

## General Information

<b>Extended Product Type:</b>	A110-30-11 110V 50Hz / 110-120V 60Hz
<b>Product ID:</b>	1SFL451001R8411
<b>EAN:</b>	7320500141588
<b>Catalog Description:</b>	A110-30-11 110V 50Hz / 110-120V 60Hz 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 control voltage, versions from 24V AC, 690 AC, 50 and 60 Hz

## Categories

Products » Low Voltage Products and Systems » Control Products » Contactors » Block Contactors

## Ordering

<b>Minimum Order Quantity:</b>	1 piece
<b>Customs Tariff Number:</b>	85364900
<b>EAN:</b>	7320500141588

## Dimensions

<b>Product Net Depth:</b>	123.5 mm
<b>Product Net Height:</b>	148.0 mm
<b>Product Net Weight:</b>	2.040 kg
<b>Product Net Width:</b>	102.0 mm

## Container Information

<b>Package Level 1 Width:</b>	140 mm
<b>Package Level 1 Length:</b>	140 mm
<b>Package Level 1 Height:</b>	170 mm
<b>Package Level 1 Gross Weight:</b>	2 kg
<b>Package Level 1 EAN:</b>	7320500141588
<b>Package Level 1 Units:</b>	1 piece

## Technical

<b>Number of Main Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Auxiliary Contacts NC:</b>	1
<b>Rated Operational Voltage:</b>	Main Circuit 1000 V
<b>Rated Frequency (f):</b>	Main Circuit 50/60 Hz
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 160 A
<b>Rated Operational Current AC-1 (I<sub>e</sub>):</b>	(690 V) 55 °C 145 A (690 V) 40 °C 160 A (690 V) 70 °C 130 A
<b>Rated Operational Current AC-3 (I<sub>e</sub>):</b>	(1000 V) 55 °C 30 A (690 V) 55 °C 82 A (415 V) 55 °C 110 A (220 / 230 / 240 V) 55 °C 110 A (440 V) 55 °C 100 A (380 / 400 V) 55 °C 110 A (500 V) 55 °C 100 A
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(500 V) 59 kW (1000 V) 40 kW (690 V) 75 kW (220 / 230 / 240 V) 30 kW (380 / 400 V) 55 kW (440 V) 59 kW (415 V) 59 kW
<b>Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:</b>	8 x I <sub>e</sub> AC-3
<b>Rated Making Capacity AC-3 acc. to IEC 60947-4-1:</b>	10 x I <sub>e</sub> AC-3
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 200 A
<b>Rated Short-time Withstand Current (I<sub>cw</sub>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 500 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 175 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 800 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1320 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 350 A

<b>Maximum Breaking Capacity:</b>	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 1160 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 800 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>Rated Operational Current DC-1 (I<sub>e</sub>):</b>	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
<b>Rated Operational Current DC-3 (I<sub>e</sub>):</b>	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
<b>Rated Operational Current DC-5 (I<sub>e</sub>):</b>	(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	Main Circuit 8 kV
<b>Mechanical Durability:</b>	10 million
<b>Maximum Mechanical Switching Frequency:</b>	3600 cycles per hour
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) 0.85 x U <sub>c</sub> Min. ... 1.1 x U <sub>c</sub> Max. (at θ ≤ 70 °C) °C
<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	60 Hz 110 ... 120 V 50 Hz 110 V
<b>Coil Consumption:</b>	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 450 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 22 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 350 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 26 V·A
<b>Operate Time:</b>	Between Coil Energization and NO Contact Closing 10 ... 25 ms Between Coil De-energization and NO Contact Opening 10 ... 18 ms Between Coil De-energization and NC Contact Closing 7 ... 15 ms Between Coil Energization and NC Contact Opening 7 ... 22 ms
<b>Connecting Capacity Main Circuit:</b>	Flexible with Cable End 1x10...70 mm <sup>2</sup> Bar 30 mm <sup>2</sup> Rigid 2x6...65 mm <sup>2</sup>
<b>Connecting Capacity Auxiliary Circuit:</b>	Solid 1x1...4 mm <sup>2</sup> Flexible with Insulated Ferrule 2x0.75...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 1x0.75...2.5 mm <sup>2</sup>
<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 IP10
<b>Connecting terminals (delivered in open position) Main poles:</b>	M8 hexagon socket screw with single connector
<b>Terminal Type:</b>	Cable Clamp
<b>Number of Main Contacts NO:</b>	3

## Environmental

<b>Maximum Operating Altitude Permissible:</b>	3000 m
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: A 20 g Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: C2 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, 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, 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, Closed, Shock Direction: C1 20 g
<b>RoHS Status:</b>	Following EU Directive 2002/95/EC August 18, 2005 and amendment
<b>Ambient Air Temperature:</b>	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -25...+50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40...+70 °C Close to Contactor for Storage -60...+80 °C

## Technical UL/CSA

<b>General Use Rating UL/CSA:</b>	(600 V AC) 140 A
<b>Horsepower Rating UL/CSA:</b>	(208 V AC) Three Phase 30 Hp (440 ... 480 V AC) Three Phase 75 Hp (550 ... 600 V AC) Three Phase 100 Hp (220 ... 240 V AC) Three Phase 40 Hp (200 V AC) Three Phase 30 Hp
<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V

## Certificates and Declarations (Document Number)

<b>Instructions and Manuals:</b>	5309660-60
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<b>BV Certificate:</b>	07172/D0 BV
<b>CB Certificate:</b>	SE-69487
<b>CCC Certificate:</b>	CQC_2002010304008904
<b>CSA Certificate:</b>	314005
<b>Data Sheet, Technical Information:</b>	1SBC100122C0202
<b>Declaration of Conformity - CE:</b>	1SFA1-63
<b>DNV Certificate:</b>	DNV_E-12191
<b>GL Certificate:</b>	GL_99358-97HH
<b>LOVAG Certificate:</b>	SE-9645071-2
<b>LR Certificate:</b>	LR_12-70027-E1
<b>RINA Certificate:</b>	ELE060313XG/001
<b>RMRS Certificate:</b>	RMRS_12-03683-315
<b>RoHS Information:</b>	1SFC101046D0203

### Classifications

<b>ETIM 4:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 5:</b>	EC000066 - Magnet contactor, AC-switching
<b>UNSPSC:</b>	39121529
<b>Object Classification Code:</b>	Q

