

## PRODUCT-DETAILS

# E45DU-45

## E45DU-45 Electronic Overload Relay 15 ... 45 A



### General Information

Extended Product Type	E45DU-45
Product ID	1SAX211001R1102
EAN	4016779666619
Catalog Description	E45DU-45 Electronic Overload Relay 15 ... 45 A

#### Long Description

The E45DU-45 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

### Popular Downloads

Data Sheet, Technical Information	1SBC100173C0201
Data Sheet, Technical Information (Part 2)	1SAX100502F0002 1SAX100508F0001
Instructions and Manuals	2CDC107013M5502
Dimension Diagram	1SAX200401F0001

Dimensions

Product Net Width	45 mm
Product Net Height	97 mm
Product Net Depth / Length	85.1 mm
Product Net Weight	0.35 kg

Technical

Setting Range	15 ... 45 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Rated Operational Current (I <sub>e</sub> )	45 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 2.5 ... 10 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 2.5 ... 10 mm <sup>2</sup> Flexible 1/2x 2.5 ... 10 mm <sup>2</sup> Rigid 1/2x 2.5 ... 16 mm <sup>2</sup>
Tightening Torque	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 2.3 ... 2.6 N·m
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 13 mm
Recommended Screw Driver	Auxiliary Circuit Pozidriv 2 Main Circuit Pozidriv 2
Mounting Position	1 ... 6
Suitable For	A26 A30 A40 AL26 AL30 AL40 TAL26 TAL30 TAL40
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
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 14-6 AWG Stranded 1/2x 14-6 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 22 in·lb

## Environmental

Ambient Air Temperature	Operation -25 ... +70 °C Operation Compensated -25 ... +70 °C Storage -25 ... +70 °C
Ambient Air Temperature Compensation	Yes
Maximum Operating Altitude Permissible	2000 m
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

## Material Compliance

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

## Certificates and Declarations

CB Certificate	1SAA964003-2002
CQC Certificate	CQC2006010309192161
Declaration of Conformity - CCC	2020980309000293
Declaration of Conformity - CE	1SAD101100-3602
Declaration of Conformity - UKCA	1SAD201100-3602
RMRS Certificate	1SAA964000-0703
UL Certificate	E48139-19990512

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	101 mm
Package Level 1 Height	49.5 mm
Package Level 1 Depth / Length	89 mm
Package Level 1 Gross Weight	0.386 kg
Package Level 1 EAN	4016779666619
Package Level 2 Units	50 piece
Package Level 2 Width	525 mm
Package Level 2 Height	189 mm
Package Level 2 Depth / Length	263 mm
Package Level 2 Gross Weight	19.863 kg
Package Level 2 EAN	4013614483325

## 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

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## Categories

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

