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
Long 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.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

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Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	2CDC107019M5502
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 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Rated Operational Current (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 0.72 A (500 V) NO 0.72 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 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	1 ... 6
Power Loss	at Rated Operating Conditions per Pole 0.028 ... 0.304 W
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
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	5g 3 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658

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REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

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	box 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

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 (Norway)	4116949
E-Number (Sweden)	3228764

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SAX101110R0001	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 → Control Products → Contactors → Electronic Overload Relays



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