PRODUCT-DETAILS

AF50-30-00RT 100-250V 50Hz / 100-250V 60Hz / 100-250V DC

AF50-30-00RT 100-250V 50Hz / 100-250V 60Hz / 100-250V DC Contactor



360°

General Information

Extended Product Type	AF50-30-00RT 100-250V 50Hz / 100-250V 60Hz / 100-250V DC
Product ID	1SBL357010R7000
EAN	3471522245106
Catalog Description	AF50-30-00RT 100-250V 50Hz / 100-250V 60Hz / 100-250V DC Contactor
Long Description	AF50 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC and 220 V DC. The contactors can also be used for many other applications such as bypass, capacitor switching, lighting, DC power circuits... The AF... contactors are fitted with an electronic coil interface which accepts a wide control voltage range, on AC 50/60 Hz or DC supplies. The same contactor can accept various supply voltages according to the different countries where the electrical equipment will be installed, or some fluctuation in the control voltage due to the local supply or network. The AF... contactors are also fully suitable for operation in AC or DC control circuit liable to voltage interruptions or voltage dip risks. Advantages: - Wide voltage range, e.g. 100 ... 250 V AC and DC - Can manage large voltage variations - Reduced power consumption - Very distinct closing and opening - Noise free - Can withstand voltage interruptions or voltage dips in the control supply (≤ 20 ms). The AF... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, front and side-mounted add-on auxiliary contact blocks - Control circuit: AC or DC operated - Accessories: a wide range of accessories is available.

© 2024 ABB. All rights reserved.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SNC001003C0202
Instructions and Manuals	FPTC407767P0002
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	70 mm
Product Net Depth / Length	108 mm
Product Net Height	110 mm
Product Net Weight	1.18 kg

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	0
Standards	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1, IEC 60077-1 (applicable parts), IEC 60077-2 (applicable parts), EN 50155 (applicable parts), TR CU 001/2011 (on request), IEC 61373, For compliance confirmation on applicable parts based on your application and combination, please consult your ABB sales representatives.
Rated Operational Voltage	Main Circuit 690 V
Rated Frequency (f)	Control Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 100 A (690 V) 55 °C 85 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 50 A (440 V) 55 °C 45 A (500 V) 55 °C 45 A (690 V) 55 °C 35 A (380 / 400 V) 55 °C 50 A (220 / 230 / 240 V) 55 °C 53
Rated Operational Power AC-3 (P_e)	(415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW
Rated Short-time Withstand Current Low Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 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

© 2024 ABB. All rights reserved.

	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 370 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 440 V 1300 A cos phi=0.45 (cos phi=0.35 for Ie > 100 A) at 690 V 630 A
Rated Operational Current DC-1 (I_e)	(110 V) 2 Poles in Series, 40 °C 100 A (110 V) 2 Poles in Series, 55 °C 85 A (110 V) 2 Poles in Series, 70 °C 70 A (110 V) 3 Poles in Series, 40 °C 100 A (110 V) 3 Poles in Series, 55 °C 85 A (110 V) 3 Poles in Series, 70 °C 70 A (220 V) 3 Poles in Series, 40 °C 100 A (220 V) 3 Poles in Series, 55 °C 85 A (220 V) 3 Poles in Series, 70 °C 70 A (72 V) 1-Pole, 40 °C 100 A (72 V) 1-Pole, 55 °C 85 A (72 V) 1-Pole, 70 °C 70 A (72 V) 2 Poles in Series, 40 °C 100 A (72 V) 2 Poles in Series, 55 °C 85 A (72 V) 2 Poles in Series, 70 °C 70 A (72 V) 3 Poles in Series, 40 °C 100 A (72 V) 3 Poles in Series, 55 °C 85 A (72 V) 3 Poles in Series, 70 °C 70 A
Rated Operational Current DC-3 (I_e)	(110 V) 2 Poles in Series, 40 °C 100 A (110 V) 2 Poles in Series, 55 °C 85 A (110 V) 2 Poles in Series, 70 °C 70 A (110 V) 3 Poles in Series, 40 °C 100 A (110 V) 3 Poles in Series, 55 °C 85 A (110 V) 3 Poles in Series, 70 °C 70 A (220 V) 3 Poles in Series, 40 °C 100 A (220 V) 3 Poles in Series, 55 °C 85 A (220 V) 3 Poles in Series, 70 °C 70 A (72 V) 1-Pole, 40 °C 100 A (72 V) 1-Pole, 55 °C 85 A (72 V) 1-Pole, 70 °C 70 A (72 V) 2 Poles in Series, 40 °C 100 A (72 V) 2 Poles in Series, 55 °C 85 A (72 V) 2 Poles in Series, 70 °C 70 A (72 V) 3 Poles in Series, 40 °C 100 A (72 V) 3 Poles in Series, 55 °C 85 A (72 V) 3 Poles in Series, 70 °C 70 A
Rated Operational Current DC-5 (I_e)	(110 V) 2 Poles in Series, 40 °C 80 A (110 V) 2 Poles in Series, 55 °C 80 A (110 V) 2 Poles in Series, 70 °C 70 A (110 V) 3 Poles in Series, 40 °C 100 A (110 V) 3 Poles in Series, 55 °C 85 A (110 V) 3 Poles in Series, 70 °C 70 A (220 V) 3 Poles in Series, 40 °C 50 A (220 V) 3 Poles in Series, 55 °C 50 A (220 V) 3 Poles in Series, 70 °C 50 A (72 V) 1-Pole, 40 °C 50 A (72 V) 1-Pole, 55 °C 50 A (72 V) 1-Pole, 70 °C 50 A (72 V) 2 Poles in Series, 40 °C 100 A (72 V) 2 Poles in Series, 55 °C 85 A (72 V) 2 Poles in Series, 70 °C 70 A (72 V) 3 Poles in Series, 40 °C 100 A (72 V) 3 Poles in Series, 55 °C 85 A (72 V) 3 Poles in Series, 70 °C 70 A
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	8 kV
Rated Control Circuit Voltage (U_c)	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH75-25 (75 x 25 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M6 screws placed diagonally

© 2024 ABB. All rights reserved.

Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP10 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10
Terminal Type	Ring-Tongue Terminals

Technical UL/CSA

NEMA Size	2
Continuous Current Rating NEMA	45 A
Horsepower Rating NEMA	(115 V AC) Single Phase 3 Hp (200 V AC) Three Phase 10 Hp (230 V AC) Single Phase 7-1/2 Hp (230 V AC) Three Phase 15 Hp (460 V AC) Three Phase 25 Hp (575 V AC) Three Phase 25 Hp
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 80 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 3 hp (200 ... 208 V AC) Three Phase 15 Hp (220 ... 240 V AC) Three Phase 20 Hp (240 V AC) Single Phase 7-1/2 hp (440 ... 480 V AC) Three Phase 40 Hp (550 ... 600 V AC) Three Phase 50 Hp

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 55 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
Shock and Vibration Withstand acc. to IEC 61373	Category 1, Class B

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

CCC Certificate	CCC_2018010304134049
CQC Certificate	CQC2018010304134049 CQC2010010304402983
Declaration of Conformity - CCC	2020980304001624 2020980304001225
Declaration of Conformity - CE	1SBD250803U1000
Declaration of	1SBD250820U1000

© 2024 ABB. All rights reserved.

Conformity - UKCA	
EAC Certificate	EAC_RU C-FR ME77 B01010
GOST Certificate	GOST_POCCFRME77B07175
KC Certificate	KC_HW02032-21001B
UL Certificate	UL-US-L312527-291-50119991-3 UL-CA-2305459-0

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	140 mm
Package Level 1 Depth / Length	146 mm
Package Level 1 Height	96 mm
Package Level 1 Gross Weight	1.18 kg
Package Level 1 EAN	3471522245106
Package Level 2 Units	box 20 piece
Package Level 2 Gross Weight	23.6 kg

Classifications

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4756 >> Capacitor magnet contactor

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF50

© 2024 ABB. All rights reserved.



© 2024 ABB. All rights reserved.