

# Detailed information for: EF19-18.9

This page contains technical data sheet, documents library and links to offering related to this product. If you require any other information, please contact us using form located at the bottom of the page.

[Print...](#)

[Print to Pdf...](#)

Data Sheet

Documentation

## EF19-18.9

### 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.



### Categories

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

### + Accessories

### 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: 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 (Part 2): [2CDC107043M6801](#)

Dimension Diagram: [1SAX100403F0001](#)

## Technical

Setting Range: 5.7 ... 18.9 A

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 ( $U_i$ ): 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<sup>2</sup>  
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>

Connecting Capacity Main Circuit: Flexible with Ferrule 1/2x 0.75 ... 2.5 mm<sup>2</sup>  
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 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

## 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:	18.9 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:	<a href="#">1SAA941002-0101</a>
ATEX Certificate:	<a href="#">1SAA941004-3901</a>
BV Certificate:	<a href="#">1SAA941002-0201</a>
CB Certificate:	<a href="#">1SAA964002-2002</a>
CCC Certificate:	<a href="#">1SAA942001-3801</a>
CCS Certificate:	<a href="#">1SAA941001-0901</a>
cUL Certificate:	<a href="#">cUL_E48139</a>
Declaration of Conformity - CE:	<a href="#">1SAD938513-0180</a>

	1SAD938509-0180
DNV Certificate:	1SAA941003-0301
DNV GL Certificate:	1SAA941003-0302
EAC Certificate:	1SAA941003-2701
GOST Certificate:	1SAA941001-2701
Instructions and Manuals:	2CDC107023M6803
LR Certificate:	1SAA941002-0501
RINA Certificate:	RINA_ELE376813CS
RMRS Certificate:	1SAA964000-0703
RoHS Information:	1SAD938513-0180
UL Certificate:	UL_E48139

## Container Information

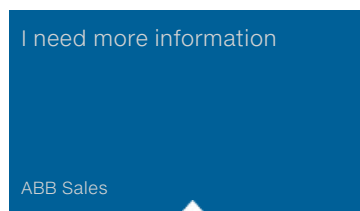
Package Level 1 Units:	1 piece
Package Level 1 Width:	91 mm
Package Level 1 Height:	51.5 mm
Package Level 1 Length:	68 mm
Package Level 1 Gross Weight:	0.183 kg
Package Level 1 EAN:	4013614404023
Package Level 2 Units:	100 piece
Package Level 2 Width:	463 mm
Package Level 2 Height:	276 mm
Package Level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

## Classifications

Object Classification Code:	F
E-nummer:	3224184
ETIM 4:	EC001080 - Electronic overload relay
ETIM 5:	EC001080 - Electronic overload relay
ETIM 6:	EC001080 - Electronic overload relay
eClass:	7.0 27371502
UNSPSC:	39121521

## Contact information

What would you like to do?



Submit your inquiry

Your local ABB Sales Team

Country

Name

Name

Company

E-Mail

Phone

Zip code

Your message

[→ Privacy policy](#)

Cancel

**Send message**

▲ [Close](#)