

PRODUCT-DETAILS

EF19-18.9 EF19-18.9 Electronic Overload Relay



General Information	
Extended Product Type	EF19-18.9
Product ID	1SAX121001R1105
EAN	4013614404023
Catalog Description	EF19-18.9 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. The EF19 and EF45 have ATEX and IECEx certification 1)
	1) ATEX is valid for products produced from week 42, 2014. IECEx is valid for products produced from week 15, 2017.
Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Dimensions

Product Net Width	44.4 mm
Product Net Height	85 mm
Product Net Depth / Length	59.3 mm
Product Net Weight	0.158 kg

Popular Downloads	
Data Sheet, Technical Information	2CDC107025D0201
Data Sheet, Technical Information (Part 2)	1SAX100509F0001 1SAX100510F0001
Instructions and Manuals	2CDC107023M6803
Instructions and Manuals (Part 2)	2CDC107043M6801
Dimension Diagram	1SAX100403F0001

Technical	
Setting Range	5.7 18.9 /
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Rated Operational Current (I _e)	18.9 A
Rated Operational Current AC-3 (I _e)	18.9 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 (Ui)	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	Flexible with Ferrule 1/2x 0.75 2.5 mm ²

Connecting Capacity Auxiliary Circuit $\label{eq:Flexible with Ferrule 1/2x\,0.75\,...\,2.5\,mm^2} \\ Flexible with Insulated Ferrule 1/2x\,0.75\,...\,2.5\,mm^2$

	Flexible 1/2x 0.75 2.5 mm² Rigid 1/2x 1 4 mm²
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.75 2.5 mm² Flexible with Insulated Ferrule 1/2x 0.75 2.5 mm² Flexible 1/2x 0.75 2.5 mm² Rigid 1/2x 1 4 mm²
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 0.028 0.304 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

Technical UL/CSA	
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Ampere Rating UL/CSA	18.9 A
Contact Rating UL/CSA	(NC:) B600 (NC:) Q600 (NO:) B600 (NO:) Q600
Connecting Capacity	Flexible 1/2x 16-10 AWG
Main Circuit UL/CSA	Stranded 1/2x 16-10 AWG
Connecting Capacity	Flexible 1/2x 18-10 AWG
Auxiliary Circuit UL/CSA	Stranded 1/2x 18-10 AWG
Tightening Torque	Auxiliary Circuit 7 1 in·lb
UL/CSA	Main Circuit 7 13 in·lb

Environmental	
Ambient Air	Operation -25 +70 °C
Temperature	Operation Compensated -25 +70 °C Storage -50 +80 °C
Ambient Air	Yes
Temperature	
Compensation	
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/EU

Certificates and Declarations (Document Num	per)
ABS Certificate	1SAA941002-0102
ATEX Certificate	1SAA941004-3901
BV Certificate	1SAA941002-0201
CB Certificate	1SAA964002-2002
CCC Certificate	1SAA942001-3801

CCS Certificate	1SAA941001-0901
cUL Certificate	cUL_E48139
Declaration of	1SAD938516-0180
Conformity - CE	
DNV Certificate	1SAA941003-0301
DNV GL Certificate	1SAA941003-0302
EAC Certificate	1SAA941003-2701
GOST Certificate	1SAA941001-2701
Instructions and	2CDC107023M6803
Manuals	
Instructions and	2CDC107043M6801
Manuals (Part 2)	
LR Certificate	1SAA941002-0501
RINA Certificate	RINA_ELE376813CS
RMRS Certificate	1SAA964000-0703
RoHS Information	1SAD938513-0180
UL Certificate	UL_E48139

Container Information	
Package Level 1 Units	1 piece
Package Level 1 Width	91 mm
Package Level 1 Height	51.5 mm
Package Level 1 Depth / Length	68 mm
Package Level 1 Gross Weight	0.183 kg
Package Level 1 EAN	4013614404023
Package Level 2 Units	100 piece
Package Level 2 Width	463 mm
Package Level 2 Height	276 mm
Package Level 2 Depth / Length	263 mm
Package Level 2 Gross Weight	18.863 kg
Package Level 2 EAN	4013614483301

Classifications	Cla	ssif	fica	tio	ns
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Object Classification Code	F
ETIM 4	EC001080 - Electronic overload relay
ETIM 5	EC001080 - Electronic overload relay
ETIM 6	EC001080 - Electronic overload relay
ETIM 7	EC001080 - Electronic overload relay
eClass	7.0 27371502
UNSPSC	39121521
E-Number (Sweden)	3224184

Accessories				
Identifier	Description	Type Qu	Type Quantity	
1SAX101910R1001	DB19EF Single Mounting Kit	DB19EF	1	piece

Categories

Low Voltage Products and Systems \rightarrow Control Products \rightarrow Contactors \rightarrow Electronic Overload Relays

