

Product No: AF52300014

ABB CONTACTOR 100A AC1 53A AC3 3P 3NO 250-500VACDC COIL AF52300014

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 - 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 4 ... 35 mm ² Flexible with Insulated Ferrule 1/2x 4 ... 35 mm ² Rigid Stranded 1/2x 6 ... 35 mm ²
Clamp Type	Screw Terminals
Coil Consumption	Average Holding Value 50 / 60 Hz 4 V·A Average Holding Value 50 Hz 4 V·A Average Holding Value 60 Hz 4 V·A Average Holding Value DC 2 W Average Holding Value, from Warm State 2 W
Conventional Free-Air Thermal Current - I _{th} (A)	acc. to IEC 60947-4-1, Open Contactors $\theta = 40\text{ }^{\circ}\text{C}$ 105 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 950 A cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 690 V 600 A

Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 1200 cycles per hour
Maximum Mechanical Switching Frequency	3600 cycles per hour
No. of Main Contacts	3 NO
No. of Poles	3
Operate Time	Between Coil De-energization and NC Contact Closing 19 ... 105 ms Between Coil De-energization and NO Contact Opening 17 ... 100 ms Between Coil Energization and NC Contact Opening 38 ... 95 ms Between Coil Energization and NO Contact Closing 42 ... 100 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 UL/CSA 600 V
Rated Operational Current AC-1 (A)	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (A)	(415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 A (380 / 400 V) 60 °C 53 A (220 / 230 / 240 V) 60 °C 53 A
Rated Operational Power AC-3 (kW)	(400 V) 22 kW (415 V) 30 kW (440 V) 30 kW (500 V) 30 kW (690 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW
Rated Operational Voltage AC (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 600 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A

at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 350 A

Wire Stripping Length (mm)	10 [Control Circuit] 16 [Main Circuit]
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Dimensions

Dimensions (mm)	125.5 * 55 * 111 [H*W*D]
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Protection & Standards

Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
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Standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-1, UL 60947-4-1, CSA C22.2 No. 60947-1:22, CSA C22.2 No. 60947-4-1:22
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