

# E80DU-80

ABB contact for United  
States of America

## General Information

<b>Extended Product Type:</b>	E80DU-80
<b>Product ID:</b>	1SAX311001R1101
<b>EAN:</b>	4016779666626
<b>Catalog Description:</b>	E80DU-80 Electronic Overload Relay
<b>Long Description:</b>	The E80DU-80 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.

## Categories

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

## Ordering

<b>EAN:</b>	4016779666626
<b>Minimum Order Quantity:</b>	1 piece
<b>Customs Tariff Number:</b>	85364900

## Dimensions

<b>Product Net Width:</b>	70.0 mm
<b>Product Net Height:</b>	127.2 mm
<b>Product Net Depth:</b>	104.4 mm
<b>Product Net Weight:</b>	0.775 kg

## Container Information

<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	139.0 mm
<b>Package Level 1 Height:</b>	79.5 mm
<b>Package Level 1 Length:</b>	107.0 mm
<b>Package Level 1 Gross Weight:</b>	0.847 kg
<b>Package Level 2 Units:</b>	20 piece
<b>Package Level 2 Width:</b>	413.0 mm
<b>Package Level 2 Height:</b>	227 mm
<b>Package Level 2 Length:</b>	290.0 mm
<b>Package Level 2 Gross Weight:</b>	17.503 kg
<b>Package Level 2 EAN:</b>	4013614483356

## Technical

<b>Setting Range:</b>	27.0 ... 80.0 A
<b>Rated Operational Voltage:</b>	Auxiliary Circuit 600 V AC DC V Main Circuit 1000 V AC
<b>Rated Operational Current (I<sub>o</sub>):</b>	80 A

<b>Rated Operational Current AC-3 (<math>I_e</math>):</b>	80 A
<b>Rated Frequency (f):</b>	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	Auxiliary Circuit 6 kV Main Circuit 8 kV
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	1000 V
<b>Number of Poles:</b>	3
<b>Number of Auxiliary Contacts NC:</b>	1
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Protected Poles:</b>	3
<b>Conventional Free-air Thermal Current (<math>I_{th}</math>):</b>	Auxiliary Circuit NC 6 A Auxiliary Circuit NO 6 A
<b>Rated Operational Current AC-15 (<math>I_e</math>):</b>	(240V) NC 3 A (240V) NO 3 A (400V) NC 1.1 A (400V) NO 1.1 A (500V) NC 0.72 A (500V) NO 0.72 A
<b>Rated Operational Current DC-13 (<math>I_e</math>):</b>	(125V) NC 0.55 A (125V) NO 0.5 A (24V) NC 1.5 A (24V) NO 1.5 A (250V) NC 0.27 A (250V) NO 0.27 A (60V) NC 0.55 A (60V) NO 0.55 A
<b>Degree of Protection:</b>	IP20
<b>Pollution Degree:</b>	3
<b>Connecting Capacity-Auxiliary Circuit:</b>	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>
<b>Connecting Capacity-Main Circuit:</b>	Flexible 1x 6 ... 70 mm <sup>2</sup> Flexible 2x 6 ... 35 mm <sup>2</sup> Rigid 1x 6 ... 95 mm <sup>2</sup> Rigid 2x 6 ... 35 mm <sup>2</sup>
<b>Tightening Torque:</b>	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 6 ... 6.5 N·m
<b>Wire Stripping Length:</b>	Auxiliary Circuit 9 mm
<b>Recommended Screw Driver:</b>	Auxiliary Circuit Pozidriv 2 Main Circuit Hexagon 4
<b>Mounting Position:</b>	Position 1 to 6
<b>Suitable For:</b>	A50 A63 A75 AE50 AE63 AE75 TAE50 TAE63 TAE75
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1

## Environmental

<b>Ambient Air Temperature:</b>	Operation -25 ... +70 °C Operation Compensated -25 ... +70 °C Storage -25 ... +70 °C
<b>Ambient Air Temperature Compensation:</b>	Yes
<b>Maximum Operating Altitude Permissible:</b>	2000 m
<b>RoHS Status:</b>	Following EU Directive 2002/95/EC August 18, 2005 and amendment

## Technical UL/CSA

<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V AC
<b>Ampere Rating UL/CSA:</b>	80 A
<b>Connecting Capacity-Main Circuit UL/CSA:</b>	Flexible 1/2x 10 ... 0 AWG Stranded 1/2x 10 ... 0 AWG
<b>Connecting Capacity-Auxiliary Circuit UL/CSA:</b>	Flexible 1/2x 16 ... 10 AWG Stranded 1/2x 16 ... 10 AWG
<b>Tightening Torque UL/CSA:</b>	Auxiliary Circuit 7 in·lb Main Circuit 53 in·lb

## Certificates and Declarations (Document Number)

<b>CB Certificate:</b>	1SAA964003-2001
<b>CCC Certificate:</b>	1SAA964001-3802
<b>cUL Certificate:</b>	cUL_E48139
<b>Declaration of Conformity - CE:</b>	1SAD938508-0053
<b>RMRS Certificate:</b>	1SAA964000-0702
<b>RoHS Information:</b>	1SAA964002-4401
<b>UL Certificate:</b>	UL_E48139

## Classifications

<b>Object Classification Code:</b>	F
<b>eClass:</b>	7.0 27371502
<b>E-number:</b>	3228767
<b>ETIM 4.0:</b>	EC001080 - Electronic overload relay
<b>ETIM 5.0:</b>	EC001080 - Electronic overload relay
<b>UNSPSC:</b>	39121500

