

PRODUCT-DETAILS

## E16DU-18.9

# E16DU-18.9 Electronic Overload Relay 5.7 ... 18.9 A



#### **General Information**

Extended Product Type	E16DU-18.9	
Product ID	1SAX111001R1105	
EAN	4013614395260	
Catalog Description	E16DU-18.9 Electronic Overload Relay 5.7 18.9 A	

Catalog Description

The E16DU-18.9 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.

Long Description

Ordering Minimum Order Quantity 1 piece **Customs Tariff Number** 85364900

#### **Popular Downloads**

Instructions and 2CDC107019M5502 Manuals

E16DU-18.9

Instructions and Manuals (Part 2)	1SAC200017M0002
Time-Current Characteristic Curve	1SAX100502F0002 1SAX100508F0001
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	1SAX100402F0001 1SAX100401F0001

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	

Technical	
Setting Range	5.7 18.9 <i>A</i>
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 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
Degree of Protection	IP20
Pollution Degree	2
Connecting Capacity Auxiliary 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

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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	16	
Power Loss	at Rated Operating Conditions per Pole 0.028 0.304 W	
Suitable For	B6	
	B7	
	BC6	
	BC7	
	A09	
	A12	
	A16 AL09	
	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
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	Operation -25 +70 °C
Temperature	Operation Compensated -25 +70 °C Storage -50 +85 °C
Ambient Air	Yes
Temperature	
Compensation	
Maximum Operating	2000 m
Altitude Permissible	
Resistance to Shock acc.	11 ms Pulse 15g
to IEC 60068-2-27	_
Resistance to Vibrations	5g / 3 150 Hz
acc. to IEC 60068-2-6	<i>5,</i>
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

### **Certificates and Declarations**

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CB Certificate	1SAA964002-2002
CQC Certificate	CQC2008010309289447
Declaration of Conformity - CCC	2020980309000285
Declaration of Conformity - CE	1SAD101100-3602
Declaration of Conformity - UKCA	1SAD201100-3602
EAC Certificate	1SAA941003-2701
RMRS Certificate	1SAA964000-0703
UL Certificate	E48139-19990512

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
ETIM 8	EC001080 - Electronic overload relay
eClass	V11.0 : 27371502
UNSPSC	39122330
IDEA Granular Category Code (IGCC)	5365 >> Electronic overload relay
E-Number (Finland)	3709394
E-Number (Sweden)	3228764

Accessories				
Identifier 1SAX101110R0001	Description	Type Quantity		Unit Of Measure
	DB16E Single Mounting Kit	DB16E	1	piece
1SFA616162R1014	KPR3-101L Reset push button	KPR-101L	1	piece

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## Categories

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

