PRODUCT-DETAILS

T16-3.1

T16-3.1 Thermal Overload Relay



General Information

Extended Product Type	T16-3.1
Product ID	1SAZ711201R1033
EAN	4013614397912
Catalog Description	T16-3.1 Thermal Overload Relay
Long Description	The T16-3.1 thermal overload relay is an economic electromechanical protection device for the main circuit. It offers reliable and fast protection for motors in the event of overload or phase failure. The device has trip class 10. Further features are the temperature compensation, trip contact (NC), signal contact (NO), automatic- or manual reset selectable, trip-free mechanism, STOP function and a trip indication. The overload relays are connected directly to the mini contactors or block contactors. Single mounting kits are available as accessory.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	2CDC106020D0201
Instructions and Manuals	2CDC106019M6802 2CDC106021M6801
Time-Current Characteristic Curve	1SAZ700505F0012

Dimension Diagram 1SAZ700404F0001

Dimensions

Product Net Width	45 mm
Product Net Height	76.7 mm
Product Net Depth / Length	53.5 mm
Product Net Weight	0.1 kg

Technical

Setting Range	2.3 ... 3.1 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Rated Operational Current (I_e)	3.1 A
Rated Operational Current AC-3 (I_e)	3.1 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 6 kV
Rated Insulation Voltage (U_i)	690 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 Auxiliary Circuit NO 4 A
Rated Operational Current AC-15 (I_e)	(120 V) NC 3 A (120 V) NO 0.5 A (240 V) NC 3 A (240 V) NO 0.5 A (400 V) NC 0.75 A (400 V) NO 0.5 A (500 V) NC 0.75 A (500 V) NO 0.5 A
Rated Operational Current DC-13 (I_e)	(125 V) NC 0.55 A (125 V) NO 0.55 A (24 V) NC 1.25 A (24 V) NO 1.25 A (250 V) NC 0.27 A (250 V) NO 0.27 A (500 V) NC 0.15 A (500 V) NO 0.15 A (60 V) NC 0.55 A (60 V) NO 0.55 A
Degree of Protection	IP20
Pollution Degree	3
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Flexible 1/2x 0.75 ... 1 mm² Flexible 1/2x 1 ... 2.5 mm² Rigid 1/2x 0.75 ... 4 mm²
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 ... 4 mm²

Main Circuit	Flexible with Insulated Ferrule 1/2x 0.75 ... 4 mm² Flexible 1/2x 0.75 ... 4 mm² Solid 1/2x 0.75 ... 1.5 mm² Solid 1/2x 1.5 ... 4 mm² Stranded 1/2x 1 ... 4 mm²
Tightening Torque	Auxiliary Circuit 1 ... 1.2 N·m Main Circuit 1.1 ... 1.5 N·m
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 12 mm
Recommended Screw Driver	Main Circuit Pozidriv 2
Power Loss	at Rated Operating Conditions per Pole 1.1 W
Suitable For	B6 BC6 B7 BC7 VB6 VBC6 VB7 VBC7 AS09 AS12 AS16
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	3.1 A
Contact Rating UL/CSA	(NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 18-12 AWG Stranded 1/2x 18-10 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Flexible 1/2x 18-12 AWG Stranded 1/2x 18-12 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 9 ... 11 in·lb Main Circuit 9 ... 13 in·lb

Environmental

Ambient Air Temperature	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C
Ambient Air Temperature Compensation	Yes
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 22g
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	1SAA941001-0102

BV Certificate	1SAA941001-0203
CB Certificate	1SAA941008-2001
CQC Certificate	CQC2011010309459316
cUL Certificate	cUL_E48139
Declaration of Conformity - CCC	2020980304001787
Declaration of Conformity - CE	1SAD938510-0182
DNV GL Certificate	1SAA941001-0302
EAC Certificate	1SAA941002-2702
Environmental Information	1SAC200055H0009
GL Certificate	1SAA941007-0401
GOST Certificate	1SAA941000-2704
Instructions and Manuals	2CDC106019M6802 2CDC106021M6801
LR Certificate	1SAA941001-0502
RINA Certificate	1SAA941000-0802
RMRS Certificate	1SAA941000-0704
RoHS Information	1SAD938507-0182
Time-Current Characteristic Curve	1SAZ700505F0012
UL Certificate	UL_E48139

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	48 mm
Package Level 1 Height	63 mm
Package Level 1 Depth / Length	82 mm
Package Level 1 Gross Weight	0.112 kg
Package Level 1 EAN	4013614397912
Package Level 2 Units	40 piece
Package Level 2 Width	280 mm
Package Level 2 Height	210 mm
Package Level 2 Depth / Length	395 mm
Package Level 2 Gross Weight	8.45 kg
Package Level 2 EAN	4013614440625

Classifications

Object Classification Code	F
ETIM 4	EC000106 - Thermal overload relay
ETIM 5	EC000106 - Thermal overload relay
ETIM 6	EC000106 - Thermal overload relay
ETIM 7	EC000106 - Thermal overload relay
eClass	V11.0 : 27371501
UNSPSC	39121520
IDEA Granular Category Code (IGCC)	5364 >> Overload relay
E-Number (Finland)	3706144
E-Number (Sweden)	3212065

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SAZ701901R0001	DB16 Single Mounting Kit	DB16	1	piece
1SFA616162R1014	KPR3-101L Reset Pushbutton	KPR-101L	1	piece

Categories

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

