

## PRODUCT-DETAILS

# AM300-30-11-78

## AM300-30-11 110-125V 50/60Hz / DC Contactor



### General Information

|                       |  |
|-----------------------|--|
| Extended Product Type | AM300-30-11-78   |
| Product ID            | 1SFL558029R7811  |
| EAN                   | 7320500356920  |
| Catalog Description   | AM300-30-11 110-125V 50/60Hz / DC Contactor  |
| Long Description      | A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, Bypass and Distribution application up to max 690 V. Magnetically latch, control voltage 110-125 V, AC/DC latch |

### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

### Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100192C0206 |
| Instructions and Manuals          | 1SFC101024M5501 |

### Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 164 mm   |
| Product Net Depth / Length | 180.5 mm |
| Product Net Height         | 227 mm   |
| Product Net Weight         | 5.4 kg   |

## Technical

|   |   |
|---|---|
| Number of Main Contacts<br>NO                                     | 3   |
| Number of Main Contacts<br>NC                                     | 0   |
| Number of Auxiliary<br>Contacts NO                                | 1   |
| Number of Auxiliary<br>Contacts NC                                | 1   |
| Rated Operational Voltage   | Main Circuit 690 V  |
| Rated Frequency (f)   | Main Circuit 50 / 60 Hz   |
| Conventional Free-air<br>Thermal Current ( $I_{th}$ )             | acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 500 A   |
| Rated Operational Current<br>AC-1 ( $I_e$ )                       | (690 V) $40^\circ\text{C}$ 500 A<br>(690 V) $55^\circ\text{C}$ 400 A<br>(690 V) $70^\circ\text{C}$ 325 A  |
| Rated Operational Current<br>AC-3 ( $I_e$ )                       | (415 V) $55^\circ\text{C}$ 300 A<br>(440 V) $55^\circ\text{C}$ 280 A<br>(500 V) $55^\circ\text{C}$ 280 A<br>(690 V) $55^\circ\text{C}$ 280 A<br>(380 / 400 V) $55^\circ\text{C}$ 305 A<br>(220 / 230 / 240 V) $55^\circ\text{C}$ 305  |
| Rated Operational Power<br>AC-3 ( $P_e$ )                         | (415 V) 160 kW<br>(440 V) 160 kW<br>(500 V) 200 kW<br>(690 V) 250 kW<br>(380 / 400 V) 160 kW<br>(220 / 230 / 240 V) 90 kW   |
| Rated Breaking Capacity<br>AC-3                                   | 8 x $I_e$ AC-3  |
| Rated Making Capacity<br>AC-3                                     | 10 x $I_e$ AC-3   |
| Short-Circuit Protective<br>Devices                               | gG Type Fuses 500 A   |
| Rated Short-time<br>Withstand Current Low<br>Voltage ( $I_{cw}$ ) | at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 2400 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 500 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 1100 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 3500 A<br>at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 1500 A |
| Maximum Breaking<br>Capacity                                      | $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 3000 A<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 2500 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 ( $I_e$ )                       | (110 V) 2 Poles in Series, $40^\circ\text{C}$ 450 A<br>(220 V) 3 Poles in Series, $40^\circ\text{C}$ 450 A  |
| Rated Operational Current<br>DC-3 ( $I_e$ )                       | (110 V) 2 Poles in Series, $40^\circ\text{C}$ 450 A<br>(220 V) 3 Poles in Series, $40^\circ\text{C}$ 450 A  |
| Rated Operational Current<br>DC-5 ( $I_e$ )                       | (110 V) 2 Poles in Series, $40^\circ\text{C}$ 450 A<br>(220 V) 3 Poles in Series, $40^\circ\text{C}$ 450 A  |

|  |  |
|--|--|
| Rated Insulation Voltage<br>( $U_i$ )                              | 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 ( $U_{imp}$ )                   | Main Circuit 8 kV  |
| Mechanical Durability  | 5 million  |
| Maximum Mechanical<br>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 $\theta \leq 70^\circ \text{C}$ )   |
| Rated Control Circuit<br>Voltage ( $U_c$ )                         | 50 Hz 110 ... 125 V<br>60 Hz 110 ... 125 V<br>DC Operation 110 ... 125 V   |
| Coil Consumption   | Holding at Max. Rated Control Circuit Voltage 50 Hz 10 V·A<br>Holding at Max. Rated Control Circuit Voltage 60 Hz 10 V·A<br>Holding at Max. Rated Control Circuit Voltage DC 2 W<br>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 470 V·A<br>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 470 V·A<br>Pull-in at Max. Rated Control Circuit Voltage DC 520 W |
| Operate Time   | Between Coil De-energization and NC Contact Closing 40 ... 50 ms<br>Between Coil De-energization and NO Contact Opening 43 ... 53 ms<br>Between Coil Energization and NC Contact Opening 45 ... 85 ms<br>Between Coil Energization and NO Contact Closing 50 ... 90 ms   |
| Connecting Capacity Main<br>Circuit                                | Bar 32 mm <sup>2</sup><br>Rigid Al-Cable 120 ... 240 mm <sup>2</sup><br>Rigid Cu-Cable 16 ... 240 mm <sup>2</sup>  |
| Connecting Capacity<br>Auxiliary Circuit                           | Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible 2x0.75 ... 2.5 mm <sup>2</sup><br>Solid 2 x 1 ... 4 mm <sup>2</sup><br>Stranded 2 x 1 ... 4 mm <sup>2</sup>   |
| Degree of Protection   | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20<br>acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00   |
| Connecting Terminals<br>(delivered in open<br>position) Main Poles | Flat type c/w screws and bolts   |
| Terminal Type  | Main Circuit: Bars   |

## Technical UL/CSA

|                                     |   |
|-------------------------------------|---|
| Maximum Operating<br>Voltage UL/CSA | Main Circuit 600 V  |
| Horsepower Rating<br>UL/CSA         | (200 V AC) Three Phase 100 hp<br>(208 V AC) Three Phase 100 hp<br>(220 ... 240 V AC) Three Phase 100 hp<br>(440 ... 480 V AC) Three Phase 250 hp<br>(550 ... 600 V AC) Three Phase 300 hp |

## Environmental

|   |   |
|---|---|
| Ambient Air Temperature                       | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -25 ... 50 °C<br>Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 $U_c$ ) -40 ... 70 °C<br>Close to Contactor for Storage -40 ... +70 °C |
| Maximum Operating<br>Altitude Permissible     | Without Derating 3000 m   |
| Resistance to Shock acc.<br>to IEC 60068-2-27 | Shock Direction: A 5 g<br>Shock Direction: B1 5 g<br>Shock Direction: B2 5 g<br>Shock Direction: C1 5 g<br>Shock Direction: C2 5 g  |

RoHS Status

Following EU Directive 2011/65/EU

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## Certificates and Declarations (Document Number)

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|                                   |                   |
|-----------------------------------|-------------------|
| Declaration of Conformity<br>- CE | 2CMT2015-005436   |
| Environmental Information         | 1SFC101063D0201   |
| GL Certificate                    | GL_20262-04HH     |
| Instructions and Manuals          | 1SFC101024M5501   |
| RINA Certificate                  | ELE060313XG/002   |
| RMRS Certificate                  | RMRS_12-03683-315 |
| RoHS Information                  | 2CMT2015-005436   |

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## Container Information

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|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | box 1 piece   |
| Package Level 1 Width             | 203 mm        |
| Package Level 1 Depth /<br>Length | 245 mm        |
| Package Level 1 Height            | 188 mm        |
| Package Level 1 Gross<br>Weight   | 6.1 kg        |
| Package Level 1 EAN               | 7320500356920 |

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## Classifications

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|                                       |   |
|---------------------------------------|---|
| 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                        |

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## Categories

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

