PRODUCT-DETAILS

# EF750-800

## EF750-800 Electronic Overload Relay



### General Information

| | |
|---|---|
| Extended Product Type | EF750-800 |
| Product ID | 1SAX821001R1101 |
| EAN | 4013614487422 |
| Catalog Description | EF750-800 Electronic Overload Relay |
| Long Description | The EF460-500 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. The EF460 and EF750 have ATEX and IECEx certification 1)<br><br>1) ATEX is valid for products produced from week 42, 2014.<br>IECEx is valid for products produced from week 15, 2017. |

### Ordering

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|---|---|
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85364900 |

### Popular Downloads

| | |
|---|---|
| Data Sheet, Technical | 2CDC107045D0201 |

| Information | |
|---|---|
| Instructions and Manuals | 2CDC107034M6803 |
| Instructions and Manuals (Part 2) | 2CDC107043M6801 |
| Time-Current Characteristic Curve | 1SAX100509F0001;1SAX100510F0001 |
| Dimension Diagram | 1SAX800402F0001 |

## Dimensions

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|---|---|
| Product Net Width | 244 mm |
| Product Net Height | 111.6 mm |
| Product Net Depth / Length | 187.73 mm |
| Product Net Weight | 2.765 kg |

## Technical

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|---|---|
| Setting Range | 250 ... 800 A |
| Rated Operational Voltage | Auxiliary Circuit 600 V AC/DC<br>Main Circuit 1000 V AC |
| Rated Operational Current ($I_e$) | 800 A |
| Rated Operational Current AC-3 ($I_e$) | 800 A |
| Rated Frequency (f) | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC<br>Main Circuit 50 Hz<br>Main Circuit 60 Hz |
| Rated Impulse Withstand Voltage ($U_{imp}$) | Auxiliary Circuit 6 kV<br>Main Circuit 8 kV |
| Rated Insulation Voltage ($U_i$) | 1000 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<br>Auxiliary Circuit NO 6 A |
| Rated Operational Current AC-15 ($I_e$) | (240 V) NC 3 A<br>(240 V) NO 3 A<br>(400 V) NC 1.1 A<br>(400 V) NO 1.1 A<br>(500 V) NC 0.75 A<br>(500 V) NO 0.75 A |
| Rated Operational Current DC-13 ($I_e$) | (125 V) NC 0.55 A<br>(125 V) NO 0.5 A<br>(24 V) NC 1.5 A<br>(24 V) NO 1.5 A<br>(250 V) NC 0.27 A<br>(250 V) NO 0.27 A<br>(60 V) NC 0.55 A<br>(60 V) NO 0.55 A |
| Degree of Protection | Housing IP20<br>Main Circuit Terminals IP00 |
| Pollution Degree | 3 |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm² |

| | |
|---|---|
| | Flexible 1/2x 0.75 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Tightening Torque | Auxiliary Circuit 0.8 ... 1.2 N·m |
| Wire Stripping Length | Auxiliary Circuit 9 mm |
| Recommended Screw Driver | Auxiliary Circuit Pozidriv 2 |
| Mounting Position | Position 1 to 6 |
| Suitable For | AF580<br>AF750 |
| Standards | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>UL 60947-1<br>UL 60947-4-1 |

## Technical UL/CSA

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|---|---|
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V AC |
| Ampere Rating UL/CSA | 800 A |
| Contact Rating UL/CSA | (NC:) B600<br>(NC:) Q600<br>(NO:) B600<br>(NO:) Q600 |
| Connecting Capacity Auxiliary Circuit UL/CSA | Flexible 1/2x 18-10 AWG<br>Stranded 1/2x 18-10 AWG |
| Tightening Torque UL/CSA | Auxiliary Circuit 7 ... 1 in·lb |

## Environmental

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|---|---|
| Ambient Air Temperature | Operation -25 ... +70 °C<br>Operation Compensated -25 ... +70 °C<br>Storage -25 ... +70 °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 60068-2-6 | 3g / 3 ... 150 Hz |
| RoHS Status | Following EU Directive 2011/65/EU |

## Certificates and Declarations (Document Number)

| | |
|---|---|
| ABS Certificate | 1SAA941002-0102 |
| ATEX Certificate | 1SAA941004-3901 |
| BV Certificate | 1SAA941002-0201 |
| CB Certificate | 1SAA942009-2001 |
| CCS Certificate | 1SAA941001-0901 |
| CQC Certificate | CQC2013010309662463 |
| cUL Certificate | cUL_E48139 |
| Declaration of Conformity - CCC | 2020980309000289 |
| Declaration of Conformity - CE | 1SAD938516-0180 |
| DNV Certificate | 1SAA941003-0301 |
| DNV GL Certificate | 1SAA941003-0302 |
| EAC Certificate | 1SAA941003-2701 |

| | |
|---|---|
| Environmental Information | 1SAC200104H0001 |
| GOST Certificate | 1SAA941001-2701 |
| Instructions and Manuals | 2CDC107034M6803 |
| Instructions and Manuals (Part 2) | 2CDC107043M6801 |
| LR Certificate | 1SAA941002-0501 |
| RINA Certificate | RINA_ELE376813CS |
| RMRS Certificate | 1SAA941001-0701 |
| RoHS Information | 1SAD938513-0180 |
| Time-Current Characteristic Curve | 1SAX100509F0001;1SAX100510F0001 |
| UL Certificate | UL_E48139 |

## Container Information

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|---|---|
| Package Level 1 Units | 1 piece |
| Package Level 1 Width | 144 mm |
| Package Level 1 Height | 250 mm |
| Package Level 1 Depth / Length | 270 mm |
| Package Level 1 Gross Weight | 2.915 kg |
| Package Level 1 EAN | 4013614487422 |

## Classifications

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|---|---|
| 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 |
| eClass | V11.0 : 27371502 |
| UNSPSC | 39121520 |
| IDEA Granular Category Code (IGCC) | 5364 >> Overload relay |
| E-Number (Finland) | 3707464 |
| E-Number (Sweden) | 3210295 |

## Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|---|---|---|---|---|
| 1SAX801904R0002 | LT750EF Terminal Shroud | LT750EF | 1 | piece |
| 1SAX801902R1011 | DT800/AF750-S Mounting Kit | DT800/AF750-S | 1 | piece |
| 1SAX801902R1001 | DT800/AF750-L Mounting Kit | DT800/AF750-L | 1 | piece |
| 1SAX101911R1001 | DRS-F-01 Remote Reset Coil | DRS-F-01 | 1 | piece |
| 1SAX101911R1002 | DRS-F-02 Remote Reset Coil | DRS-F-02 | 1 | piece |
| 1SAX101911R1003 | DRS-F-03 Remote Reset Coil | DRS-F-03 | 1 | piece |
| 1SAX101911R1004 | DRS-F-04 Remote Reset Coil | DRS-F-04 | 1 | piece |
| 1SAX101911R1011 | DRS-F-EF-01 Remote Coil | DRS-F-EF-01 | 1 | piece |
| 1SAX101911R1012 | DRS-F-EF-02 Remote Coil | DRS-F-EF-02 | 1 | piece |
| 1SAX101911R1013 | DRS-F-EF-03 Remote Coil | DRS-F-EF-03 | 1 | piece |
| 1SAX101911R1014 | DRS-F-EF-04 Remote Coil | DRS-F-EF-04 | 1 | piece |
| 1SAZ701903R1001 | WRH-F Holder | WRH-F | 1 | piece |
| 1SAZ701903R1011 | WRB-400 Bowden Wire | WRB-400 | 1 | piece |
| 1SAZ701903R1012 | WRB-600 Bowden Wire | WRB-600 | 1 | piece |
| 1SAZ701903R1013 | WRB-1000 Bowden Wire | WRB-1000 | 1 | piece |
| 1SAZ701903R1030 | WRBG Gasket | WRBG | 1 | piece |
| 1SFA616162R1014 | KPR3-101L Reset Pushbutton | KPR-101L | 1 | piece |

## Categories

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

