

PRODUCT-DETAILS

# E16DU-18.9

## E16DU-18.9 Electronic Overload Relay



### General Information

Extended Product Type	E16DU-18.9
Product ID	1SAX111001R1105
EAN	4013614395260
Catalog Description	E16DU-18.9 Electronic Overload Relay

#### Long Description

The E16DU-18.9 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.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Dimensions

Product Net Width	44.4 mm
Product Net Height	74.6 mm
Product Net Depth / Length	57 mm

Product Net Weight

0.15 kg

## Popular Downloads

Data Sheet, Technical Information	1SBC100173C0201
Data Sheet, Technical Information (Part 2)	1SAX100502F0002 1SAX100508F0001
Instructions and Manuals	2CDC107019M5502
Dimension Diagram	1SAX100402F0001 1SAX100401F0001

## 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 <sub>e</sub> )	18.9 A
Rated Operational Current AC-3 (I <sub>e</sub> )	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 <sub>imp</sub> )	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage (U <sub>i</sub> )	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 0.72 A (500 V) NO 0.72 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 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
Suitable For	B6 B7 BC6 BC7 A09 A12 A16 AL09 AL12 AL16 VB6 VB7 VBC6 VBC7
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	B600 Q300
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 16-10 AWG Stranded 1/2x 16-10 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 7 in-lb Main Circuit 7 in-lb

### Environmental

Ambient Air Temperature	Operation -25 ... +70 °C Operation Compensated -25 ... +70 °C Storage -50 ... +85 °C
Ambient Air Temperature Compensation	Yes
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 15g
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU

### Certificates and Declarations (Document Number)

CB Certificate	1SAA964002-2002
CCC Certificate	1SAA942001-3801
cUL Certificate	cUL_E48139
Declaration of Conformity - CE	1SAD938513-0053

EAC Certificate	1SAA941003-2701
Instructions and Manuals	2CDC107019M5502
RMRS Certificate	1SAA964000-0703
RoHS Information	1SAD938510-0187
UL Certificate	UL_E48139

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	65 mm
Package Level 1 Height	46 mm
Package Level 1 Depth / Length	76.5 mm
Package Level 1 Gross Weight	0.17 kg
Package Level 1 EAN	4013614395260
Package Level 2 Units	100 piece
Package Level 2 Width	340 mm
Package Level 2 Height	314 mm
Package Level 2 Depth / Length	245 mm
Package Level 2 Gross Weight	17.563 kg
Package Level 2 EAN	4013614483257

## 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
eClass	7.0 27371502
UNSPSC	39121521

## Categories

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

