

PRODUCT-DETAILS

### **EF19-1.0**

# EF19-1.0 Electronic Overload Relay 0.30 ... 1.0 A



#### **General Information**

Extended Product Type	EF19-1.0
Product ID	1SAX121001R1102
EAN	4013614403996
Catalog Description	FE19-1 0 Electronic Overload Relay 0 30 1 0 4

The EF19-1.0 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

1) ATEX is valid for products produced from week 42, 2014. IECEx is valid for products produced from week 15, 2017.

Long Description

#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

certification 1)

Popular Downloads	
Data Sheet, Technical Information	2CDC107025D0201
Instructions and Manuals	2CDC107023M6803
Instructions and Manuals (Part 2)	1SAC200017M0002
Ex Operating Instructions	2CDC107043M6801
Time-Current Characteristic Curve	1SAX100509F0002 1SAX100510F0001
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	1SAX100403F0001
Dimensions	
Product Net Width	44.4 mm
Product Net Height	85 mm
Product Net Depth / Length	59.3 mm
Product Net Weight	0.158 k <u>c</u>
Technical	
Setting Range	0.30 1.0 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Rated Operational Current (I <sub>e</sub> )	14
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 <sub>imp</sub> )	Auxiliary Circuit 6 k\ Main Circuit 6 k\
Rated Insulation Voltage (U <sub>i</sub> )	690 V
Number of Poles	5
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	1
Number of Protected Poles	<u> </u>
Conventional Free-air Thermal Current (I <sub>th</sub> )	Auxiliary Circuit NC 6 A Auxiliary Circuit NO 6 A
Rated Operational Current AC-15 (I <sub>e</sub> )	(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 <sub>e</sub> )	(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 <sup>2</sup>
Auxiliary Circuit	Flexible with Insulated Ferrule 1/2x 0.75 2.5 mm <sup>2</sup>
	Flexible 1/2x 0.75 2.5 mm <sup>2</sup>
	Rigid 1/2x 1 4 mm²
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 2.5 mm <sup>2</sup>
Main Circuit	Flexible with Insulated Ferrule 1/2x 0.75 2.5 mm <sup>2</sup>
	Flexible 1/2x 0.75 2.5 mm <sup>2</sup>
	Rigid 1/2x 1 4 mm <sup>2</sup>
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	Auxiliary Circuit Pozidriv 2
Driver	Main Circuit Pozidriv 2
Mounting Position	16
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

Technical UL/CSA	
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
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

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	3g 3 150 Hz

4

Material Compliance	
Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	No declaration needed
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Eco Transparency	
Environmental	1SAC200096H0001
Information	

Certificates and Declarations	
ABS Certificate	1SAA941002-0102
ATEX Certificate	1SAA941004-3901
BV Certificate	1SAA941002-0201
CB Certificate	1SAA964002-2002
CCS Certificate	1SAA941001-0901
CQC Certificate	CQC2008010309289447
Declaration of Conformity - CCC	2020980309000285
Declaration of Conformity - CE	1SAD101100-3601
Declaration of Conformity - UKCA	1SAD201100-3601
DNV Certificate	1SAA941003-0302
EAC Certificate	1SAA941003-2701
IECEx Certificate	1SAA941000-4001
LR Certificate	1SAA941002-0501
RINA Certificate	RINA_ELE376813CS
RMRS Certificate	1SAA964000-0703
UL Certificate	E48139-19990512

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	4013614403996
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	4013614483271

Classifications	
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
ETIM 8	EC001080 - Electronic overload relay
eClass	V11.0 : 27371502
UNSPSC	39122330
IDEA Granular Category	5365 >> Electronic overload relay
Code (IGCC)	
E-Number (Finland)	3706152
E-Number (Sweden)	3224181

Accessories				
Identifier	Description	Type Quantity		Unit Of Measure
1SAX101910R1001	DB19EF Single Mounting Kit	DB19EF	1	piece
1SAX101911R1001	DRS-F-01 Remote Reset Coil	DRS-F-01	1	piece
1SAX101911R1002	DRS-F-02 Remote Reset Coil	DRS-F-02	1	piece
1SAX101911R1003	DRS-F-03 Remote Reset Coil	DRS-F-03	1	piece
1SAX101911R1004	DRS-F-04 Remote Reset Coil	DRS-F-04	1	piece
1SAX101911R1011	DRS-F-EF-01 Remote Coil	DRS-F-EF-01	1	piece
1SAX101911R1012	DRS-F-EF-02 Remote Coil	DRS-F-EF-02	1	piece
1SAX101911R1013	DRS-F-EF-03 Remote Coil	DRS-F-EF-03	1	piece
1SAX101911R1014	DRS-F-EF-04 Remote Coil	DRS-F-EF-04	1	piece
1SAZ701903R1001	WRH-F Holder	WRH-F	1	piece
1SAZ701903R1011	WRB-400 Bowden Wire	WRB-400	1	piece
1SAZ701903R1012	WRB-600 Bowden Wire	WRB-600	1	piece
1SAZ701903R1013	WRB-1000 Bowden Wire	WRB-1000	1	piece
1SAZ701903R1030	WRBG Gasket	WRBG	1	piece
1SFA616162R1014	KPR3-101L Reset push button	KPR-101L	1	piece

## Categories

 $\textbf{Low Voltage Products and Systems} \rightarrow \textbf{Control Products} \rightarrow \textbf{Contactors} \rightarrow \textbf{Electronic Overload Relays}$ 

