

PRODUCT-DETAILS

EF205-210

EF205-210 Electronic Overload Relay



General Information

| Extended Product Type | EF205-210 |
|-----------------------|-----------------|
| Product ID | 1SAX531001R1101 |
| EAN | 4013614442223 |

Catalog Description

EF205-210 Electronic Overload Relay

The EF205-210 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. EF205 has

Long Description

1) ATEX is valid for products produced from week 42, 2014. IECEx is valid for products produced from week 15, 2017.

Ordering

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

Popular Downloads

Data Sheet, Technical 2CDC107042D0201

| Information | |
|----------------------|-----------------|
| Instructions and | 2CDC107036M6802 |
| Manuals | |
| Instructions and | 2CDC107043M6801 |
| Manuals (Part 2) | |
| Time-Current | 1SAX100509F0001 |
| Characteristic Curve | 1SAX100510F0001 |
| Dimension Diagram | 1SAX500401F0001 |
| | |

| Dimensions | |
|----------------------------|----------|
| Product Net Width | 105 mm |
| Product Net Height | 171 mm |
| Product Net Depth / Length | 122.8 mm |
| Product Net Weight | 1.256 kg |

| Technical | |
|---|---|
| Setting Range | 63 210 A |
| Rated Operational Voltage | Auxiliary Circuit 600 V AC/DC Main Circuit 1000 V AC |
| Rated Operational Current (I _e) | 210 A |
| Rated Operational Current AC-3 (I _e) | 210 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 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 5 A Auxiliary Circuit NO 5 A |
| Rated Operational Current AC-15 (I _e) | (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 0.75 A (500 V) NO 0.75 A |
| Rated Operational Current DC-13 (I _e) | (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 | Housing IP20 Main Circuit Terminals IP00 |
| 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 4 mm² |
|-----------------------|--|
| Connecting Capacity | Hole Diameter > 8 mm² |
| Main Circuit | Rigid or Flexible with Cable Lug 1x 16 185 mm² |
| | Rigid or Flexible with Cable Lug 2x 16 120 mm ² |
| Tightening Torque | Auxiliary Circuit 0.8 1.2 N·m |
| | Main Circuit 18 N·m |
| Wire Stripping Length | Auxiliary Circuit 9 mm |
| Recommended Screw | Auxiliary Circuit Pozidriv 2 |
| Driver | |
| Mounting Position | 16 |
| Power Loss | at Rated Operating Conditions per Pole 0.107 1.191 W |
| Suitable For | A145 |
| | A185 |
| | AF145 |
| | AF185 |
| | AF190 |
| | AF205 |
| 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 |
| Ampere Rating UL/CSA | 210 A |
| Contact Rating UL/CSA | (NC:) B600 (NC:) Q600 (NO:) B600 (NO:) Q600 |
| Connecting Capacity Main Circuit UL/CSA | Stranded 1/2x 6-0000 AWG |
| Connecting Capacity Auxiliary Circuit UL/CSA | Flexible 1/2x 18-10 AWG Stranded 1/2x 18-10 AWG |
| Tightening Torque UL/CSA | Auxiliary Circuit 7 11 in·lb Main Circuit 160 in·lb |

| Environmental | |
|--------------------------|-----------------------------------|
| Ambient Air | Operation -25 +70 °C |
| Temperature | Operation Compensated -25 +70 °C |
| • | Storage -50 +85 °C |
| Ambient Air | Yes |
| Temperature | |
| Compensation | |
| Maximum Operating | 2000 m |
| Altitude Permissible | |
| Resistance to Shock acc. | 11 ms Pulse 25g |
| to IEC 60068-2-27 | _ |
| Resistance to Vibrations | 5q / 3 150 Hz |
| acc. to IEC 60068-2-6 | Ç. |
| 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 | 1SAA942007-2001 |
| CCS Certificate | 1SAA941001-0901 |

EF205-210 4

| CQC Certificate | CQC2012010309537805 |
|--------------------------------------|------------------------------------|
| cUL Certificate | cUL_E48139 |
| Declaration of Conformity - CCC | 2020980309000290 |
| Declaration of Conformity - CE | 1SAD938516-0180 |
| Declaration of Conformity - UKCA | 1SAD938502-1180 |
| DNV Certificate | 1SAA941003-0301 |
| DNV GL Certificate | 1SAA941003-0302 |
| EAC Certificate | 1SAA941003-2701 |
| Environmental Information | 1SAC200101H0001 |
| IECEx Certificate | 1SAA941000-4001 |
| Instructions and Manuals | 2CDC107036M6802 |
| 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 | |
|-----------------------------------|---------------|
| Package Level 1 Units | 1 piece |
| Package Level 1 Width | 195 mm |
| Package Level 1 Height | 199 mm |
| Package Level 1 Depth / Length | 140 mm |
| Package Level 1 Gross Weight | 1.624 kg |
| Package Level 1 EAN | 4013614442223 |

| Classifications | |
|------------------------|--------------------------------------|
| Object Classification | F |
| Code | |
| 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 | 5364 >> Overload relay |
| Code (IGCC) | |
| E-Number (Finland) | 3705899 |
| E-Number (Sweden) | 3210248 |

Accessories

| Identifier 1SAX501904R0001 | Description LT200E Terminal Shroud | Type Quantity | | Unit Of Measure |
|----------------------------|-------------------------------------|---------------|---|--------------------|
| | | LT200E | 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 push button | KPR-101L | 1 | piece |

Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Electronic\ Overload\ Relays$

