Product No: AF38300014

ABB CONTACTOR 50A AC1 38A/18.5KW AC3 3P 3NO 250-500VACDC COIL AF38300014

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 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid Solid 1/2x 1 ... 2.5 mm² Rigid Stranded 1/2x 1 ... 2.5 mm²
Cable Sections - Main Circuit	Flexible with Ferrule 1/2x 1.5 ... 10 mm² Flexible with Insulated Ferrule 1x 1.5 ... 10 mm² Flexible with Insulated Ferrule 2x 1.5 ... 4 mm² Rigid Solid 1/2x 2.5 ... 4 mm² Rigid Stranded 1/2x 2.5 ... 10 mm²
Clamp Type	Screw Terminals
Conventional Free-Air Thermal Current - Ith (A)	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 50 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 Ie > 100 A) at 440 V 500 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 200 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 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 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 38 A (440 V) 60 °C 38 A (500 V) 60 °C 33 A (690 V) 60 °C 24 A (380 / 400 V) 60 °C 38 A (220 / 230 / 240 V) 60 °C 40 A
Rated Operational Power AC-3 (kW)	(400 V) 18.5 kW (415 V) 18.5 kW (440 V) 22 kW (500 V) 22 kW (690 V) 22 kW (380 / 400 V) 18.5 kW (220 / 230 / 240 V) 11 kW
Rated Operational Voltage AC (V)	Main Circuit 690 V
Rated Short-time Withstand Current Low Voltage - Icw (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

Dimensions	
Dimensions (mm)	86 * 45 * 86 [H*W*D]

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 IP20
Standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1