# EF19-6.3



#### **General Information**

Extended Product Type:	EF19-6.3	
Product ID:	1SAX121001R1104	
EAN:	4013614404016	
Catalog Description:	EF19-6.3 Electronic Overload Relay	
Long Description:	The EF19-6.3 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

# Ordering

EAN:	4013614404016	
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:	4013614483295

Technical

I echnical		
Setting Range:	1.9 6.3 A	
Rated Operational Voltage:	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC	
Rated Operational Current (Ie):	6.3 A	
Rated Operational Current AC-3 (Ie)	: 6.3 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 <sub>imp</sub> ):	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 <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 0.75 A (125 V) NC 0.55 A (24 V) NC 1.5 A (24 V) NC 1.5 A (250 V) NC 0.27 A (250 V) NC 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 0.008 0.083 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			
Environmental Ambient Air Temperature:			
	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C		
Ambient Air Temperature: Ambient Air Temperature	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes		
Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status:	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g 3g / 3 150 Hz		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: <u>Technical UL/CSA</u> Maximum Operating Voltage UL/CSA:	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g 3g / 3 150 Hz		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Voltage UL/CSA: Ampere Rating UL/CSA:	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC Main Circuit 600 V AC 6.3 A		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: <u>Technical UL/CSA</u> Maximum Operating Voltage UL/CSA:	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC Main Circuit 600 V AC		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: <u>Technical UL/CSA</u> Maximum Operating Voltage UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main Circuit UL/CSA:	UL 60947-4-1  Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes  2000 m  11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC  Main Circuit 600 V AC  6.3 A (NC:) B600 (NC:) G600 (NC:) G600 (NC:) G600 (NC:) G600 Flexible 1/2x 16 10 AWG Stranded 1/2x 16 10 AWG		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: <u>Technical UL/CSA</u> Maximum Operating Voltage UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main Circuit UL/CSA: Connecting Capacity Auxiliary Circuit UL/CSA:	UL 60947-4-1 Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m 11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC Main Circuit 600 V AC 6.3 A (NC:) B600 (NC:) C000 (NC:) C000 (NC:) C000 (NC:) C000 Flexible 1/2x 16 10 AWG Stranded 1/2x 18 10 AWG Stranded 1/2x 18 10 AWG		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Voltage UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main Circuit UL/CSA: Connecting Capacity Main Circuit	UL 60947-4-1  Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m  11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC  Main Circuit 600 V AC 6.3 A (NC:) B600 (NC:) C000 (NC:) C000 (NC:) C000 Flexible 1/2x 16 10 AWG Flexible 1/2x 16 10 AWG Flexible 1/2x 18 10 AWG		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: <u>Technical UL/CSA</u> Maximum Operating Voltage UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main Circuit UL/CSA: Connecting Capacity Auxiliary Circuit UL/CSA: Tightening Torque UL/CSA: Certificates and Declarations (Declaration)	UL 60947-4-1  Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m  11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC  Main Circuit 600 V AC 6.3 A (NC:) B600 (NC:) Cool (NC:) B600 (NC:) Cool (		
Ambient Air Temperature:         Ambient Air Temperature         Compensation:         Maximum Operating Altitude         Permissible:         Resistance to Shock acc. to IEC         60068-2-27:         Resistance to Vibrations acc. to IEC         60068-2-6:         RoHS Status:         Technical UL/CSA         Maximum Operating Voltage         UL/CSA:         Ampere Rating UL/CSA:         Connecting Capacity Main Circuit         UL/CSA:         Connecting Capacity Main Circuit         UL/CSA:         Connecting Capacity Auxiliary         Circuit UL/CSA:         Tightening Torque UL/CSA:         Certificates and Declarations (Doc         ABS Certificate:	UL 60947-4-1  Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m  11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC  Main Circuit 600 V AC 6.3 A (NC:) B600 (NC:) Coco (		
Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitude Permissible: Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: <u>Technical UL/CSA</u> Maximum Operating Voltage UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main Circuit UL/CSA: Connecting Capacity Auxiliary Circuit UL/CSA: Tightening Torque UL/CSA: Certificates and Declarations (Declaration)	UL 60947-4-1  Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +80 °C Yes 2000 m  11 ms Pulse 25g 3g / 3 150 Hz Following EU Directive 2011/65/EC  Main Circuit 600 V AC 6.3 A (NC:) B600 (NC:) Cool (NC:) B600 (NC:) Cool (		

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:	3224183			
ETIM 4:	EC001080 - Electronic overload relay			
ETIM 5:	EC001080 - Electronic overload relay			
UNSPSC:	39121521			

# Accessories

1 Products		Filter	
Identifier	Туре	Description	Qty Unit Of Measure
1SAX101910R1001	DB19EF	DB19EF Single Mounting Kit	1 piece

