

Representative Image

Alternate Catalog No. E16DU18.9
Catalog No. 1SAX111001R1105

Description: E16DU-18.9 Electronic Overload Relay

UPC No 4013614395260

Home > Contactors & Starters > Overload Relays

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.

Descriptors

Category	Overload Relays

Specifications

Product Name	Electronic Overload Relay
Rated Operational Voltage	Auxiliary Circuit 600 V AC / DC Main Circuit 690 V AC
Rated Operational Current	18.9 A
Setting Range	5.7 ... 18.9 A
Rated Impulse Withstand Voltage	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage	690 V
Number of Poles	3
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	1
Number of Protected Poles	3
Trip Class	class 10E class 20E class 30E
Conventional Free-air Thermal Current	Auxiliary Circuit NC 6 A Auxiliary Circuit NO 6 A
Rated Frequency	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 50Hz Main Circuit 60 Hz
Rated Operational Current AC-3	18.9 A
Degree of Protection	IP20
Pollution Degree	3

by ABB

Specifications

Suitable For	B6 B7 BC6 BC7 A09 A12 A16 AL09 AL12 AL16 VB6 VB7 VBC6 VBC7
Rated Operational Current AC-15	(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	(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
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
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
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 9 mm
Tightening Torque	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 0.8 ... 1.5 N·m
Mounting Position	Position 1 to 6
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Recommended Screw Driver	Auxiliary Circuit Pozidriv 2 Main Circuit Pozidriv 2
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
Ambient Air Temperature	Operation -25 ... +70 °C Operation Compensated -25 ... +70 °C Storage -50 ... +85 °C
Ambient Air Temperature Compensation	Yes
Connecting Capacity Auxiliary Circuit UL/CSA	Flexible 1/2x 16-10 AWG Stranded 1/2x 16-10 AWG
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 15g
Maximum Operating Altitude Permissible	2000 m
RoHS Status	Following EU Directive 2011/65/EU
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
Tightening Torque UL/CSA	Auxiliary Circuit 7 in·lb Main Circuit 7 in·lb
Object Classification Code	F

Classifications

ETIM 5.0	EC001080 - Electronic overload relay
ETIM 6.0	EC001080 - Electronic overload relay
ETIM 7	EC001080 - Electronic overload relay
eClass	7.0 27371502
ETIM 4	EC001080 - Electronic overload relay

Dimensions

Product Net Width	44.4 mm
Product Net Height	74.6 mm
Product Net Weight	0.15kg
Product Net Depth / Length	57 mm

Package Information

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

Ordering

ECN	N
Customs Tariff Number	85364900
ECCN	N
ABB MDF Code	3DL - Relays (LV / Control + Protection)