



Electric Automation
Automation specialists

Reference: EF19-1.0
Code: 1SAX121001R1102

EF19-1.0 Electronic Overload Relay

Buy it at Electric Automation Network



The EF19-1.0 is a 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.

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Accessories

Identifier	Description	Type	Qty	Unit Of Measure
1SAX101910R1001	DB19EF Single Mounting Kit	DB19EF	1	piece

Ordering

EAN:	4013614403996
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Dimensions

Product Net Width:	44.4 mm
Product Net Height:	85 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 mm
Package Level 1 Height:	51.5 mm
Package Level 1 Length:	68 mm
Package Level 1 Gross Weight:	0.183 kg
Package Level 2 Units:	100 piece
Package Level 2 Width:	463 mm
Package Level 2 Height:	276 mm
Package Level 2 Length:	263 mm
Package Level 2 Gross Weight:	18.863 kg
Package Level 2 EAN:	4013614483271

Technical

Setting Range:	0.3 ... 1 A
Rated Operational Voltage:	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Rated Operational Current (I_e):	1 A
Rated Operational Current AC-3 (I_e):	1 A
Rated Frequency (f):	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage (U_{imp}):	Auxiliary Circuit 6 kV 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 A Auxiliary Circuit NO 6 A

Rated Operational Current AC-15 (I _e):	(240 V) NC 3 A (240 V) NO 3 A (400 V) NC 1.1 A (400 V) NO 1.1 A (500 V) NC 0.75 A (500 V) NO 0.75 A
Rated Operational Current DC-13 (I _e):	(125 V) NC 0.55 A (125 V) NO 0.5 A (24 V) NC 1.5 A (24 V) NO 1.5 A (250 V) NC 0.27 A (250 V) NO 0.27 A (60 V) NC 0.55 A (60 V) NO 0.55 A
Degree of Protection:	IP20
Pollution Degree:	3
Connecting Capacity-Auxiliary Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible 1/2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ²
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible 1/2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ²
Tightening Torque:	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 0.8 ... 1.5 N·m
Wire Stripping Length:	Auxiliary Circuit 9 mm Main Circuit 9 mm
Recommended Screw Driver:	Auxiliary Circuit Pozidriv 2 Main Circuit Pozidriv 2
Mounting Position:	Position 1 to 6
Power Loss:	at Rated Operating Conditions per Pole 0.005 ... 0.054 W
Suitable For:	AF09 AF12 AF16 AF26
Standards:	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1

Environmental

Ambient Air Temperature:	Operation -25 ... +70 °C Operation Compensated -25 ... +70 °C 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:	1 A
Contact Rating UL/CSA:	(NC:) B600 (NC:) Q600 (NO:) B600 (NO:) Q600
Connecting Capacity Main Circuit UL/CSA:	Flexible 1/2x 16 ... 10 AWG Stranded 1/2x 16 ... 10 AWG
Connecting Capacity Auxiliary Circuit UL/CSA:	Flexible 1/2x 18 ... 10 AWG Stranded 1/2x 18 ... 10 AWG
Tightening Torque UL/CSA:	Auxiliary Circuit 7 ... 1 in·lb Main Circuit 7 ... 13 in·lb

Certificates and Declarations (Document Number)

ABS Certificate:	1SAA941002-0101
ATEX Certificate:	1SAA941004-3901
BV Certificate:	1SAA941002-0201
CB Certificate:	1SAA964002-2002
CCC Certificate:	1SAA942001-3801
cUL Certificate:	cUL_E48139
Declaration of Conformity - CE:	1SAD938510-0180 1SAD938509-0180
DNV Certificate:	1SAA941003-0301
EAC Certificate:	1SAA941003-2701
GOST Certificate:	1SAA941001-2701
LR Certificate:	1SAA941002-0501
RINA Certificate:	RINA_ELE376813CS
RMRS Certificate:	1SAA941001-0701
RoHS Information:	1SAA942001-4406
UL Certificate:	UL_E48139

Classifications

Object Classification Code:	F
eClass:	7.0 27371502
E-nummer:	3224181
ETIM 4:	EC001080 - Electronic overload relay
ETIM 5:	EC001080 - Electronic overload relay
UNSPSC:	39121521

