

Product No: AF30301114

ABB CONTACTOR 50A AC1 32A AC3 3P 3NO 250-500VACDC COIL AF30301114

FEATURES

- Add-on auxiliary contact.
- Built-in surge suppression.
- Reduced panel energy consumption.
- Very distinct closing and opening.
- DIN Rail or panel mounting.



General Information

Brand	ABB
Product Type	AF Contactors

Technical Attributes

Cable Sections - Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Cable Sections - Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Cable Sections - Main Circuit	Flexible with Ferrule 1/2x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm ² Flexible with Insulated Ferrule 2x 1.5 ... 4 mm ² Rigid Solid 1/2x 2.5 ... 4 mm ² Rigid Stranded 1/2x 2.5 ... 10 mm ²
Clamp Type	Screw Terminals
Conventional Free-Air Thermal Current - I _{th} (A)	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ }^{\circ}\text{C}$ 50 A acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A
DIN Rail Mounting	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V

500 A
 cos phi=0.45 (cos phi=0.35 for I_e > 100 A) at 690 V
 200 A

Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 1200 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour
Maximum Mechanical Switching Frequency	3600 cycles per hour
No. of Auxiliary Contacts	1 NO + 1 NC
No. of Main Contacts	3 NO
No. of Poles	3
Operate Time	Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 ms
Rated Control Voltage	50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V
Rated Frequency (Hz)	50 / 60
Rated Impulse Withstand Voltage (kV)	6
Rated Insulation Voltage	acc. to IEC 60947-4-1 690 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Operational Current AC-1 (A)	(690 V) 40 °C 50 A (690 V) 60 °C 42 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (A)	(415 V) 60 °C 32 A (440 V) 60 °C 32 A (500 V) 60 °C 28 A (690 V) 60 °C 21 A (380 / 400 V) 60 °C 32 A (220 / 230 / 240 V) 60 °C 33 A
Rated Operational Power AC-3 (kW)	(400 V) 15 kW (415 V) 15 kW (440 V) 18.5 kW (500 V) 18.5 kW (690 V) 18.5 kW (380 / 400 V) 15 kW (220 / 230 / 240 V) 9 kW
Rated Operational Voltage AC (V)	Auxiliary Circuit 690 V Main Circuit 690 V

Rated Short-time Withstand Current Low Voltage - I _{cw} (A)	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 350 A
	at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 50 A
	at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A
	at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 700 A
	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A, for 0.1 s 140 A, for 1 s 100 A

Wire Stripping Length (mm)	10 [Auxiliary Circuit]
	10 [Control Circuit]
	14 [Main Circuit]

Dimensions

Dimensions (mm)	86 * 45 * 111.5 [H*W*D]
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Protection & Standards

Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20
	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20

Standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1
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