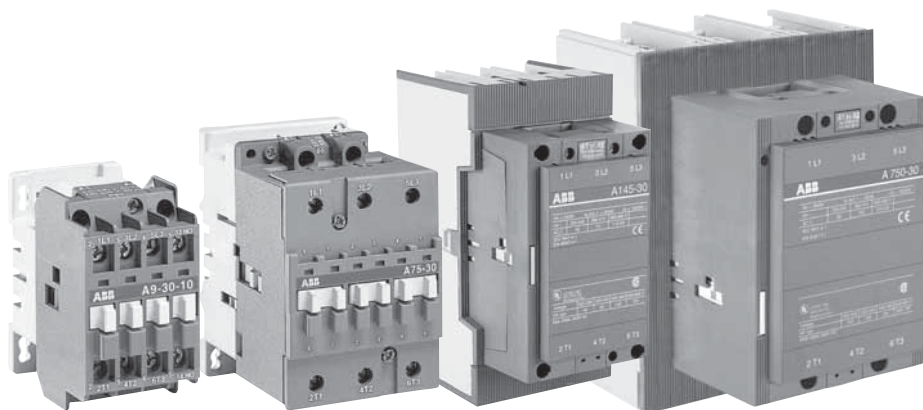


ABB Across the line contactors

A9 - AF1650

1



A9 - A110

- Maximum UL/CSA horsepower ratings according to UL508 and CSA22.2 No. 14
- Includes NEMA sizes 00 - 3
- CE mark
- Compact space saving design
- Standard auxiliary contact configurations:
 - A9 - A40 1 NO or 1 NC
 - A50 - A110 1 NO & 1 NC
- Contactor sizes A50 - A110 can be supplied without auxiliaries
- Additional auxiliary contact blocks are available
- D.C. ratings & D.C. control operation available
- Fast, snap-on DIN rail mounting
- Double break contact design
- Snap-on front mounted accessories include mechanical latch, pneumatic timer, and 1 & 4 pole auxiliary contact blocks
- Contactors ensure positive safety between their auxiliary contact blocks.
- Easy coil change
- Captive terminal screws
- NEMA, UL, IEC, CSA, VDE and most other international standards
- Touch safe design: All connection terminals are protected against accidental touch
- Terminals supplied open for ease of wiring
- Operates over an extended voltage range of 85% to 110% of rated control voltage
- Screwdriver guide holes
- UL File No: E39231 (A9 - A75); (AE9 - AE75); (AL9 - AL40); (AF50 - AF75)
- UL File No: E79416 (A95 - A110); (AE95 - AE110); (AF145 - AF750)
- CSA File No: LR56745 (A9 - A75); (AE9 - AE75); (AF50 - AF75)
- CSA File No: LR19700 (A95 - A110); (AE95 - AE110); (AF145 - AF750)
- CSA approved for elevator service

A145 - AF1650

- Maximum UL/CSA horsepower ratings according to UL508 and CSA22.2 No. 14
- Includes NEMA sizes 4 - 8
- CE mark
- 1 NO & 1 NC auxiliary contacts are standard and up to 6 additional auxiliary contacts may be added to provide a total of 8 (4 NO & 4 NC)
- Contactors ensure positive safety between their auxiliary contact blocks.
- D.C. ratings and D.C. control operation available
- Easy maintenance of main contacts and coil inspection
- Can be mounted in any position
- Operates over an extended voltage range of 85% to 110% of rated control voltage
- NEMA, UL, IEC, CSA, VDE and most other international standards
- UL File No: E79416 (A/AF145 - AF750)
- UL File No: E73397 (AF1350 - AF1650)
- CSA File No: LR19700

General information

A9 - A300, AC 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.

Description of 3 pole and 4 pole contactors A9 - A300

All A-Line contactors can be assembled side by side. The add-on or built-in auxiliary contacts are suitable for low level currents.

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

35 x 7.5mm for A9 - A40

35 x 15mm for A9 - A75

75mm for A45 - A110

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

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

Terminals delivered in open position with captive screws (screws of unused terminals 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.

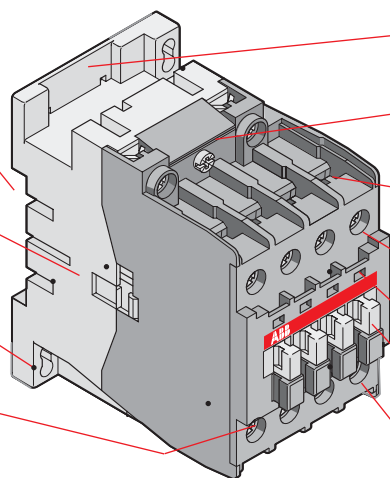
All A9 - A40 contactor terminals as well as A45 - A300 contactor auxiliary contact and coil terminals ensure IP20 degree of protection according to IEC 947-1.

Control circuit types

- A-Line types: AC operated with laminated magnetic circuit.

Contactors types

- 3 pole contactors with NO or NC built in auxiliary contact for A9 - A40 contactors; factory assembled auxiliary contacts for A50 - A300 contactors
- 4 pole contactors: 4 NO or 2 NO & 2 NC without any auxiliary contacts. (A9 - A75)



A9 - A300

Location of surge suppressors.

Clear marking of coil voltages and frequencies.

Connecting point for control leads in top part of main terminals of A50 - A75 contactors. For A95 & A110 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 A9 - A75
- M8 hex threaded socket screw for A95 - A300 main terminals.

Catalog number explanation

A9-30-10-84

Frame size

Power pole

30 = 3 NO
40 = 4 NO
22 = 2 NO & 2 NC

Coil voltage

(see coil voltage selection chart)

Auxiliary contacts

10 = 1 NO & 0 NC
01 = 0 NO & 1 NC
11 = 1 NO & 1 NC
00 = No auxiliary provided
22 = 2 NO & 2 NC

Coil voltage selection chart

Hz	Cntr type	12	24	48	110	120	125	208	220	240	277	380	415	440	480	500	600
60	A		81	83	84	84		34	36	80	42		86	86	51	53	55
50	A		81	83	84				80				85	86			55

For other voltages, see page 1.26.

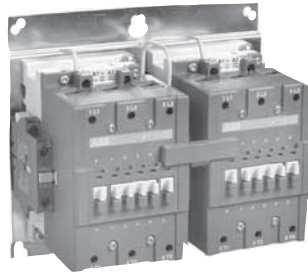
A9 - A300, AC operated

Non-reversing, mechanically interlocked, reversing

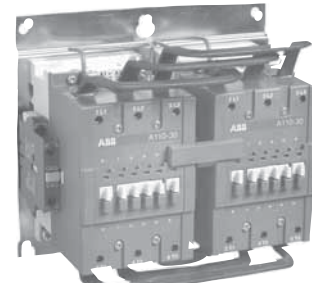
UL rated, 3 phase



A26-30-10-84



A110M-30-11-84



A110R-30-11-84

UL 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	List price	Catalog number	List price	Catalog number	List price
UL rated													
AC1													
21	9	2	2	5	7.5	1 0	0 1	A9-30-10-84 A9-30-01-84	\$ 78	A9M-30-10-84 A9M-30-01-84	\$ 255	A9R-30-10-84 A9R-30-01-84	\$ 315
25	11	3	3	7.5	10	1 0	0 1	A12-30-10-84 A12-30-01-84	84	A12M-30-10-84 A12M-30-01-84	315	A12R-30-10-84 A12R-30-01-84	375
30	17	5	5	10	15	1 0	0 1	A16-30-10-84 A16-30-01-84	102	A16M-30-10-84 A16M-30-01-84	345	A16R-30-10-84 A16R-30-01-84	413
40	28	7.5	10	20	25	1 0	0 1	A26-30-10-84 A26-30-01-84	183	A26M-30-10-84 A26M-30-01-84	405	A26R-30-10-84 A26R-30-01-84	480
50	34	10	10	25	30	1 0	0 1	A30-30-10-84 A30-30-01-84	252	A30M-30-10-84 A30M-30-01-84	548	A30R-30-10-84 A30R-30-01-84	623
60	42	10	15	30	40	1 0	0 1	A40-30-10-84 A40-30-01-84	297	A40M-30-10-84 A40M-30-01-84	639	A40R-30-10-84 A40R-30-01-84	750
80	54	15	20	40	50	1	1	A50-30-11-84	330	A50M-30-11-84	713	A50R-30-11-84	810
90	65	20	25	50	60	1	1	A63-30-11-84	372	A63M-30-11-84	870	A63R-30-11-84	1013
105	80	25	30	60	75	1	1	A75-30-11-84	413	A75M-30-11-84	1155	A75R-30-11-84	1298
125	95	30	30	60	75	1	1	A95-30-11-84	450	A95M-30-11-84	1230	A95R-30-11-84	1425
140	110	30	40	75	100	1	1	A110-30-11-84	480	A110M-30-11-84	1365	A110R-30-11-84	1628
230	130	40	50	100	125	1	1	A145-30-11-84	825	A145M-30-11-84	2235	A145R-30-11-84	2250
250	156	50	60	125	150	1	1	A185-30-11-84	1290	A185M-30-11-84	3360	A185R-30-11-84	3375
300	192	60	75	150	200	1	1	A210-30-11-84	1635	A210M-30-11-84	4035	A210R-30-11-84	4050
350	248	75	100	200	250	1	1	A260-30-11-84	1815	A260M-30-11-84	4485	A260R-30-11-84	4500
400	302	100	100	250	300	1	1	A300-30-11-84	1875	A300M-30-11-84	5460	A300R-30-11-84	5475
550	414	125	150	350	400	1	1	See Type AF contactors, page 1.9					
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 AC operated catalog numbers include a 120VAC 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 240V coil is required for an A75 contactor: A75-30-11-**80**

Auxiliary contact blocks

For additional auxiliary contact blocks, see catalog number explanation on page 1.2. Add \$ 20 to list price for each additional auxiliary, and see page 1.18 for available combinations. Only side-mounted blocks are allowed to be factory installed. If auxiliary contacts are not required for A50 - A300, subtract \$ 40 from list price and change catalog number to "00" instead of "11."

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:

- A9 - A16 — mounted on 35mm DIN rail
- A26 - A300 — mounted on common baseplate

Power wiring is not included. The NC electrical interlock is provided with the mechanical interlock for A9 - A110 contactors.

Coil voltage selection chart

Hz	Cntr type	Volts											
		12	24	48	110	120	125	208	220	240	277	380	415
60	A		81	83	84	84		34	36	80	42		86
50	A		81	83	84			80				85	86

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:

- A9 - A16 — mounted on 35mm DIN rail
- A26 - A300 — mounted on common baseplate

The NC electrical interlock is provided with the mechanical interlock for A9 - A110 contactors.