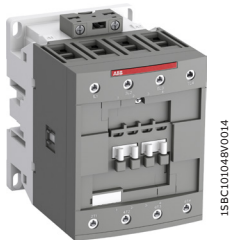


# AF40 ... AF80 4-pole contactors

70 to 125 A AC-1  
AC / DC operated



AF40-40-00



AF80-40-00

AF40 ... AF80 4-pole contactors are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces...) and generally for controlling power circuits up to 690 V AC (AF40, AF52) / 1000 V AC (AF80) and 440 V DC. These contactors are of the block type design with 4 main poles.

- control circuit: AC or DC operated with electronic coil interface accepting a wide control voltage range (e.g. 100...250 V AC and DC), only 4 control voltages ranges covering 24...500 V 50/60 Hz and 20...500 V DC
  - can manage large control voltage variations
  - reduced panel energy consumption
  - very distinct closing and opening
  - can withstand short voltage dips and voltage sags (SEMI F47-0706 conditions of use on request).
- built-in surge suppression
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.

| IEC   | UL/CSA                         | Rated control circuit voltage<br>Uc min. ... Uc max. |      | Auxiliary contacts fitted | Type | Order code | Weight            |
|---|--------------------------------|--|------|---------------------------|------|------------|-------------------|
| Rated operational current<br>$\theta \leq 40^\circ\text{C}$<br>AC-1 | General use rating<br>600 V AC | V 50/60 Hz   | V DC |                           |      |            | Pkg (1 pce)<br>kg |

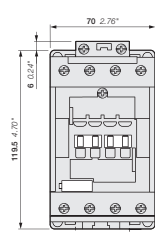
### 4 N.O. main poles

| Rated operational current | UL/CSA rating | Uc min. (V 50/60 Hz) | Uc max. (V DC) | Auxiliary contacts | Type          | Order code      | Weight (kg) |
|---------------------------|---------------|----------------------|----------------|--------------------|---------------|-----------------|-------------|
| 70                        | 60            | 24...60              | 20...60        | 0 0                | AF40-40-00-11 | 1SBL347201R1100 | 1.210       |
|                           |               | 48...130             | 48...130       | 0 0                | AF40-40-00-12 | 1SBL347201R1200 | 1.210       |
|                           |               | 100...250            | 100...250      | 0 0                | AF40-40-00-13 | 1SBL347201R1300 | 1.160       |
|                           |               | 250...500            | 250...500      | 0 0                | AF40-40-00-14 | 1SBL347201R1400 | 1.160       |
| 100                       | 80            | 24...60              | 20...60        | 0 0                | AF52-40-00-11 | 1SBL367201R1100 | 1.210       |
|                           |               | 48...130             | 48...130       | 0 0                | AF52-40-00-12 | 1SBL367201R1200 | 1.210       |
|                           |               | 100...250            | 100...250      | 0 0                | AF52-40-00-13 | 1SBL367201R1300 | 1.160       |
|                           |               | 250...500            | 250...500      | 0 0                | AF52-40-00-14 | 1SBL367201R1400 | 1.160       |
| 125                       | 105           | 24...60              | 20...60        | 0 0                | AF80-40-00-11 | 1SBL397201R1100 | 1.490       |
|                           |               | 48...130             | 48...130       | 0 0                | AF80-40-00-12 | 1SBL397201R1200 | 1.490       |
|                           |               | 100...250            | 100...250      | 0 0                | AF80-40-00-13 | 1SBL397201R1300 | 1.440       |
|                           |               | 250...500            | 250...500      | 0 0                | AF80-40-00-14 | 1SBL397201R1400 | 1.440       |

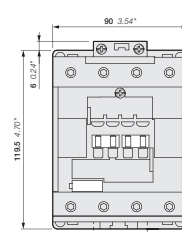
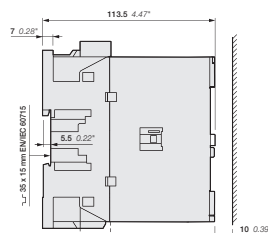
### 2 N.O. + 2 N.C. main poles

| Rated operational current | UL/CSA rating | Uc min. (V 50/60 Hz) | Uc max. (V DC) | Auxiliary contacts | Type          | Order code      | Weight (kg) |
|---------------------------|---------------|----------------------|----------------|--------------------|---------------|-----------------|-------------|
| 70                        | 60            | 24...60              | 20...60        | 0 0                | AF40-22-00-11 | 1SBL347501R1100 | 1.210       |
|                           |               | 48...130             | 48...130       | 0 0                | AF40-22-00-12 | 1SBL347501R1200 | 1.210       |
|                           |               | 100...250            | 100...250      | 0 0                | AF40-22-00-13 | 1SBL347501R1300 | 1.160       |
|                           |               | 250...500            | 250...500      | 0 0                | AF40-22-00-14 | 1SBL347501R1400 | 1.160       |
| 125                       | 105           | 24...60              | 20...60        | 0 0                | AF80-22-00-11 | 1SBL397501R1100 | 1.490       |
|                           |               | 48...130             | 48...130       | 0 0                | AF80-22-00-12 | 1SBL397501R1200 | 1.490       |
|                           |               | 100...250            | 100...250      | 0 0                | AF80-22-00-13 | 1SBL397501R1300 | 1.440       |
|                           |               | 250...500            | 250...500      | 0 0                | AF80-22-00-14 | 1SBL397501R1400 | 1.440       |

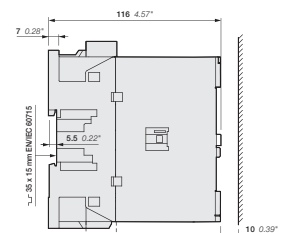
For control by PLC-output, use RA4 interface relay.



AF40, AF52



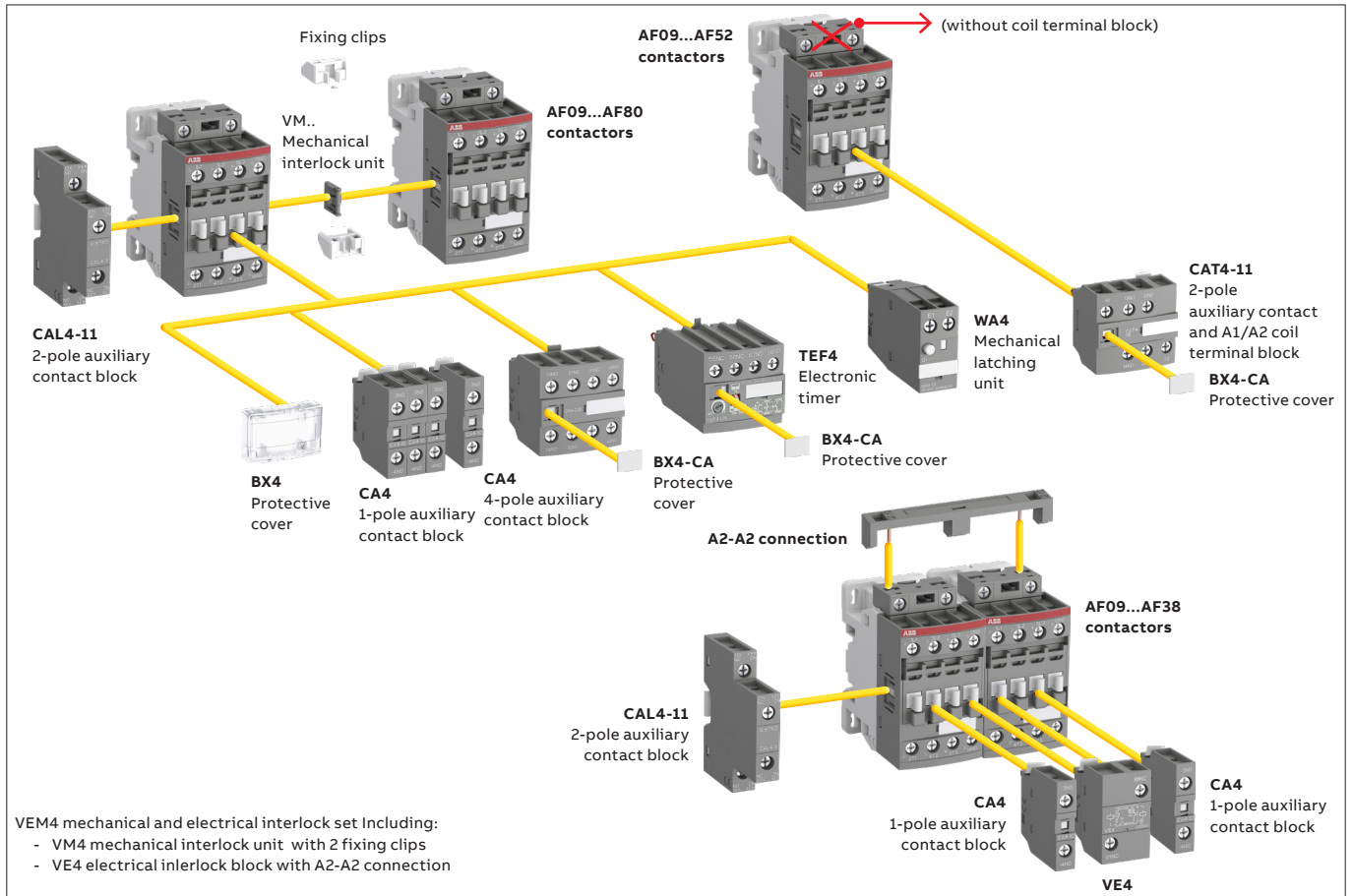
AF80



Main dimensions mm, inches

# AF09 ... AF80 4-pole contactors

## Contactors and main accessories



**Main accessory fitting details** - for ordering details, technical data and other accessories: see section accessories  
 Many configurations of accessories are possible depending on whether these are front-mounted or side-mounted.

| Contactor types   | Main poles | Built-in auxiliary contacts | Front-mounted accessories |                |            | Electronic timer | Mechanical latching unit | Electrical and mechanical interlock set (between 2 contactors) | Side-mounted accessories |            |
|---|------------|-----------------------------|---------------------------|----------------|------------|------------------|--------------------------|--|--------------------------|------------|
|   |            |                             | Auxiliary contact blocks  |                |            |                  |                          |  | Auxiliary contact blocks |            |
|   |            |                             | 1-pole CA4                | 2-pole CAT4-11 | 4-pole CA4 | TEF4             | WA4 (4)                  | VEM4   | 2-pole CAL4-11           |            |
|   |            |                             |                           |                |            |                  |                          |  | Left side                | Right side |
| <b>AF09(Z) ... AF38(Z)</b>                                |            |                             |                           |                |            |                  |                          |  |                          |            |
| AF09 ... AF16   | 4 0        | 0 0(1)                      | 4 max.                    | or 1           | or 1       | or 1             | or 1                     | -  | + 1                      | -          |
| AF26 ... AF38   | 4 0        | 0 0(2)                      | 2 max.                    | or 1           | -          | or 1             | or 1                     | -  | + 1                      | + 1        |
|   |            |                             | 3 max.                    | -              | -          | -                | -                        | + 1 (5)  | + 1                      | or 1       |
| AF09 ... AF38   | 2 2        | 0 0(2)                      | 4 max.                    | or 1           | or 1       | or 1             | or 1                     | -  | + 1                      | -          |
|   |            |                             | 2 max.                    | or 1           | -          | or 1             | or 1                     | -  | + 1                      | + 1        |
| <b>AF09Z ... AF38Z 24 V DC designed for PLC - coil 30</b> |            |                             |                           |                |            |                  |                          |  |                          |            |
| AF09Z ... AF16Z   | 4 0        | 0 0(1)                      | 4 max.                    | -              | or 1       | or 1             | -                        | -(5)   | or 1                     | + 1        |
| AF26Z ... AF38Z   | 4 0        | 0 0(2)                      | 2 max.                    | -              | -          | or 1             | -                        | -(5)   | + 1                      | or 1       |
|   |            |                             | -                         | -              | -          | 1                | -                        | -  | + 1                      | + 1        |
| AF09Z ... AF38Z   | 2 2        | 0 0(2)                      | 4 max.                    | -              | or 1       | or 1             | -                        | -  | or 1                     | + 1        |
|   |            |                             | 2 max.                    | -              | -          | or 1             | -                        | -  | + 1                      | or 1       |
| -   | -          | -                           | -                         | -              | -          | 1                | -                        | -  | + 1                      | + 1        |
| <b>AF40 ... AF80</b>                                      |            |                             |                           |                |            |                  |                          |  |                          |            |
| AF40 ... AF52   | 4 0        | 0 0                         | 4 max.                    | or 1           | or 1       | or 1             | or 1                     | -  | + 1                      | + 1        |
| AF80  | 4 0        | 0 0                         | 4 max.                    | -              | or 1       | or 1             | or 1                     | -  | + 1                      | + 1        |
| AF40  | 2 2        | 0 0(3)                      | 4 max.                    | or 1           | or 1       | or 1             | or 1                     | -  | + 1                      | -          |
|   |            |                             | 4 max.                    | -              | or 1       | or 1             | or 1                     | -  | + 1                      | + 1        |
| AF80  | 2 2        | 0 0(3)                      | 4 max.                    | -              | or 1       | or 1             | or 1                     | -  | + 1                      | + 1        |

(1) Including add-on contacts: 4 N.C. auxiliary contacts max. on positions 1, 2, 3, 4 and 3 N.C. auxiliary contacts max. on positions 1 ±30°, 5.  
 (2) Including add-on contacts: 3 N.C. auxiliary contacts max. on positions 1, 2, 3, 4 and 2 N.C. auxiliary contacts max. on positions 1 ±30°, 5.  
 (3) Including add-on contacts: 2 N.C. auxiliary contacts max. on positions 1, 1 ±30°, 2, 3, 4, 5.  
 (4) Use WA4 for AF09...AF52 and WA4-96 for AF80.  
 Accept 1-pole CA4 auxiliary contacts (1 block on each side of the mechanical latch) in respect to the total number of built-in or additional N.C. auxiliary contacts.  
 For WA4 accessory use with contactors coil 30, please consult your ABB local sales organization.  
 (5) VEM4 not suitable for AF..Z contactors with DC control voltages 12...20 V DC (coil 20) and 24 V DC (coil 30). Use VM4 side-mounted mechanical interlock unit.