

PRODUCT-DETAILS

## A110-30-11-81 A110-30-11 24V 50Hz / 24V 60Hz Contactor "No longer for sale" replaced by



| 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-<br>pass and Distribution application up to max 1000 V.Operated with control voltage, versions<br>from 24….690 AC, 50 and 60 Hz |
| Ordering                     |   |
| Minimum Order Quantity       | 1 piece   |
| Customs Tariff Number        | 85364900  |
| Replacement Product ID (NEW) | 1SFL427001R1111   |
|                              |   |
| Popular Downloads            |   |
| Data Sheet, Technical        | 1SBC100192C0206   |
| Information                  |   |

Dimension Diagram 53540923-1

| D'  |   |
|---|---|
| Dimensions  |   |
| Product Net Width   | 102 mm  |
| Product Net Depth /<br>Length   | 123.5 mm  |
| Product Net Height  | 148 mm  |
| Product Net Weight  | 1.8 kg  |
|   |   |
| Technical   |   |
| Number of Main Contacts<br>NO   | 3   |
| Number of Main Contacts<br>NC   | O   |
| Number of Auxiliary<br>Contacts NO                                      | 1   |
| Number of Auxiliary<br>Contacts NC                                      | 1   |
| Rated Operational Voltage   | Main Circuit 1000 V   |
| Rated Frequency (f)   | Main Circuit 50 / 60 Hz   |
| Conventional Free-air<br>Thermal Current (I <sub>th</sub> )             | acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 160 A  |
| Rated Operational Current<br>AC-1 (I <sub>e</sub> )                     | (690 V) 40 °C 160 A<br>(690 V) 55 °C 145 A<br>(690 V) 70 °C 130 A   |
| Rated Operational Current<br>AC-3 (I <sub>e</sub> )                     | (415 V) 55 °C 110 A<br>(440 V) 55 °C 100 A<br>(500 V) 55 °C 100 A<br>(690 V) 55 °C 82 A<br>(1000 V) 55 °C 30 A<br>(380 / 400 V) 55 °C 110 A<br>(220 / 230 / 240 V) 55 °C 110  |
| Rated Operational Power<br>AC-3 (P <sub>e</sub> )                       | (415 V) 59 kW<br>(440 V) 59 kW<br>(500 V) 59 kW<br>(690 V) 75 kW<br>(1000 V) 40 kW<br>(380 / 400 V) 55 kW<br>(220 / 230 / 240 V) 30 kW  |
| Rated Breaking Capacity<br>AC-3   | 8 x le AC-3   |
| Rated Making Capacity<br>AC-3   | 10 x le AC-3  |
| Short-Circuit Protective<br>Devices                                     | gG Type Fuses 200 A   |
| Rated Short-time<br>Withstand Current Low<br>Voltage (I <sub>cw</sub> ) | 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 15 min 175 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 350 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 30 s 500 A |
| Maximum Breaking<br>Capacity  | cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 1160 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 800 A  |
| Maximum Electrical<br>Switching Frequency                               | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(AC-3) 300 cycles per hour   |
| Rated Operational Current<br>DC-1 (I <sub>e</sub> )                     | (110 V) 2 Poles in Series, 40 °C 160 A<br>(220 V) 3 Poles in Series, 40 °C 160 A  |
|   |   |

Rated Operational Current DC-3 (I<sub>e</sub>)

(110 V) 2 Poles in Series, 40 °C 160 A (220 V) 3 Poles in Series, 40 °C 160 A

| Rated Operational Current<br>DC-5 (I <sub>B</sub> )                | (110 V) 2 Poles in Series, 40 °C 160 A<br>(220 V) 3 Poles in Series, 40 °C 160 A   |
|--|--|
| Rated Insulation Voltage (U <sub>i</sub> )                         | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to UL/CSA 600 V  |
| Rated Impulse Withstand<br>Voltage (U <sub>imp</sub> )             | Main Circuit 8 kV  |
| Mechanical Durability  | 10 million   |
| Maximum Mechanical<br>Switching Frequency                          | 3600 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<br>Voltage (U <sub>c</sub> )                 | 50 Hz 24 V<br>60 Hz 24 V   |
| Coil Consumption   | Holding at Max. Rated Control Circuit Voltage 50 Hz 22 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 26 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 350 V·A<br>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<br>Between Coil De-energization and NO Contact Opening 10 18 ms<br>Between Coil Energization and NC Contact Opening 7 22 ms<br>Between Coil Energization and NO Contact Closing 10 25 ms   |
| Connecting Capacity Main<br>Circuit                                | Bar 30 mm²<br>Flexible with Cable End 2 x 6 35 mm²<br>Rigid 2 x 6 65 mm²   |
| Connecting Capacity<br>Auxiliary Circuit                           | Flexible with Ferrule 2x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 2.5 mm² Flexible 2x0.75 2.5 mm² Solid 1 x 1 4 mm² Stranded 1 x 1 4 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 IP10  |
| Connecting Terminals<br>(delivered in open<br>position) Main Poles | M8 hexagon socket screw with single connector  |
| Terminal Type  | Cable Clamp  |
|  |  |
| Technical UL/CSA   |  |
| Maximum Operating<br>Voltage UL/CSA                                | Main Circuit 600 V   |
| General Use Rating<br>UL/CSA                                       | (600 V AC) 140 A   |
| Horsepower Rating UL/CSA   | (200 V AC) Three Phase 30 hp<br>(208 V AC) Three Phase 30 hp<br>(220 240 V AC) Three Phase 40 hp<br>(440 480 V AC) Three Phase 75 hp<br>(550 600 V AC) Three Phase 100 hp  |
| 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<br>Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock<br>Direction: A 20 g  |
|  | Half-sine Pulse for 11 ms, No Change in Contact Position, Closed, Shock<br>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                    |  |
|--|--|
| REACH Declaration                      | 2CMT2021-006202  |
| RoHS Information                       | 2CMT2021-006277  |
| RoHS Status                            | Following EU Directive 2011/65/EU                          |
| Toxic Substances Control<br>Act - TSCA | 2CMT2023-006525  |
| WEEE B2C / B2B                         | Business To Business                                       |
| WEEE Category                          | 5. Small Equipment (No External Dimension More Than 50 cm) |

| Certificates and Declarations    |  |
|----------------------------------|--|
| BV Certificate                   | 07172/D0 BV                                |
| CB Certificate                   | SE-69487                                   |
| CQC Certificate                  | CQC2002010304008904<br>CQC2009010304353526 |
| CSA Certificate                  | 314005                                     |
| Declaration of Conformity - CCC  | 2020980304001630<br>2020980304001078       |
| Declaration of Conformity - CE   | 2CMT2015-005436                            |
| Declaration of Conformity - UKCA | 2CMT2020-006118                            |
| DNV Certificate                  | DNV_E-12191                                |
| GL Certificate                   | GL_99358-97HH                              |
| LOVAG Certificate                | SE-9645071-2                               |
| LR Certificate                   | LR_12-70027-E1                             |
| RINA Certificate                 | ELE060313XG/001                            |
| 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<br>Weight | 2 kg          |
| Package Level 1 EAN             | 7320500141571 |

| 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  |  |
| ETIM 8                                | EC000066 - Power contactor, AC switching  |  |
| eClass                                | V11.0 : 27371003                          |  |
| UNSPSC                                | 39121529                                  |  |
| IDEA Granular Category<br>Code (IGCC) | 4755 >> Contactors                        |  |

## Categories

 $\text{Low Voltage Products and Systems} \rightarrow \text{Control Products} \rightarrow \text{Contactors} \rightarrow \text{Block Contactors} \rightarrow \text{A Contactors}$ 

