# EF19-0.32

## General Information

| | |
|---|---|
| **Extended Product Type:** | EF19-0.32 |
| **Product ID:** | 1SAX121001R1101 |
| **EAN:** | 4013614403989 |
| **Catalog Description:** | EF19-0.32 Electronic Overload Relay |
| **Long Description:** | The EF19-0.32 is an self-supplied electronic overload relay, which means no extra external supply is needed. It offers reliable and fast protection for motors in the event of overload or phase failure. Easy to use like a thermal overload relay and compatible with standard motor applications, the electronic overload relay is convincing, above all, due to its wide setting range, high accuracy, high operational temperature range and the possibility to select a trip class (10E, 20E, 30E). Further features are the temperature compensation, trip contact (NC), signal contact (NO), automatic- or manual reset selectable, trip-free mechanism, STOP- and Test function and a trip indication. The overload relays are connected directly to the contactors. Single mounting kits are available as accessory. |

## Categories

Products » Low Voltage Products and Systems » Control Products » Contactors » Electronic Overload Relays

## Accessories

| Identifier | Type | Description | Qty |
|---|---|---|---|
| 1SAX101910R1001 | DB19EF | DB19EF Single Mounting Kit | 1 |

## Ordering

| | |
|---|---|
| **EAN:** | 4013614403989 |
| **Minimum Order Quantity:** | 1 piece |
| **Customs Tariff Number:** | 85364900 |

## Dimensions

| | |
|---|---|
| **Product Net Width:** | 44.4 mm |
| **Product Net Height:** | 85.0 mm |
| **Product Net Depth:** | 59.3 mm |
| **Product Net Weight:** | 0.158 kg |

## Container Information

| | |
|---|---|
| **Package Level 1 Units:** | 1 piece |
| **Package Level 1 Width:** | 91.0 mm |
| **Package Level 1 Height:** | 51.5 mm |
| **Package Level 1 Length:** | 68.0 mm |
| **Package Level 1 Gross Weight:** | 0.183 kg |
| **Package Level 2 Units:** | 100 piece |
| **Package Level 2 Width:** | 463.0 mm |
| **Package Level 2 Height:** | 276.0 mm |
| **Package Level 2 Length:** | 263.0 mm |
| **Package Level 2 Gross Weight:** | 18.863 kg |
| **Package Level 2 EAN:** | 4013614483264 |

## Technical

| | |
|---|---|
| **Setting Range:** | 0.10 … 0.32 A |
| **Rated Operational Voltage:** | Auxiliary Circuit 600 V AC DC<br>Main Circuit 690 V AC |

| | |
|---|---|
| **Rated Operational Current ($I_e$):** | 0.32 A |
| **Rated Operational Current AC-3 ($I_e$):** | 0.32 A |
| **Rated Frequency (f):** | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC<br>Main Circuit 50 Hz<br>Main Circuit 60 Hz |
| **Rated Impulse Withstand Voltage ($U_{imp}$):** | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV |
| **Rated Insulation Voltage ($U_i$):** | 690 V |
| **Number of Poles:** | 3 |
| **Number of Auxiliary Contacts NC:** | 1 |
| **Number of Auxiliary Contacts NO:** | 1 |
| **Number of Protected Poles:** | 3 |
| **Conventional Free-air Thermal Current ($I_{th}$):** | Auxiliary Circuit NC 6.00 A<br>Auxiliary Circuit NO 6.00 A |
| **Rated Operational Current AC-15 ($I_e$):** | (240V) NC 3.000 A<br>(240V) NO 3.000 A<br>(400V) NC 1.100 A<br>(400V) NO 1.100 A<br>(500V) NC 0.750 A<br>(500V) NO 0.750 A |
| **Rated Operational Current DC-13 ($I_e$):** | (125V) NC 0.550 A<br>(125V) NO 0.500 A<br>(24V) NC 1.500 A<br>(24V) NO 1.500 A<br>(250V) NC 0.270 A<br>(250V) NO 0.270 A<br>(60V) NC 0.550 A<br>(60V) NO 0.550 A |
| **Degree of Protection:** | IP20 |
| **Pollution Degree:** | 3 |
| **Connecting Capacity-Auxiliary Circuit:** | Flexible with Ferrule 1/2x 0.75 … 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 0.75 … 2.5 mm²<br>Flexible 1/2x 0.75 … 2.5 mm²<br>Rigid 1/2x 1 … 4 mm² |
| **Connecting Capacity-Main Circuit:** | Flexible with Ferrule 1/2x 0.75 … 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 0.75 … 2.5 mm²<br>Flexible 1/2x 0.75 … 2.5 mm²<br>Rigid 1/2x 1 … 4 mm² |
| **Tightening Torque:** | Auxiliary Circuit 0.8 … 1.2 N·m<br>Main Circuit 0.8 … 1.5 N·m |
| **Wire Stripping Length:** | Auxiliary Circuit 9 mm<br>Main Circuit 9 mm |
| **Recommended Screw Driver:** | Auxiliary Circuit Pozidriv 2<br>Main Circuit Pozidriv 2 |
| **Mounting Position:** | Position 1 to 6 |
| **Power Loss:** | Per Pole 0.004 … 0.046 W |
| **Suitable For:** | AF09<br>AF12<br>AF16<br>AF26 |
| **Standards:** | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>UL 60947-1<br>UL 60947-4-1 |

## Environmental

| | |
|---|---|
| **Ambient Air Temperature:** | Operation -25 … +70 °C |

| | |
|---|---|
| | Operation Compensated -25 … +70 °C<br>Storage -50 … +80 °C |
| **Ambient Air Temperature Compensation:** | Yes |
| **Maximum Operating Altitude Permissible:** | 2000 m |
| **Resistance to Shock acc. to IEC 60068-2-27:** | 11 ms Pulse 25g |
| **Resistance to Vibrations acc. to IEC 60068-2-6:** | 3g / 3 … 150 Hz |
| **RoHS Status:** | Following EU Directive 2011/65/EC |

## Technical UL/CSA

| | |
|---|---|
| **Maximum Operating Voltage UL/CSA:** | Main Circuit 600 V AC |
| **Ampere Rating UL/CSA:** | 0.32 A |
| **Contact Rating UL/CSA:** | (NC:) B600<br>(NC:) Q600<br>(NO:) B600<br>(NO:) Q600 |
| **Connecting Capacity-Main Circuit UL/CSA:** | Flexible 1/2x 16 … 10 AWG<br>Stranded 1/2x 16 … 10 AWG |
| **Connecting Capacity-Auxiliary Circuit UL/CSA:** | Flexible 1/2x 18 … 10 AWG<br>Stranded 1/2x 18 … 10 AWG |
| **Tightening Torque UL/CSA:** | Auxiliary Circuit 7 … 1 in·lb<br>Main Circuit 7 … 13 in·lb |

## Certificates and Declarations (Document Number)

| | |
|---|---|
| **ABS Certificate:** | 1SAA941002-0101 |
| **ATEX Certificate:** | 1SAA941002-3901 |
| **BV Certificate:** | 1SAA941002-0201 |
| **CB Certificate:** | 1SAA964002-2002 |
| **CCC Certificate:** | 1SAA942001-3801 |
| **cUL Certificate:** | cUL_E48139 |
| **Declaration of Conformity - CE:** | 1SAD938506-0180<br>1SAD938508-0180 |
| **DNV Certificate:** | 1SAA941003-0301 |
| **GOST Certificate:** | 1SAA941001-2701 |
| **LR Certificate:** | 1SAA941002-0501 |
| **RINA Certificate:** | RINA_ELE376813CS |
| **RMRS Certificate:** | 1SAA964000-0702 |
| **RoHS Information:** | 1SAA942001-4405 |
| **UL Certificate:** | UL_E48139 |

## Classifications

| | |
|---|---|
| **Object Classification Code:** | F |
| **E-nummer:** | 3224180 |
| **ETIM 4.0:** | EC001080 - Electronic overload relay |
| **ETIM 5.0:** | EC001080 - Electronic overload relay |