

**PRODUCT-DETAILS** 

## **EF460-500**

# EF460-500 Electronic Overload Relay



Canara	linfa	rmation	

Extended Product Type	EF460-500
Product ID	1SAX721001R1101
EAN	4013614487415
Catalog Description	FF460-500 Electronic Overload Relay

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)

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

#### **Dimensions**

Product Net Width 186 mm

Product Net Height	103.5 mm
Product Net Depth / Length	152.13 mm
Product Net Weight	1.182 kg

Popular Downloads	
Data Sheet, Technical Information	2CDC107045D0201
Data Sheet, Technical Information (Part 2)	1SAX100509F0001 1SAX100510F0001
Instructions and Manuals	2CDC107033M6803
Instructions and Manuals (Part 2)	2CDC107043M6801
Dimension Diagram	1SAX700402F0001

Technical	
Setting Range	150 500 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 1000 V AC
Rated Operational Current (I <sub>e</sub> )	500 A
Rated Operational Current AC-3 (I <sub>e</sub> )	500 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 <sub>imp</sub> )	Auxiliary Circuit 6 kV Main Circuit 8 kV
Rated Insulation Voltage (U <sub>i</sub> )	1000 V
Number of Poles Number of Auxiliary	
Contacts NC Number of Auxiliary Contacts NO	
Number of Protected Poles	3
Conventional Free-air Thermal Current (I <sub>th</sub> )	Auxiliary Circuit NC 6 A Auxiliary Circuit NO 6 A
Rated Operational Current AC-15 (I <sub>e</sub> )	(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 <sub>e</sub> )	(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 $1/2x\ 0.75\\ 2.5\ mm^2$ Flexible with Insulated Ferrule $1/2x\ 0.75\\ 2.5\ mm^2$

	Flexible 1/2x 0.75 2.5 mm² 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	AF400 AF460
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	500 A
Contact Rating UL/CSA	(NC:) B600
	(NC:) Q600
	(NO:) B600
	(NO:) Q600
Connecting Capacity	Flexible 1/2x 16-10 AWG
Auxiliary Circuit UL/CSA	Stranded 1/2x 18-10 AWG
Tightening Torque	Auxiliary Circuit 7 1 in·lb
UL/CSA	

Environmental	
Ambient Air Temperature	Operation -25 +70 °C Operation Compensated -25 +70 °C 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
CCC Certificate	1SAA942009-3801
CCS Certificate	1SAA941001-0901
cUL Certificate	cUL_E48139
Declaration of Conformity - CE	1SAD938516-0180 1SAD938509-0180
DNV Certificate	1SAA941003-0301
DNV GL Certificate	1SAA941003-0302
EAC Certificate	1SAA941003-2701
GOST Certificate	1SAA941001-2701
Instructions and	2CDC107033M6803

Manuals	
Instructions and	2CDC107043M6801
Manuals (Part 2)	
LR Certificate	1SAA941002-0501
RINA Certificate	RINA_ELE376813CS
RMRS Certificate	1SAA941001-0701
RoHS Information	1SAD938513-0180
UL Certificate	UL_E48139

Container Information	
Package Level 1 Units	1 piece
Package Level 1 Width	140 mm
Package Level 1 Height	199 mm
Package Level 1 Depth / Length	195 mm
Package Level 1 Gross Weight	1.554 kg
Package Level 1 EAN	4013614487415

Classifications	
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	7.0 27371502
UNSPSC	39121521
E-Number (Sweden)	3210294

### Categories

 $\mbox{Low Voltage Products and Systems} \rightarrow \mbox{Control Products} \rightarrow \mbox{Contactors} \rightarrow \mbox{Electronic Overload Relays} \\ \mbox{Drives} \rightarrow \mbox{Services} \rightarrow \mbox{Spares and Consumables} \rightarrow \mbox{Parts}$ 

