

# T16-4.2



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

## General Information

<b>Extended Product Type:</b>	T16-4.2
<b>Product ID:</b>	1SAZ711201R1035
<b>EAN:</b>	4013614397929
<b>Catalog Description:</b>	T16-4.2 Thermal Overload Relay
<b>Long Description:</b>	The T16-4.2 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.

## Additional Information

<b>ABS Certificate:</b>	1SAA941001-0102
<b>Ambient Air Temperature:</b>	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C
<b>Ambient Air Temperature Compensation:</b>	Yes
<b>Ampere Rating UL/CSA:</b>	4.2 A
<b>BV Certificate:</b>	1SAA941001-0202
<b>CB Certificate:</b>	1SAA941008-2001
<b>CCC Certificate:</b>	1SAA941005-3802
<b>Co-ordination with Short-Circuit Protective Devices - Type 1:</b>	gG Type Fuses 20 A
<b>Co-ordination with Short-Circuit Protective Devices - Type 2:</b>	gG Type Fuses 20 A
<b>Connecting Capacity Auxiliary Circuit UL/CSA:</b>	Flexible 1/2x 18-12 AWG Stranded 1/2x 18-12 AWG
<b>Connecting Capacity Main Circuit UL/CSA:</b>	Flexible 1/2x 18-12 AWG Stranded 1/2x 18-10 AWG
<b>Connecting Capacity Auxiliary Circuit:</b>	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Flexible 1/2x 0.75 ... 1 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 4 mm <sup>2</sup>
<b>Connecting Capacity Main Circuit:</b>	Flexible with Ferrule 1/2x 0.75 ... 4 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 0.75 ... 4 mm <sup>2</sup> Flexible 1/2x 0.75 ... 4 mm <sup>2</sup> Solid 1/2x 0.75 ... 1.5 mm <sup>2</sup> Solid 1/2x 1.5 ... 4 mm <sup>2</sup> Stranded 1/2x 1 ... 4 mm <sup>2</sup>
<b>Contact Rating UL/CSA:</b>	(NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	Auxiliary Circuit NC 6 A Auxiliary Circuit NO 4 A
<b>Country of Origin:</b>	Germany (DE)
<b>Customs Tariff Number:</b>	85364900
<b>Data Sheet, Technical Information:</b>	2CDC106020D0201
<b>Data Sheet, Technical Information (Part 2):</b>	1SAZ700505E0012

<b>Data Sheet, Technical Information (Part 2):</b>	1SAZ70000F0013
<b>Declaration of Conformity - CE:</b>	1SAD938506-0182
<b>Degree of Protection:</b>	IP20
<b>Dimension Diagram:</b>	1SAZ700404F0001
<b>E-number:</b>	3212066
<b>EAC Certificate:</b>	1SAA941002-2701
<b>EAN:</b>	4013614397929
<b>EPLAN Catalog Tree:</b>	Electrical engineering / Relays, contactors / General
<b>EPLAN Function Definition:</b>	NO contact / NO contact, 2 connection points / NO auxiliary contact 97_98 NC contact / NC contact, 2 connection points / NC auxiliary contact 95_96 Overload / Thermal release, 6 connection points / Thermal release (bimetal relay) 1_2_3_4_5_6
<b>ETIM 4:</b>	EC000106 - Thermal overload relay
<b>ETIM 5:</b>	EC000106 - Thermal overload relay
<b>ETIM 6:</b>	EC000106 - Thermal overload relay
<b>GL Certificate:</b>	1SAA941007-0401
<b>GOST Certificate:</b>	1SAA941000-2704
<b>IT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	2CDC106019M6802 2CDC106021M6801
<b>Invoice Description:</b>	T16-4.2 Thermal Overload Relay Trip class 10, 3.10-4.20 A
<b>LR Certificate:</b>	1SAA941001-0502
<b>Maximum Operating Altitude Permissible:</b>	2000 m
<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V AC
<b>Minimum Order Quantity:</b>	1 piece
<b>Mounting Position:</b>	Position 1 to 5
<b>Mounting Type:</b>	Mounted on Contactor
<b>Number of Auxiliary Contacts NC:</b>	1
<b>Number of Auxiliary Contacts NO:</b>	1
<b>Number of Poles:</b>	3
<b>Number of Protected Poles:</b>	3
<b>Object Classification Code:</b>	F
<b>Package Level 1 EAN:</b>	4013614397929
<b>Package Level 1 Gross Weight:</b>	0.112 kg
<b>Package Level 1 Height:</b>	63 mm
<b>Package Level 1 Length:</b>	82 mm
<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	48 mm
<b>Package Level 2 EAN:</b>	4013614440632
<b>Package Level 2 Gross Weight:</b>	8.45 kg
<b>Package Level 2 Height:</b>	210 mm
<b>Package Level 2 Length:</b>	395 mm
<b>Package Level 2 Units:</b>	72 piece
<b>Package Level 2 Width:</b>	280 mm
<b>Phase Loss Sensitive:</b>	Yes
<b>Pollution Degree:</b>	3
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 1.1 ... 2.0 W
<b>Product Main Type:</b>	T16
<b>Product Name:</b>	Thermal Overload Relay

<b>Product Net Depth:</b>	53.5 mm
<b>Product Net Height:</b>	76.7 mm
<b>Product Net Weight:</b>	0.1 kg
<b>Product Net Width:</b>	45 mm
<b>RINA Certificate:</b>	1SAA941000-0801
<b>RMRS Certificate:</b>	1SAA941000-0703
<b>Rated Current (<math>I_n</math>):</b>	4.2 A
<b>Rated Frequency (f):</b>	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	Auxiliary Circuit 6 kV Main Circuit 6 kV
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	690 V
<b>Rated Operational Current (<math>I_e</math>):</b>	4.2 A
<b>Rated Operational Current AC-15 (<math>I_e</math>):</b>	(120 V) NC 3 A (120 V) NO 0.75 A (240 V) NC 3 A (240 V) NO 0.75 A (400 V) NC 0.75 A (400 V) NO 0.75 A (500 V) NC 0.75 A (500 V) NO 0.75 A
<b>Rated Operational Current AC-3 (<math>I_e</math>):</b>	4.2 A
<b>Rated Operational Current DC-13 (<math>I_e</math>):</b>	(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
<b>Rated Operational Voltage:</b>	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
<b>Recommended Screw Driver:</b>	Main Circuit Pozidriv 2
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	11 ms Pulse 22g
<b>Resistance to Vibrations acc. to IEC 60068-2-6:</b>	3g / 3 ... 150 Hz
<b>RoHS Date:</b>	1360
<b>RoHS Information:</b>	1SAA941005-4402
<b>RoHS Status:</b>	Following EU Directive 2002/95/EC August 18, 2005 and amendment
<b>Selling Unit of Measure:</b>	piece
<b>Setting Range:</b>	3.1 ... 4.2 A
<b>Short Description:</b>	T16-4.2 Thermal Overload Relay
<b>Short-Circuit Protective Devices:</b>	Auxiliary Circuit NC - gG Type Fuses 6 A Auxiliary Circuit NO - gG Type Fuses 4 A
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
<b>Suitable For:</b>	B6

BC6  
B7  
BC7  
VB6  
VBC6  
VB7  
VBC7  
AS09  
AS12  
AS16

<b>Suitable for Product Class:</b>	Block Contactors Mini Contactors
<b>Terminal Type:</b>	Screw Terminals
<b>Tightening Torque:</b>	Auxiliary Circuit 1 ... 1.2 N·m Main Circuit 1.1 ... 1.5 N·m
<b>Tightening Torque UL/CSA:</b>	Auxiliary Circuit 9 ... 11 in·lb Main Circuit 9 ... 13 in·lb
<b>Trip Class:</b>	10
<b>UL Certificate:</b>	UL_E48139
<b>UNSPSC:</b>	39121521
<b>Wire Stripping Length:</b>	Auxiliary Circuit 9 mm Main Circuit 12 mm
<b>cUL Certificate:</b>	cUL_E48139
<b>eClass:</b>	7.0 27371501
<b>DNV GL Certificate:</b>	1SAA941001-0302

