



 PRODUCT-DETAILS

AF110B-30-00RT-68

AF110B-30-00RT 20-60V DC Contactor

"No longer for sale" replaced by



General Information

Extended Product Type	AF110B-30-00RT-68
Product ID	1SFL457010R9102
EAN	7320500258408
Catalog Description	AF110B-30-00RT 20-60V DC Contactor
Long Description	A 3-phase Contactor suitable for Rail way applications application. Operated with a wide voltage control voltage range 20-60V, DC

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Replacement Product ID (NEW)	1SFL427002R1111

Popular Downloads

Data Sheet, Technical Information	1SBC100192C0206
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Dimensions

Product Net Width	102 mm
Product Net Depth / Length	123.5 mm
Product Net Height	148 mm
Product Net Weight	1.9 kg
Dimension Diagram	1SFB535001G1005

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
Number of Poles	3P
Rated Operational Voltage	Main Circuit 1000 V
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 160 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 160 A (690 V) 55 °C 145 A (690 V) 70 °C 130 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 110 A (440 V) 55 °C 100 A (500 V) 55 °C 100 A (690 V) 55 °C 82 A (1000 V) 55 °C 30 A (380 / 400 V) 55 °C 110 A (220 / 230 / 240 V) 55 °C 110
Rated Operational Current DC-1 (I_e)	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
Rated Operational Current DC-3 (I_e)	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
Rated Operational Current DC-5 (I_e)	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
Rated Operational Power AC-3 (P_e)	(415 V) 59 kW (440 V) 59 kW (500 V) 59 kW (690 V) 75 kW (1000 V) 40 kW (380 / 400 V) 55 kW (220 / 230 / 240 V) 30 kW
Rated Making Capacity AC-3	10 x I_e AC-3
Short-Circuit Protective Devices	gG Type Fuses 160 A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100\text{ A}$) at 440 V 1160 A $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100\text{ A}$) at 690 V 800 A
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	Main Circuit 8 kV

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Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Mechanical Durability	10 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at $\theta \leq 70^\circ\text{C}$)
Rated Control Circuit Voltage (U _c)	DC Operation 20 ... 60 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 7 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 7 V-A Holding at Max. Rated Control Circuit Voltage DC 2 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 350 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 350 V-A Pull-in at Max. Rated Control Circuit Voltage DC 400 W
Power Loss	at Rated Operating Conditions per Pole 3.5 W
Operate Time	Between Coil De-energization and NC Contact Closing 60 ... 130 ms Between Coil De-energization and NO Contact Opening 55 ... 125 ms Between Coil Energization and NC Contact Opening 27 ... 77 ms Between Coil Energization and NO Contact Closing 30 ... 80 ms
Connecting Capacity Main Circuit	Bar 30 mm ² Flexible with Cable End 1 x 10 ... 70 mm ² Rigid 2 x 6 ... 65 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 2x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 ... 4 mm ²
Connecting Capacity	Bar 30 mm ² Flexible with Cable End 2 x 6 ... 35 mm ² Rigid 1 x 10 ... 95 mm ²
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
Tightening Torque	Main Circuit 8 N·m
Terminal Type	Ring-Tongue Terminals
Product Name	Block Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 140 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 30 hp (208 V AC) Three Phase 30 hp (220 ... 240 V AC) Three Phase 40 hp (440 ... 480 V AC) Three Phase 75 hp (550 ... 600 V AC) Three Phase 100 hp
Full Load Amps Motor Use	(440 ... 480 V AC) Three Phase 96 A (550 ... 600 V AC) Three Phase 99 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc.	Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock

to IEC 60068-2-27

Direction: A 20 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock
 Direction: A 20 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock
 Direction: B1 15 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock
 Direction: C1 20 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock
 Direction: C2 20 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock
 Direction: B1 5 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock
 Direction: B2 15 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock
 Direction: C1 20 g
 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock
 Direction: C2 20 g

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
RoHS Declaration	2CMT2015-005436
RoHS Information	Following EU Directive 2011/65/EU
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

BV Certificate	13409/C0 BV
CB Certificate	SE-73663
CQC Certificate	CQC2002010304007860
Declaration of Conformity - CCC	2020980304001857
Declaration of Conformity - CE	2CMT2015-005436
GL Certificate	GL_20260-04HH
LOVAG Certificate	SE9831016
LR Certificate	LR_04-00015-E1
RINA Certificate	ELE060313XG/002
RMRS Certificate	RMRS_12-03683-315

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	130 mm
Package Level 1 Depth / Length	265 mm
Package Level 1 Height	162 mm
Package Level 1 Gross Weight	2.1 kg
Package Level 1 EAN	7320500258408

External Classifications and Standards

Object Classification Code	Q
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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)	4755 >> Contactors

Categories

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

