

AE9 - AE110 General information 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.)

Uc (DC) Uc (DC) CDL5 (AE45 to AE75) A1 A2 CCL5 (AE95 to AE110) Δ2 B2 - Holdina NC contact in 000000000 B2 - Holding 4th contactor pole 100000-B1 - Pull-in 00000R1 AE9 to AE40 AE45 to AE110 Location of surge suppressors.

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

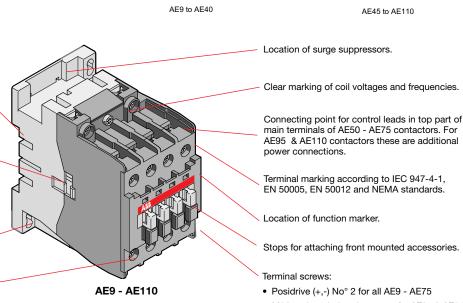
Holes for screw mounting (screws not supplied). Distance between holes according to EN 50003.

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.



• Posidrive (+,-) No° 2 for all AE9 - AE75

M8 hex threaded socket screw for AE95 & AE110

Catalog number explanation

AE9-30-00-81



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 1.24.

AE9 - AE110 Non-reversing, mechanically interlocked, reversing DC operated, UL rated, 3 phase









General UL motor		Maximum motor horsepower ratings				Standard Aux. contacts		Non-reversing		Mechanically interlocked		Reversing			
purpose current	switching current	208V	240V	480V	575/600V	NO	NC	Catalog number	List price	Catalog number	List price	Catalog number	List price		
AC1				•	•		•	UL rated	•	•	•		+		
21	9	2	2	5	7.5	1	1	AE9-30-11-81	\$ 118	AE9M-30-11-81	\$ 335	AE9R-30-11-81	\$ 395		
25	11	3	3	7.5	10	1	1	AE12-30-11-81	124	AE12M-30-11-81	395	AE12R-30-11-81	455		
30	17	5	5	10	15	1	1	AE16-30-11-81	142	AE16M-30-11-81	425	AE16R-30-11-81	493		
40	28	7.5	10	20	25	1	1	AE26-30-11-81	223	AE26M-30-11-81	485	AE26R-30-11-81	560		
50	34	10	10	25	30	1	1	AE30-30-11-81	292	AE30M-30-11-81	628	AE30R-30-11-81	703		
60	42	10	15	30	40	1	1	AE40-30-11-81	337	AE40M-30-11-81	720	AE40R-30-11-81	830		
80	54	15	20	40	50	1	1	AE50-30-11-81	375	AE50M-30-11-81	803	AE50R-30-11-81	930		
90	65	20	25	50	60	1	1	AE63-30-11-81	477	AE63M-30-11-81	1,080	AE63R-30-11-81	1,208		
105	80	25	30	60	75	1	1	AE75-30-11-81	518	AE75M-30-11-81	1,365	AE75R-30-11-81	1,493		
125	95	30	30	60	75	1	1	AE95-30-11-81	555	AE95M-30-11-81	1,440	AE95R-30-11-81	1,635		
140	110	30	40	75	100	1	1	AE110-30-11-81	690	AE110M-30-11-81	1,785	AE110R-30-11-81	2,048		
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	See AF contactors, page 1.9							
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								

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 1.32 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.	Volts							
	type	12	24	48	110				
DC	AE	80	81	83	86				

For other voltages, see page 1.24.

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:

Volts

125

87

220

88

240

89

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

The NC electrical interlock is provided with the mechanical interlock.