

PRODUCT-DETAILS

AFS12Z-30-22-30 AFS12Z-30-22-30 24VDC Contactor



| General Information | |
|-----------------------|---|
| Extended Product Type | AFS12Z-30-22-30 |
| Product ID | 1SBL156082R3022 |
| EAN | 3471523158290 |
| Catalog Description | AFS12Z-30-22-30 24VDC Contactor |
| Long Description | AFS09Z AFS38Z contactors are designed for machine safety applications. They are delivered with fixed front-mounted auxiliary contact blocks making them ideal for monitoring and controlling circuits. Mechanically linked and mirror contacts make your system safer control circuit with electronic coil interface: - dedicated 24 V DC for direct control by PLC-output ≥ 250 mA, low holding consumption up to 1.7 W - reduced panel energy consumption - mirror and mechanically linked contacts, with front marked symbol acc. to IEC60947-5-1, always guaranteeing the right contactor status - front-mounted auxiliary contact block: - permanently fixed - protective cover to prevent manual operation - yellow housing for easy identification - minimum switching capacity 12 V / 3 mA, with a failure rate 10-7 acc. to IEC 60947-5-4 - built-in surge suppression |

| 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 |
| E-Number (Sweden) | 3210678 |

| Container Information | |
|-----------------------------------|----------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 96 mm |
| Package Level 1 Depth / Length | 145 mm |
| Package Level 1 Height | 50 mm |
| Package Level 1 Gross Weight | 0.54 kg |
| Package Level 1 EAN | 3471523158290 |
| Package Level 2 Units | crate 12 piece |
| Package Level 2 Width | 51 mm |
| Package Level 2 Depth / Length | 98 mm |
| Package Level 2 Height | 148 mm |
| Package Level 2 Gross Weight | 6.48 kg |
| Package Level 3 Units | 576 piece |

| Certificates and Declarations | (Document Number) |
|-------------------------------|-------------------|
|-------------------------------|-------------------|

| CB Certificate | CB_SE-80871M3 |
|-----------------------------------|-------------------------|
| cUL Certificate | UL_20180227_E312527_7_1 |
| Declaration of Conformity - CE | 1SBD250022U1000 |
| DNV Certificate | DNV-GL_TAE00001AF-3 |
| DNV GL Certificate | DNV-GL_TAE00001AF-3 |
| EAC Certificate | EAC_RUC-FRME77B03199 |
| GL Certificate | DNV-GL_TAE00001AF-3 |
| Instructions and Manuals | 1SBC101052M6801 |
| RINA Certificate | RINA_ELE240318XG |
| RMRS Certificate | RMRS_1802705280 |
| RoHS Information | 1SBD250022U1000 |
| UL Listing Card | E312527 |

| General Use Rating UL/CSA | (600 V AC) 28 A |
|------------------------------|-------------------------|
| Tightening Torque | Auxiliary Circuit 11 IA |
| UL/CSA | Control Circuit 11 IA |
| | Main Circuit 13 IA |

| Environmental | |
|-------------------------|---|
| Ambient Air Temperature | Close to Contactor for Storage -60 +80 °C Close to Contactor without Thermal O/L Relay -40 +70 °C Close to Contactor Fitted with Thermal O/L Relay -25 +60 °C |
| Climatic Withstand | Category B according to IEC 60947-1 Annex Q |

Capacity

Maximum Electrical

| Maximum Operating Altitude Permissible | 3000 m |
|---|--|
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5 300 Hz 4 g closed position / 2 g open position |
| Resistance to Shock acc. | Closed, Shock Direction: A 30 K40 |
| to IEC 60068-2-27 | Closed, Shock Direction: B1 25 K40 |
| | Closed, Shock Direction: B2 15 K40 |
| | Closed, Shock Direction: C1 25 K40 |
| | Closed, Shock Direction: C2 25 K40 |
| RoHS Status | Following EU Directive 2011/65/EU |

| Technical | |
|---|---|
| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | C |
| Number of Auxiliary Contacts NO | 2 |
| Number of Auxiliary Contacts NC | 2 |
| Standards | IEC 60947-1 / 60947-4-1 and EN 60947-1 / 60947-4-1, UL 508, CSA C22.2 N° 14 |
| Rated Operational Voltage | Auxiliary Circuit 690 V Main Circuit 690 V |
| Rated Frequency (f) | Auxiliary Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz |
| Conventional Free-air Thermal Current (I _{th}) | acc. to IEC 60947-5-1, q = 40 °C 16 A acc. to IEC 60947-4-1, Open Contactors q = 40 °C 35 A |
| Rated Operational Current AC-1 (I _e) | (690 V) 40 °C 28 A (690 V) 60 °C 28 A (690 V) 70 °C 24 A |
| Rated Operational Current AC-3 (I _e) | (220 / 230 / 240 V) 60 °C 12 A (380 / 400 V) 60 °C 12 A (415 V) 60 °C 12 A (440 V) 60 °C 12 A (500 V) 60 °C 12 A (500 V) 60 °C 12.5 A (690 V) 60 °C 9 A |
| Rated Operational Power AC-3 (P _e) | (220 / 230 / 240 V) 3 KWT (380 / 400 V) 5.5 KWT (415 V) 5.5 KWT (440 V) 5.5 KWT (500 V) 7.5 KWT (690 V) 7.5 KWT (400 V) 5.5 KWT |
| Rated Operational Current AC-15 (I _e) | (220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A |
| Rated Short-time Withstand Current (I _{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 0.1 s 140 A |
| Maximum Breaking | cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 250 A |

cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 106 A

| | AC-15 1200 cycles per hour DC-13 900 cycles per hour |
|--|--|
| Rated Operational Current | (125 V) 0.55 A / 69 W |
| DC-13 (I _e) | (24 V) 6 A / 144 W |
| | (250 V) 0.27 A / 68 W |
| | (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W |
| | (110 V) 0.55 A / 60 W |
| | (220 V) 0.27 A / 60 W |
| | (400 V) 0.15 A / 60 W |
| | (500 V) 0.13 A / 65 W |
| | (600 V) 0.1 A / 60 W |
| Rated Insulation Voltage U _i) | acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V |
| Rated Impulse Withstand /oltage (U _{imp}) | 6 kV |
| Maximum Mechanical Switching Frequency | 3600 cycles per hour |
| Rated Control Circuit | 50 Hz - |
| /oltage (U _c) | 50 Hz / 60 Hz 100 250 V |
| | 60 Hz - DC Operation 24 V |
| Operate Time | Between Coil De-energization and NC Contact Closing 22 57 ms |
| | Between Coil De-energization and NO Contact Opening 17 29 ms Between Coil Energization and NC Contact Opening 20 35 ms Between Coil Energization and NC Contact Opening 27 53 ms |
| Connecting Capacity Main | Rigid 1/2x 1 6 m ² |
| Circuit | Flexible with Ferrule 1/2x 0.75 6 m ² Flexible with Insulated Ferrule 1x 0.75 4 m ² Flexible with Insulated Ferrule 2x 0.75 2.5 m ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 2.5 Flexible with Insulated Ferrule 2x 0.75 1.5 |
| | Flexible with Insulated Ferrule 1x 0.75 2.5 Rigid 1/2x 1 2.5 m ² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 0.75 2.5 m ² Flexible with Insulated Ferrule 1x 0.75 2.5 m ² |
| | Flexible with Insulated Ferrule 2x 0.75 1.5 m ² Rigid 1/2x 1 2.5 m ² |
| Wire Stripping Length | Auxiliary Circuit 10 mm |
| | Control Circuit 10 mm Main Circuit 10 mm |
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 |
| | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20 |
| Ferminal Type | Screw Terminals |
| | Sulew reminds |
| Dimensions | |
| Product Net Width | 45 mm |
| Product Net Depth / .ength | 130.5 mm |
| Product Net Height | 86 mm |
| Product Net Weight | 0.49 kg |
| | |
| | |

1SBC101052M6801

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

Categories

Low Voltage Products and Systems \rightarrow Control Products \rightarrow Contactors \rightarrow Block Contactors

