

## Alternate Catalog No. EF205-210 Catalog No. 1SAX531001R1101

**Description:** EF205-210 Electronic Overload Relay

**UPC No** 4013614442223

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The EF205-210 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. The EF205 and EF370 have ATEX and IECEx certification 1) 1) ATEX is valid for products produced from week 42, 2014. IECEx is valid for products produced from week 15, 2017.



Representative Image

### Descriptors

Category	Overload Relays
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### Specifications

Product Name	Electronic Overload Relay
Rated Operational Voltage	Auxiliary Circuit 600 V AC / DC Main Circuit 1000 V AC
Rated Operational Current	210 A
Setting Range	63 ... 210 A
Rated Impulse Withstand Voltage	Auxiliary Circuit 6 kV Main Circuit 8 kV
Rated Insulation Voltage	1000 V
Number of Poles	3
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	1
Number of Protected Poles	3
Trip Class	class 10E class 20E class 30E
Conventional Free-air Thermal Current	Auxiliary Circuit NC 5 A Auxiliary Circuit NO 5 A
Rated Frequency	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 50Hz Main Circuit 60 Hz
Rated Operational Current AC-3	210 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP00
Pollution Degree	3
Suitable For	A145 A185 AF145 AF185 AF190 AF205

by **ABB**

## Specifications

Rated Operational Current AC-15	(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	(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
Connecting Capacity Main Circuit	Hole Diameter > 8 mm <sup>2</sup> Rigid or Flexible with Cable Lug 1x 16 ... 185 mm <sup>2</sup> Rigid or Flexible with Cable Lug 2x 16 ... 120 mm <sup>2</sup>
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>
Wire Stripping Length	Auxiliary Circuit 9 mm
Tightening Torque	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 18 N·m
Mounting Position	Position 1 to 6
Power Loss	at Rated Operating Conditions per Pole 0.107 ... 1.191 W
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Recommended Screw Driver	Auxiliary Circuit Pozidriv 2
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
Ambient Air Temperature	Operation -25 ... +70 °C Operation Compensated -25 ... +70 °C Storage -50 ... +85 °C
Ambient Air Temperature Compensation	Yes
Connecting Capacity Auxiliary Circuit UL/CSA	Flexible 1/2x 18-10 AWG Stranded 1/2x 18-10 AWG
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 25g
Maximum Operating Altitude Permissible	2000 m
RoHS Status	Following EU Directive 2011/65/EU
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
Tightening Torque UL/CSA	Auxiliary Circuit 7 ... 11 in·lb Main Circuit 160 in·lb
Object Classification Code	F

## Classifications

ETIM 5.0	EC001080 - Electronic overload relay
ETIM 6.0	EC001080 - Electronic overload relay
ETIM 7	EC001080 - Electronic overload relay
eClass	7.0 27371502
ETIM 4	EC001080 - Electronic overload relay

## Dimensions

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

## Package Information

Package Level 1 Units	1 piece
Package Level 1 Width	195 mm
Package Level 1 Depth / Length	140 mm
Package Level 1 Gross Weight	1.624 kg
Package Level 1 EAN	4013614442223
Package Level 1 Height	199 mm

## Ordering

ECN	N
Customs Tariff Number	85364900
ECCN	N
ABB MDF Code	3DL - Relays (LV / Control + Protection)