole CAT4-11 | 4-pole CA4 | VEM4  | Left side                | Right side |
|   |                             | 1-pole CC4                |      |                |            |   | 2-pole CAL4-11           |            |
| Max. N.C. built-in and add-on N.C. auxiliary contacts: 4 N.C. max. on positions 1, 2, 3, 4 and 3 N.C. max. on positions 1 ±30°, 5 |                             |                           |      |                |            |   |                          |            |
| 3   | 0                           | 4 max.                    | or 1 |                | or 1       | –   | + 1                      | –          |
| 0   | 0                           | 2 max.                    | or 1 |                | –          | –   | + 1                      | + 1        |
|   |                             | 3 max.                    | –    |                | –          | + 1   | + 1                      | or 1       |

## Overview of main accessories (other accessories available)



## Main Accessories

### Ordering Details

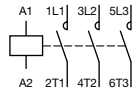
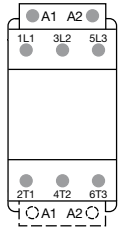
| Description  | Auxiliary contacts<br> | Type     | Order code         | EAN                | Pack <sup>(ing)</sup> piece | Weight     |       |
|--|---|----------|--------------------|--------------------|-----------------------------|------------|-------|
|  |   |          |                    |                    |                             | kg (1 pce) |       |
| <b>Additional auxiliary contact blocks</b>                                   | Front-mounted instantaneous auxiliary contact blocks  | 0 1 - -  | CA4-01             | 1SBN 010 110 R1001 | 3471523130029               | 1          | 0.014 |
|  |   | 1 0 - -  | CA4-10             | 1SBN 010 110 R1010 | 3471523130005               | 1          | 0.014 |
|  |   | 0 1 - -  | CA4-01-T           | 1SBN 010 110 T1001 | 3471523130395               | 10         | 0.014 |
|  |   | 1 0 - -  | CA4-10-T           | 1SBN 010 110 T1010 | 3471523130371               | 10         | 0.014 |
|  | Front-mounted auxiliary contact blocks with N.O. leading contact and N.C. lagging contact               | - - 0 1  | CC4-01             | 1SBN 010 111 R1001 | 3471523130432               | 1          | 0.014 |
|  |   | - - 1 0  | CC4-10             | 1SBN 010 111 R1010 | 3471523130425               | 1          | 0.014 |
|  | Side-mounted instantaneous auxiliary contact blocks   | 1 1 - -  | CAL4-11            | 1SBN 010 120 R1011 | 3471523130043               | 1          | 0.040 |
|  |   | 1 1 - -  | CAL4-11-T          | 1SBN 010 120 T1011 | 3471523130418               | 10         | 0.040 |
|  | Front-mounted instantaneous auxiliary contact blocks  | 0 4 - -  | CA4-04E            | 1SBN 010 140 R1004 | 3471523130159               | 1          | 0.055 |
|  |   | 2 2 - -  | CA4-22E            | 1SBN 010 140 R1022 | 3471523130128               | 1          | 0.055 |
|  |   | 3 1 - -  | CA4-31E            | 1SBN 010 140 R1031 | 3471523130135               | 1          | 0.055 |
|  |   | 4 0 - -  | CA4-40E            | 1SBN 010 140 R1040 | 3471523130142               | 1          | 0.055 |
| Front-mounted instantaneous auxiliary contact and A1/A2 coil terminal blocks | 1 1 - -   | CAT4-11E | 1SBN 010 151 R1011 | 3471523130067      | 1                           | 0.040      |       |
| <b>Interlocks</b>  | Mechanical interlock unit   |          | VM4                | 1SBN 030 105 T1000 | 3471523130609               | 10         | 0.005 |
|  | Mechanical and electrical interlock set   | 1 1 - -  | VEM4               | 1SBN 030 111 R1000 | 3471523130616               | 1          | 0.035 |
|  | Fixing clips  |          | BB4                | 1SBN 110 120 W1000 | 3471523130722               | 50         | 0.002 |
| <b>Connection accessories for starting</b>                                   | Connecting links with manual motor starters   |          | BEA26-4            | 1SBN 082 306 T1000 | 3471523130746               | 10         | 0.025 |
|  |   |          | BEA38-4            | 1SBN 082 306 T2000 | 3471523130753               | 10         | 0.030 |
|  | Connection sets for reversing contactors  |          | BER38-4            | 1SBN 082 311 R1000 | 3471523130784               | 1          | 0.100 |
| <b>Additional coil terminal block</b>  | Additional coil terminal block  |          | LDC4               | 1SBN 070 156 T1000 | 3471523130678               | 10         | 0.010 |
| <b>Protective covers</b>   | Protective covers   |          | BX4                | 1SBN 110 108 T1000 | 3471523130708               | 10         | 0.006 |
|  |   |          | BX4-CA             | 1SBN 110 109 W1000 | 3471523130715               | 50         | 0.001 |
| <b>Function markers</b>  | Function markers  |          | BA4                | 1SNA 235 156 R2700 | 3472592351568               | 16         | 0.011 |
|  |   |          | HTP500-BA4         | 1SNA 235 712 R2400 | 3472592357126               | 1          | 0.220 |
|  |   |          | SPRC 1             | 1SNA 360 010 R1500 | 3472593600108               | 1          | 0.290 |

Note:

- CAT4: not fittable on AF..Z contactors with DC control voltage 12...20VDC.
- VM4: includes 2 fixing clips (BB4) to maintain together both contactors.
- VEM4: includes a VM4 mechanical interlock unit with 2 fixing clips (BB4), a VE4 electrical interlock block and A2-A2 connection. VE4 block must be used with its A2-A2 connection to respect the electrical connection diagram.
- VE4 block must be used with its A2-A2 connection to respect the electrical connection diagram.
- VEM4 not fittable on AF..Z contactors with DC control voltage 12...20 V DC.

## Terminal Marking and Positioning

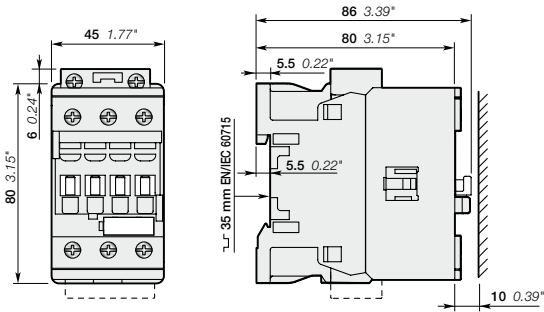
Standard devices without addition of auxiliary contacts



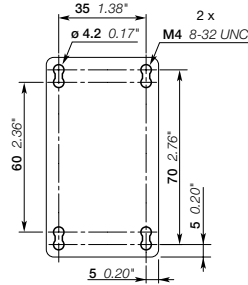
AF38-30-00.. / AF38Z-30-00..

AF38-30-00.. / AF38Z-30-00..

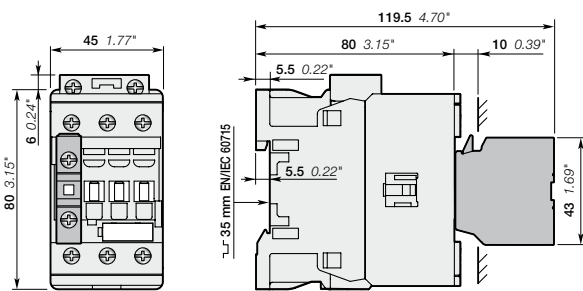
## Dimensions mm, inches



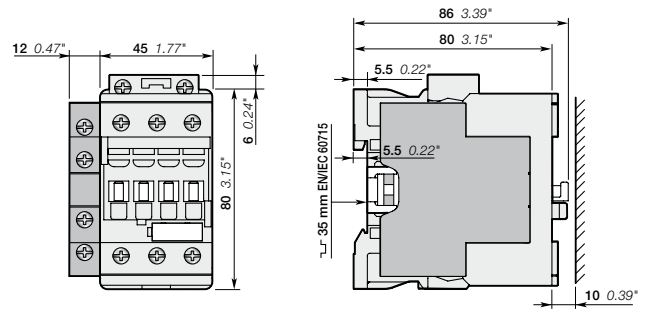
AF38



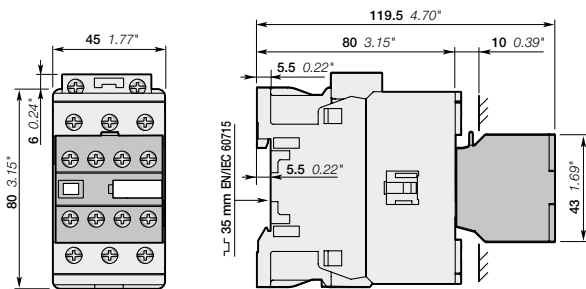
AF38



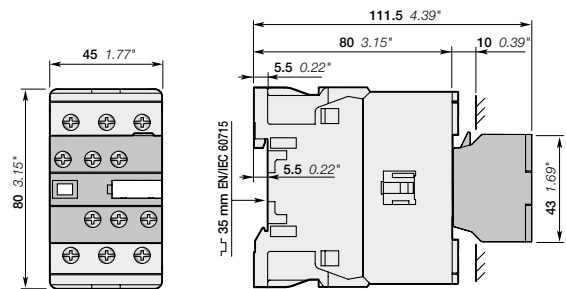
AF38  
+ CA4, CC4 1-pole auxiliary contact block



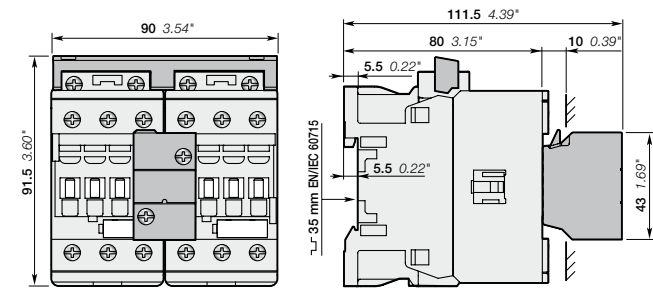
AF38  
+ CAL4-11 2-pole auxiliary contact block



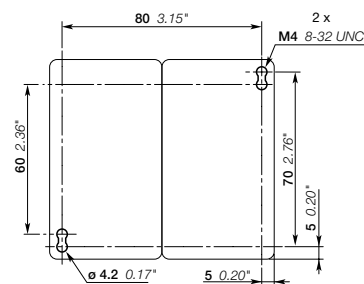
AF38  
+ CA4 4-pole auxiliary contact block



AF38  
+ CAT4 2-pole auxiliary contact and coil terminal block



AF38  
+ VEM4 mechanical and electrical interlock set



AF38  
+ VEM4 mechanical and electrical interlock set

Note: contactor lateral distance to grounded component 2 mm 0.08" min.



# Contact us

## **ABB France**

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You can find the address of your local sales organisation  
on the ABB home page  
<http://www.abb.com/contacts> -> Low Voltage products

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