

General information

AE9 - AE110, DC operated

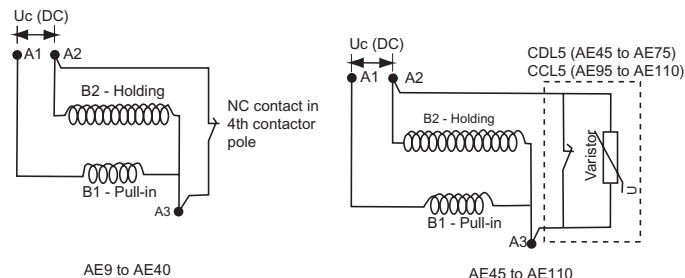
UL rated, 3 phase

Application

A-Line contactors are mainly used for controlling 3-phase motors and for controlling power circuits corresponding to their operating characteristics up to 690 and even 1000 VAC. and 440 VDC.

Control circuit types

AE types: with laminated magnetic circuit and double-winding coil fed from DC supply via a CDL5 insertion contact mounted on the device. The CDL5 has an NC lagging contact for insertion of the second winding. (See schematic.)



Quick mounting on DIN rail: EN 50022 and EN 50023 standards:

35 x 7.5mm for AE9 - AE40

35 x 15mm for AE9 - AE75

75mm for AE45 - AE110

Location of side mounted accessories: on right or left hand side. Factory mounted on left hand side for CAL5 on A50 - A300

- right hand side for CDL5/CCL5 on AE45 - AE110

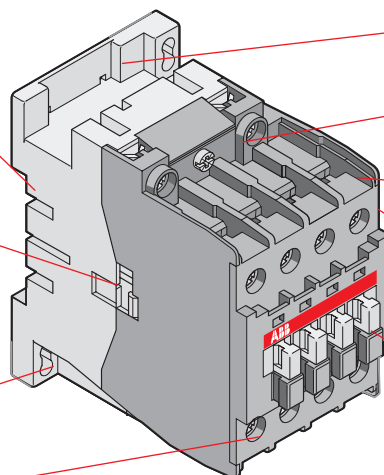
Holes for screw mounting (screws not supplied). Distance between holes according to EN 50003.

Terminals delivered in open position with captive screws (unused terminal screws must be tightened).

Screwdriver guidance for all terminals makes it possible to use motorized screwdrivers.

All terminals provide protection against accidental direct contact with live parts according to VDE0106 - Part. 100.

All AE9 - AE40 contactor terminals as well as AE45 - AE110 contactor auxiliary contact and coil terminals ensure IP20 degree of protection according to IEC 947-1.



AE9 - AE110

Location of surge suppressors.

Clear marking of coil voltages and frequencies.

Connecting point for control leads in top part of main terminals of AE50 - AE75 contactors. For AE95 & AE110 contactors these are additional power connections.

Terminal marking according to IEC 947-4-1, EN 50005, EN 50012 and NEMA standards.

Location of function marker.

Stops for attaching front mounted accessories.

Terminal screws:

- Posidrive (+, -) No° 2 for all AE9 - AE75
- M8 hex threaded socket screw for AE95 & AE110

Catalog number explanation

AE9-30-00-81

Frame size

Power pole

30 = 3 NO

40 = 4 NO

22 = 2 NO & 2 NC

Coil voltage

(see coil voltage selection chart)

Auxiliary contacts

00 = No auxiliary provided

11 = 1 NO & 1 NC

Coil voltage selection chart

| Hz | Contr. type | Volts | | | | | | |
|----|-------------|-------|----|----|-----|-----|-----|-----|
| | | 12 | 24 | 48 | 110 | 125 | 220 | 240 |
| DC | AE | 80 | 81 | 83 | 86 | 87 | 88 | 89 |

For other voltages, see page 1.26.

AE9 - AE110

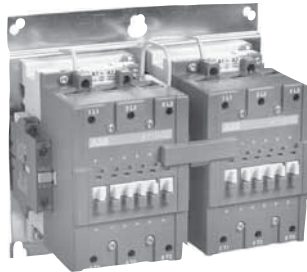
Non-reversing, mechanically interlocked, reversing
DC operated, UL rated, 3 phase

Across the line
contactors

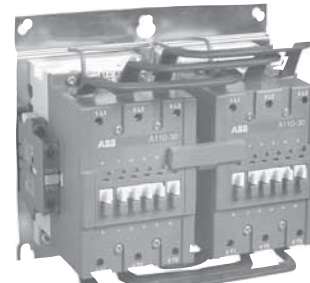
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AE26-30-11-81



AE110M-30-11-81



AE110R-30-11-81

| General purpose current | UL motor switching current | Maximum motor horsepower ratings | | | | Standard Aux. contacts | | Non-reversing | | Mechanically interlocked | | Reversing | |
|-------------------------|----------------------------|----------------------------------|------|------|----------|------------------------|----|----------------|--|--------------------------|--|-----------------|--|
| | | 208V | 240V | 480V | 575/600V | NO | NC | Catalog Number | | Catalog Number | | Catalog Number | |
| AC1 | | UL rated | | | | | | | | | | | |
| 21 | 9 | 2 | 2 | 5 | 7.5 | 1 | 1 | AE9-30-11-81 | | AE9M-30-11-81 | | AE9R-30-11-81 | |
| 25 | 11 | 3 | 3 | 7.5 | 10 | 1 | 1 | AE12-30-11-81 | | AE12M-30-11-81 | | AE12R-30-11-81 | |
| 30 | 17 | 5 | 5 | 10 | 15 | 1 | 1 | AE16-30-11-81 | | AE16M-30-11-81 | | AE16R-30-11-81 | |
| 40 | 28 | 7.5 | 10 | 20 | 25 | 1 | 1 | AE26-30-11-81 | | AE26M-30-11-81 | | AE26R-30-11-81 | |
| 50 | 34 | 10 | 10 | 25 | 30 | 1 | 1 | AE30-30-11-81 | | AE30M-30-11-81 | | AE30R-30-11-81 | |
| 60 | 42 | 10 | 15 | 30 | 40 | 1 | 1 | AE40-30-11-81 | | AE40M-30-11-81 | | AE40R-30-11-81 | |
| 80 | 54 | 15 | 20 | 40 | 50 | 1 | 1 | AE50-30-11-81 | | AE50M-30-11-81 | | AE50R-30-11-81 | |
| 90 | 65 | 20 | 25 | 50 | 60 | 1 | 1 | AE63-30-11-81 | | AE63M-30-11-81 | | AE63R-30-11-81 | |
| 105 | 80 | 25 | 30 | 60 | 75 | 1 | 1 | AE75-30-11-81 | | AE75M-30-11-81 | | AE75R-30-11-81 | |
| 125 | 95 | 30 | 30 | 60 | 75 | 1 | 1 | AE95-30-11-81 | | AE95M-30-11-81 | | AE95R-30-11-81 | |
| 140 | 110 | 30 | 40 | 75 | 100 | 1 | 1 | AE110-30-11-81 | | AE110M-30-11-81 | | AE110R-30-11-81 | |
| 230 | 130 | 40 | 50 | 100 | 125 | 1 | 1 | | | | | | |
| 250 | 156 | 50 | 60 | 125 | 150 | 1 | 1 | | | | | | |
| 300 | 192 | 60 | 75 | 150 | 200 | 1 | 1 | | | | | | |
| 350 | 248 | 75 | 100 | 200 | 250 | 1 | 1 | | | | | | |
| 400 | 302 | 100 | 100 | 250 | 300 | 1 | 1 | | | | | | |
| 550 | 414 | 125 | 150 | 350 | 400 | 1 | 1 | | | | | | |
| 650 | 480 | 150 | 200 | 400 | 500 | 1 | 1 | | | | | | |
| 750 | 602 | 200 | 250 | 500 | 600 | 1 | 1 | | | | | | |
| 900 | 810 | 250 | 300 | 600 | 700 | 1 | 1 | | | | | | |
| 1350 | 960 | — | 400 | 800 | 900 | 1 | 1 | | | | | | |
| 1650 | 1080 | — | 450 | 900 | 1000 | 1 | 1 | | | | | | |

See AF contactors, page 1.9

Coil voltage selection

All DC operated catalog numbers include a 24VDC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the two digits after the last dash in the catalog number.

Ex.: A 110V coil is required for an AE75 contactor: AE75-30-11-**86**

Auxiliary contact blocks

For additional auxiliary contact blocks, see catalog number explanation on page 1.4. Add \$ 20 to list price for each additional auxiliary, and see page 1.18 for available combinations.

Mechanical interlock

Mechanically interlocked contactors are designed for reversing, 2 speed, reduced voltage, etc. type starter applications. The complete assembly consists of two mechanically and electrically interlocked contactors mounted as follows with line and load terminals:

- AE9 - AE16 — mounted on 35mm DIN rail
- AE26 - AE110 — mounted on common baseplate

Power wiring is not included.

The NC electrical interlock is provided with the mechanical interlock.

Coil voltage selection chart

| Hz | Contr. type | Volts | | | | | | | |
|----|-------------|-------|----|----|-----|-----|-----|-----|--|
| | | 12 | 24 | 48 | 110 | 125 | 220 | 240 | |
| DC | AE | 80 | 81 | 83 | 86 | 87 | 88 | 89 | |

For other voltages, see page 1.26.

Reversing

Reversing contactors are designed for reversing type starter applications. The complete assembly consists of two mechanically and electrically interlocked contactors mounted as follows with line and load terminals:

- AE9 - AE16 — mounted on 35mm DIN rail
- AE26 - AE110 — mounted on common baseplate

The NC electrical interlock is provided with the mechanical interlock.