

## PRODUCT-DETAILS

# A110-30-11-81

## A110-30-11 24V 50Hz / 24V 60Hz Contactor



### General Information

Extended Product Type	A110-30-11-81
Product ID	1SFL451001R8111
EAN	7320500141571
Catalog Description	A110-30-11 24V 50Hz / 24V 60Hz Contactor
Long Description	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with control voltage, versions from 24V AC, 50 and 60 Hz

### Classifications

Object Classification Code	Q
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching
ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4755 >> Contactors

### 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 kg
Package Level 1 EAN	7320500141571

## Certificates and Declarations (Document Number)

BV Certificate	07172/D0 BV
CB Certificate	SE-69487
CCC Certificate	CQC_2002010304008904
CSA Certificate	314005
Declaration of Conformity - CE	2CMT2015-005436
DNV Certificate	DNV_E-12191
Environmental Information	1SFC101001D0201
GL Certificate	GL_99358-97HH
Instructions and Manuals	5309660-60
LOVAG Certificate	SE-9645071-2
LR Certificate	LR_12-70027-E1
RINA Certificate	ELE060313XG/001
RMRS Certificate	RMRS_12-03683-315
RoHS Information	2CMT2015-005436

## 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

## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C 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
Maximum Operating Altitude Permissible	3000 m
Resistance to Shock acc. to IEC 60068-2-27	Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: A 20 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: A 20 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: B1 15 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: C1 20 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock Direction: C2 20 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: B1 5 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: B2 15 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: C1 20 K40 Half-sine Pulse for 11 ms, No Change in Contact Position, Open, Shock Direction: C2 20 K40
RoHS Status	Following EU Directive 2011/65/EU

## 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
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 50/60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 160 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) $40^\circ\text{C}$ 160 A (690 V) $55^\circ\text{C}$ 145 A (690 V) $70^\circ\text{C}$ 130 A
Rated Operational Current AC-3 ( $I_e$ )	(1000 V) $55^\circ\text{C}$ 30 A (220 / 230 / 240 V) $55^\circ\text{C}$ 110 A (380 / 400 V) $55^\circ\text{C}$ 110 A (415 V) $55^\circ\text{C}$ 110 A (440 V) $55^\circ\text{C}$ 100 A (500 V) $55^\circ\text{C}$ 100 A (690 V) $55^\circ\text{C}$ 82 A
Rated Operational Power AC-3 ( $P_e$ )	(1000 V) 40 (220 / 230 / 240 V) 30 kW (380 / 400 V) 55 kW (415 V) 59 kW (440 V) 59 kW (500 V) 59 kW (690 V) 75 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x $I_e$ AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x $I_e$ AC-3
Short-Circuit Protective Devices	gG Type Fuses 200 A
Rated Short-time Withstand Current ( $I_{cw}$ )	at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 800 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 175 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 350 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 1320 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 500 A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 1160 A $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 800 A
Maximum Electrical Switching Frequency	AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour AC-3 300 cycles per hour
Rated Operational Current DC-1 ( $I_e$ )	(110 V) 2 Poles in Series, $40^\circ\text{C}$ 160 A (220 V) 3 Poles in Series, $40^\circ\text{C}$ 160 A
Rated Operational Current DC-3 ( $I_e$ )	(110 V) 2 Poles in Series, $40^\circ\text{C}$ 160 A (220 V) 3 Poles in Series, $40^\circ\text{C}$ 160 A
Rated Operational Current DC-5 ( $I_e$ )	(110 V) 2 Poles in Series, $40^\circ\text{C}$ 160 A (220 V) 3 Poles in Series, $40^\circ\text{C}$ 160 A
Rated Insulation Voltage ( $U_i$ )	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Main Circuit 8 kV
Mechanical Durability	10 million
Maximum Mechanical Switching Frequency	3600 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) $0.85 \times U_c$ Min. ... $1.1 \times U_c$ Max. (at $\theta \leq 70^\circ\text{C}$ )
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 24 V 60 Hz 24 V

Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 22 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 26 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 350 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 450 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 7 ... 15 ms Between Coil De-energization and NO Contact Opening 10 ... 18 ms Between Coil Energization and NC Contact Opening 7 ... 22 ms Between Coil Energization and NO Contact Closing 10 ... 25 ms
Connecting Capacity Main Circuit	Bar 30 m² Flexible with Cable End 2 x 6 ... 35 m² Rigid 2 x 6 ... 65 m²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 2x 0.75 ... 2.5 Flexible with Insulated Ferrule 2x 0.75 ... 2.5 Flexible 2x0.75 ... 2.5 m² Solid 1 x 1 ... 4 m² Stranded 1 x 1 ... 4 m²
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
Connecting Terminals (delivered in open position) Main Poles	M8 hexagon socket screw with single connector
Terminal Type	Cable Clamp

## Dimensions

Product Net Width	102 mm
Product Net Depth / Length	123.5 mm
Product Net Height	148 mm
Product Net Weight	1.8 kg

## Popular Downloads

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	5309660-60
Dimension Diagram	53540923-1

## Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Replacement Product ID (NEW)	1SFL427001R1111

## Categories

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

