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PRODUCT-DETAILS

EF96-100

EF96-100 Electronic Overload Relay 36 ... 100 A



EAN	4013614442247
Product ID	1SAX341001R1101
Extended Product Type	EF96-100

Catalog Description

EF96-100 Electronic Overload Relay 36 ... 100 A

The EF96 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. Single mounting kits are available as accessory. The EF65, EF96 and EF146have 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.

Order	

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

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Data Sheet, Technical Information	2CDC107041D0201
Instructions and Manuals	2CDC107027M6803
Instructions and Manuals (Part 2)	1SAC200017M0002
Ex Operating Instructions	2CDC107043M6801
Time-Current Characteristic Curve	1SAX100509F0002 1SAX100510F0001
CAD Dimensional Drawing	2CDC001079B0201
<u>Dimension Diagram</u>	1SAX300406F0001
Dimensions	
Product Net Width	70 mm
Product Net Height Product Net Depth /	132.7 mm 105.2 mm
Length	
Product Net Weight	0.802 kg
Technical	
Setting Range	36 100 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 1000 V AC
Rated Operational Current (I_e)	100 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	3P
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 Auxiliary Circuit NO 6 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) NO 0.55 A (125 V) NO 0.5 A (24 V) NC 1.5 A (24 V) NC 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 IP10

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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 Main Circuit	Flexible with Ferrule 2x 4 35 mm² Flexible with Ferrule 1x 4 50 mm² Flexible with Insulated Ferrule 2x 2 35 mm² Flexible with Insulated Ferrule 1x 4 50 mm² Flexible 1x 4 50 mm² Flexible 2x 4 35 mm² Rigid 1x 4 70 mm² Rigid 2x 4 35 mm²
ightening Torque	Auxiliary Circuit 0.8 1.2 N·m Main Circuit 6 N·m
Vire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 20 mm
Recommended Screw Driver	Auxiliary Circuit Pozidriv 2 Main Circuit Hexagon 4
Nounting Position	1 6
Power Loss	at Rated Operating Conditions per Pole 0.117 0.9 W
Suitable For	AF80 AF96
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
Contact Rating UL/CSA	(NC:) B600 (NC:) Q600 (NC:) B600 (NO:) Q600
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 10-2 AWG Stranded 1/2x 10-2 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Flexible 1/2x 18-10 AWG Stranded 1/2x 18-10 AWG
Fightening Torque JL/CSA	Auxiliary Circuit 7 1 in·lb Main Circuit 70 in·lb
Environmental	
Ambient Air Temperature	Operation -25 +70 °C Operation Compensated -25 +70 °C Storage -50 +85 °C
Ambient Air Temperature Compensation	Yes
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. o IEC 60068-2-27	11 ms Pulse 25g
Resistance to Vibrations RoHS Status	5g 3 150 Hz Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Foxic Substances Control Act - TSCA	2CMT2023-006525
Material Compliance	
Conflict Minerals Reporting Template CMRT)	9AKK108467A5658

2024/11/21

2CMT2021-006202

2CMT2021-006277

Subject to change without notice

REACH Declaration

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RoHS Information

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WEEE B2C / B2B Business To Business
WEEE Category 5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions	
ABB EcoSolutions	Yes
Environmental Product Declaration - EPD	1SAC200236H0001
Environmental Information	1SAC200099H0001

Certificates and Declarations	
ABS Certificate	1SAA941002-0102
ATEX Certificate	1SAA941004-3901
BV Certificate	1SAA941002-0201
CB Certificate	1SAA964013-2001
CCS Certificate	1SAA941001-0901
CQC Certificate	CQC2013010309592132
Declaration of Conformity - CCC	2020980309000286
Declaration of Conformity - CE	1SAD101100-3601
Declaration of Conformity - UKCA	1SAD201100-3601
DNV Certificate	1SAA941003-0302
EAC Certificate	1SAA941003-2701
IECEx Certificate	1SAA941000-4001
LR Certificate	1SAA941002-0501
RINA Certificate	RINA ELE376813CS
RMRS Certificate	1SAA941001-0701
UL Certificate	E48139-19990512

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	139 mm
Package Level 1 Height	107 mm
Package Level 1 Depth / Length	75.5 mm
Package Level 1 Gross Weight	0.857 kg
Package Level 1 EAN	4013614442247

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
ETIM 8	EC001080 - Electronic overload relay
eClass	V11.0 : 27371502
UNSPSC	39122330
IDEA Granular Category Code (IGCC)	5365 >> Electronic overload relay
E-Number (Finland)	3706581
E-Number (Norway)	4116701
E-Number (Sweden)	3210246

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Accessories				
Identifier	Description	Туре	Quantity	Unit Of Measure
1SAZ901901R1001	DB96 Single Mounting Kit	DB96	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

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



