EF45-30

General Information

Extended Product Type: EF45-30

Product ID: 1SAX221001R1101 **EAN:** 4013614403965

Catalog Description: EF45-30 Electronic Overload Relay

Long Description: The EF45-30 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

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

EAN: 4013614403965

Minimum Order Quantity: 1 piece
Customs Tariff Number: 85364900

Dimensions

Product Net Width: 45.0 mm
Product Net Height: 104.7 mm
Product Net Depth: 86.0 mm
Product Net Weight: 0.362 kg

Container Information

Package Level 1 Units: 1 piece
Package Level 1 Width: 111.0 mm
Package Level 1 Height: 51.5 mm
Package Level 1 Length: 93.0 mm
Package Level 1 Gross Weight: 0.398 kg
Package Level 2 Units: 50 piece
Package Level 2 Width: 558.0 mm

Package Level 2 Height: 189.0 mm
Package Level 2 Length: 263.0 mm
Package Level 2 Gross Weight: 20.463 kg
Package Level 2 EAN: 4013614483332

Technical

Setting Range: 9.00 ... 30.0 A

Rated Operational Voltage: Auxiliary Circuit 600 V AC DC

Main Circuit 690 V AC

Rated Operational Current (I_e): 30 A Rated Operational Current AC-3 (I_e): 30.00 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 (Ith):

Auxiliary Circuit NC 6.00 A Auxiliary Circuit NO 6.00 A

Rated Operational Current AC-15 (I_e): (240V) NC 3.000 A

(240V) NO 3.000 A (400V) NC 1.100 A (400V) NO 1.100 A (500V) NC 0.750 A (500V) NO 0.750 A

Rated Operational Current DC-13 (Ie): (125V) NC 0.550 A

(125V) NO 0.500 A (24V) NC 1.500 A (24V) NO 1.500 A (250V) NC 0.270 A (250V) NO 0.270 A (60V) NC 0.550 A (60V) NO 0.550 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 $1/2x \ 1 \dots \ 4 \ mm^2$

Connecting Capacity-Main Circuit: Flexible with Ferrule 1/2x 2.5 ... 10 mm²

Flexible with Insulated Ferrule 1/2x 2.5 ... 10 mm²

Flexible 1/2x 2.5 ... 10 mm² Rigid 1/2x 2.5 ... 16 mm²

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: Position 1 to 6

Power Loss: Per Pole 0.021 ... 0.234 W

Suitable For: AF26

AF30 AF38

Standards: IEC/EN 60947-1

> IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1

Environmental

Operation -25 ... +70 °C **Ambient Air Temperature:**

Operation Compensated -25 ... +70 °C

Storage -50 ... +80 °C

Ambient Air Temperature

Compensation:

Yes

Maximum Operating Altitude

Permissible:

2000 m

Resistance to Shock acc. to IEC

60068-2-27:

11 ms Pulse 25g

Resistance to Vibrations acc. to IEC 5g / 3 ... 150 Hz

60068-2-6:

RoHS Status: Following EU Directive 2011/65/EC

Technical UL/CSA

Maximum Operating Voltage

Main Circuit 600 V AC

UL/CSA:

Ampere Rating UL/CSA: 30.00 A Contact Rating UL/CSA: (NC:) B600 (NC:) Q600

(NO:) B600 (NO:) Q600

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 18 ... 10 AWG Stranded 1/2x 18 ... 10 AWG Auxiliary Circuit 7 ... 1 in·lb

Tightening Torque UL/CSA: Main Circuit 20 ... 22 in lb

Certificates and Declarations (Document Number)

ABS Certificate: 1SAA941002-0101 **ATEX Certificate:** 1SAA941002-3901 **BV** Certificate: 1SAA941002-0201 **CB** Certificate: 1SAA964003-2002 **CCC Certificate:** 1SAA942002-3801 **cUL** Certificate: cUL E48139 **Declaration of Conformity - CE:** 1SAD938506-0180

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DNV Certificate: 1SAA941003-0301 **GOST Certificate:** 1SAA941001-2701 LR Certificate: 1SAA941002-0501
RINA Certificate: RINA_ELE376813CS
RMRS Certificate: 1SAA964000-0702
RoHS Information: 1SAA942001-4405

UL_E48139

Classifications

Object Classification Code: F

E-nummer: 3224185

ETIM 4.0: EC001080 - Electronic overload relay
ETIM 5.0: EC001080 - Electronic overload relay