



PRODUCT-DETAILS

AF145B-30-11RT-72

AF145B-30-11RT 20-60V DC Contactor

"No longer for sale" replaced by



General Information

Extended Product Type	AF145B-30-11RT-72
Product ID	1SFL477062R7211
EAN	7320500260265
Catalog Description	AF145B-30-11RT 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)	1SFL467062R1122

Popular Downloads

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	1SFC380003-89

Dimension Diagram

53540923-7

Dimensions

Product Net Width	111.5 mm
Product Net Depth / Length	160 mm
Product Net Height	196 mm
Product Net Weight	3.3 kg

Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	1
Number of Auxiliary Contacts NC	1
Number of Poles	3P
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, 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
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40^\circ\text{C}$ 250 A
Rated Operational Current AC-1 (I_e)	(1000 V) 40 °C 180 A (1000 V) 55 °C 180 A (1000 V) 70 °C 180 A (690 V) 40 °C 250 A (690 V) 55 °C 230 A (690 V) 70 °C 180 A
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 145 A (440 V) 55 °C 145 A (500 V) 55 °C 145 A (690 V) 55 °C 120 A (1000 V) 55 °C 80 A (380 / 400 V) 55 °C 145 A (220 / 230 / 240 V) 55 °C 145 A
Rated Operational Current DC-1 (I_e)	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Rated Operational Current DC-3 (I_e)	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Rated Operational Current DC-5 (I_e)	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Rated Operational Power AC-3 (P_e)	(415 V) 75 kW (440 V) 75 kW (500 V) 90 kW (690 V) 110 kW (1000 V) 110 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 45 kW
Rated Breaking Capacity AC-3	8 x I_e AC-3
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 $I_e > 100$ A) at 440 V 1500 A $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 1200 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	Main Circuit 8 kV

Voltage (U _{imp})	
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	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) 0.85 x U _c Min. ... 1.1 x U _c Max. (at θ ≤ 70 °C)
Rated Control Circuit Voltage (U _c)	DC Operation 20 ... 60 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A Holding at Max. Rated Control Circuit Voltage DC 2 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 430 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 430 V·A Pull-in at Max. Rated Control Circuit Voltage DC 500 W
Power Loss	at Rated Operating Conditions per Pole 5 W
Operate Time	Between Coil De-energization and NC Contact Closing 40 ... 50 ms Between Coil De-energization and NO Contact Opening 43 ... 53 ms Between Coil Energization and NC Contact Opening 45 ... 85 ms Between Coil Energization and NO Contact Closing 50 ... 90 ms
Connecting Capacity Main Circuit	Bar 24 mm² Rigid Al-Cable 1 x 25 ... 150 mm² Rigid Cu-Cable 1 x 6 ... 185 mm²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm² Flexible 2x0.75 ... 2.5 mm² Solid 2 x 1 ... 4 mm² Stranded 2 x 1 ... 4 mm²
Connecting Capacity	Bar 24 mm² Rigid Al-Cable 1 x 25 ... 150 mm² Rigid Cu-Cable 1 x 6 ... 185 mm²
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 IP00
Connecting Terminals (delivered in open position) Main Poles	Flat type c/w screws and bolts
Tightening Torque	Main Circuit 18 N·m
Terminal Type	Ring-Tongue Terminals
Product Name	Block Contactor

Technical UL/CSA

NEMA Size	4
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 230 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 40 hp (208 V AC) Three Phase 40 hp (220 ... 240 V AC) Three Phase 50 hp (440 ... 480 V AC) Three Phase 100 hp (550 ... 600 V AC) Three Phase 125 hp
Full Load Amps Motor Use	(440 ... 480 V AC) Three Phase 124 A (550 ... 600 V AC) Three Phase 125 A

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U _c) -25 ... 50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U _c) -40 ... 70 °C Close to Contactor for Storage -40 ... 70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Shock Direction: A 5 g Shock Direction: B1 5 g Shock Direction: B2 5 g Shock Direction: C1 5 g

Shock Direction: C2 5 a

Material Compliance

RoHS Information	2CMT2015-005436
RoHS Status	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

ABS Certificate	15-LD1408622-PDA
BV Certificate	13409/C0 BV
CB Certificate	SE-69478
CQC Certificate	CQC2007010304256685
Declaration of Conformity - CCC	2020980304001634
Declaration of Conformity - CE	2CMT2015-005436
EAC Certificate	9AKK107046A8618
GL Certificate	GL_20261-04HH
LOVAG Certificate	SE-0105160
LR Certificate	LR_04-00015-E1
RINA Certificate	ELE060313XG/002
RMRS Certificate	RMRS_12-03683-315
TÜV Certificate	MHM-EST-7.70017788e

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	178 mm
Package Level 1 Depth / Length	232 mm
Package Level 1 Height	167 mm
Package Level 1 Gross Weight	3.5 kg
Package Level 1 EAN	7320500260265

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)	4755 >> Contactors

Categories

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

