

# AF145-30-11 100-250V 50/60Hz / 100-250V DC



Products Low Voltage Products and Systems Control Products Contactors Block Contactors

## General Information

<b>Extended Product Type:</b>	AF145-30-11 100-250V 50/60Hz / 100-250V DC
<b>Product ID:</b>	1SFL477001R7011
<b>EAN:</b>	7320500220191
<b>Catalog Description:</b>	AF145-30-11 100-250V 50/60Hz / 100-250V DC Contactor
<b>Long Description:</b>	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, Bypass and Distribution application up to max 1000 V. Operated with wide control voltage range 100-250 V, AC/DC

## Additional Information

<b>ABB Industrial IT Suite:</b>	Control IT
<b>Ambient Air Temperature:</b>	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 -40...+70 °C
<b>BV Certificate:</b>	13409/C0 BV
<b>Battery Information:</b>	Type NONE
<b>Block Contactor Type:</b>	3-Pole Contactor
<b>CB Certificate:</b>	SE-69478
<b>CCC Certificate:</b>	CQC_2007010304256685
<b>Coil Consumption:</b>	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 430 V·A Holding at Max. Rated Control Circuit Voltage DC 2 W Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V·A Pull-in at Max. Rated Control Circuit Voltage DC 500 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 430 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V·A
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) 0.85 x Uc Min. ... 1.1 x Uc Max. (at $\theta \leq 70$ °C) °C
<b>Coil Voltage Code:</b>	70
<b>Connecting Capacity:</b>	Rigid Al-Cable 1x25...150 mm <sup>2</sup> Bar 24 mm Rigid Cu-Cable 1x6...185 mm <sup>2</sup>
<b>Connecting Capacity Auxiliary Circuit:</b>	Solid 2x1...4 mm <sup>2</sup> Flexible with Insulated Ferrule 1x0.75...2.5 mm <sup>2</sup> Stranded 2x1...4 mm <sup>2</sup> Flexible 2x0.75...2.5 mm <sup>2</sup> Flexible with Ferrule 2x0.75...2.5 mm <sup>2</sup>
<b>Connecting Capacity Main Circuit:</b>	Rigid Al-Cable 1x25...150 mm <sup>2</sup> Bar 24 mm Rigid Cu-Cable 1x6...185 mm <sup>2</sup>
<b>Connecting terminals (delivered in open position):</b>	YES
<b>Connecting terminals (delivered in open position) Coils terminals:</b>	YES
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 250 A
<b>Country of Origin:</b>	Sweden (SE)
<b>Customs Tariff Number:</b>	85364900
<b>Data Sheet, Technical Information:</b>	1SBC100122C0202
<b>Declaration of Conformity - CE:</b>	1SFA1-61
<b>Degree of Protection:</b>	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00

<b>Dimension Diagram:</b>	53540923-7
<b>Drop-out Voltage in % of Uc:</b>	55 %
<b>E-nummer:</b>	3228286
<b>EAN:</b>	7320500220191
<b>ETIM 4:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 5:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 6:</b>	EC000066 - Power contactor, AC switching
<b>Environmental Information:</b>	1SFC101007D0201
<b>Full Load Amps Motor Use:</b>	(440 ... 480 V AC) Three Phase 124 A (550 ... 600 V AC) Three Phase 125 A
<b>GL Certificate:</b>	GL_20261-04HH
<b>General Use Rating UL/CSA:</b>	(600 V AC) 230 A
<b>Horsepower Rating UL/CSA:</b>	(208 V AC) Three Phase 40 Hp (440 ... 480 V AC) Three Phase 100 Hp (550 ... 600 V AC) Three Phase 125 Hp (220 ... 240 V AC) Three Phase 50 Hp (200 V AC) Three Phase 40 Hp
<b>IIT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	1SFC380003-89
<b>Invoice Description:</b>	AF145-30-11 100-250V 50/60Hz / 100-250V DC Contactor
<b>LOVAG Certificate:</b>	SE-0105160
<b>LR Certificate:</b>	LR_04-00015-E1
<b>Made To Order:</b>	No
<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 1500 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 1200 A
<b>Maximum Electrical Switching Frequency:</b>	AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour
<b>Maximum Mechanical Switching Frequency:</b>	300 cycles per hour
<b>Maximum Operating Altitude Permissible:</b>	3000 m
<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V
<b>Maximum Peak Current:</b>	For Capacitor Switching Î 4 kA
<b>Maximum Î<sub>peak</sub> Permissible:</b>	30
<b>Mechanical Durability:</b>	5 million
<b>Minimum Order Quantity:</b>	1 piece
<b>Mounted Auxiliary Contacts:</b>	1 NO, 1 NC
<b>NEMA Size:</b>	4
<b>Number of Auxiliary Contacts NC:</b>	1
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Main Contacts NC:</b>	0
<b>Number of Main Contacts NO:</b>	3
<b>Number of Poles:</b>	3
<b>Object Classification Code:</b>	Q
<b>Operate Time:</b>	Between Coil Energization and NO Contact Closing 50 ... 90 ms Between Coil De-energization and NO Contact Opening 43 ... 53 ms Between Coil De-energization and NC Contact Closing 40 ... 50 ms Between Coil Energization and NC Contact Opening 45 ... 85 ms
<b>Order Multiple:</b>	1 piece
<b>Package Level 1 EAN:</b>	7320500220191
<b>Package Level 1 Gross Weight:</b>	3.6 kg

Package Level 1 Height:	245 mm
Package Level 1 Length:	180 mm
Package Level 1 Units:	1 piece
Package Level 1 Width:	170 mm
Part Type:	New
Power Loss:	at Rated Operating Conditions per Pole 5 W
Product Main Type:	AF145
Product Name:	Contactora
Product Net Depth:	160.0 mm
Product Net Height:	196.0 mm
Product Net Weight:	3.600 kg
Product Net Width:	111.5 mm
Product Packing Type:	Box
Quote Only:	No
RINA Certificate:	ELE060313XG/002
RMRS Certificate:	RMRS_12-03683-315
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:	8 x I <sub>e</sub> AC-3
Rated Control Circuit Voltage (U <sub>c</sub> ):	60 Hz 100 ... 250 V 50 Hz 100 ... 250 V DC Operation 100 ... 250 V
Rated Frequency (f):	Main Circuit 50/60 Hz
Rated Frequency Limits:	25...400 Hz
Rated Impulse Withstand Voltage (U <sub>imp</sub> ):	Main Circuit 8 kV
Rated Insulation Voltage (U <sub>i</sub> ):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
Rated Making Capacity AC-3 acc. to IEC 60947-4-1:	10 x I <sub>e</sub> AC-3
Rated Operational Current AC-1 (I <sub>e</sub> ):	(690 V) 55 °C 230 A (690 V) 40 °C 250 A (1000 V) 40 °C 180 A (1000 V) 55 °C 180 A (690 V) 70 °C 180 A (1000 V) 70 °C 180 A
Rated Operational Current AC-3 (I <sub>e</sub> ):	(1000 V) 55 °C 80 A (690 V) 55 °C 120 A (220 / 230 / 240 V) 55 °C 145 A (415 V) 55 °C 145 A (440 V) 55 °C 145 A (380 / 400 V) 55 °C 145 A (500 V) 55 °C 145 A
Rated Operational Current DC-1 (I <sub>e</sub> ):	(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 <sub>e</sub> ):	(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 <sub>e</sub> ):	(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 <sub>e</sub> ):	(220 / 230 / 240 V) 45 kW (380 / 400 V) 75 kW (415 V) 75 kW (440 V) 75 kW (500 V) 90 kW (690 V) 110 kW (1000 V) 110 kW
Rated Operational Power AC-6a (P <sub>e</sub> ):	(500 V) 80 kW

Rated Operational Current (I <sub>g</sub> ):	(500 V) 60 kV·A (415 / 440 V) 65 kV·A (380 / 400 V) 60 kV·A (660 / 690 V) 105 kV·A (220 / 240 V) 35 kV·A
Rated Operational Voltage:	Main Circuit 690 V
Rated Short-time Withstand Current (I <sub>cw</sub> ):	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 800 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 280 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1800 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 600 A
Replacement Product ID (NEW):	1SFL447002R1311
Resistance to Shock acc. to IEC 60068-2-27:	Shock Direction: A 5 g Shock Direction: C2 5 g Shock Direction: B2 5 g Shock Direction: C1 5 g Shock Direction: B1 5 g
RoHS Date:	0811 4
RoHS Information:	1SFC101055D0202
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment
Selling Unit of Measure:	piece
Short Description:	AF145-30-11 100-250V 50/60Hz / 100-250V DC Contactor
Short-Circuit Protective Devices:	gG Type Fuses 315 A
Technical Information:	Mechanically
Terminal Type:	Main Circuit: Bars
Tightening Torque:	Main Circuit 18 N·m
UNSPSC:	39121529

