

## General Information

<b>Extended Product Type:</b>	TF42-2.3
<b>Product ID:</b>	1SAZ721201R1031
<b>EAN:</b>	4013614398070
<b>Catalog Description:</b>	TF42-2.3 Thermal Overload Relay
<b>Long Description:</b>	The TF42-2.3 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 r 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 block contactors. Single mounting kits are available as accessory.

## Additional Information

<b>ABS Certificate:</b>	1SAA941001-0102
<b>ATEX Certificate:</b>	1SAA941001-3901
<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>	2.3 A
<b>BV Certificate:</b>	1SAA941001-0202
<b>CB Certificate:</b>	1SAA941009-2001
<b>CCC Certificate:</b>	1SAA941006-3804
<b>Co-ordination with Short-Circuit Protective Devices - Type 1:</b>	gG Type Fuses 10 A
<b>Co-ordination with Short-Circuit Protective Devices - Type 2:</b>	gG Type Fuses 10 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 18-10 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> Rigid 1/2x 0.75 ... 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>	2CDC106023D0201
<b>Data Sheet, Technical Information (Part 2):</b>	1SAZ700506F0011
<b>Declaration of Conformity - CE:</b>	1SAD938507-0181

Degree of Protection:	IP20
Dimension Diagram:	1SAZ700405F0001
E-nummer:	3211964
EAC Certificate:	1SAA941002-2701
EAN:	4013614398070
EPLAN Catalog Tree:	Electrical engineering / Relays, contactors / General
EPLAN Function Definition:	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
ETIM 4:	EC000106 - Thermal overload relay
ETIM 5:	EC000106 - Thermal overload relay
ETIM 6:	EC000106 - Thermal overload relay
GL Certificate:	1SAA941007-0401
GOST Certificate:	1SAA941001-2701
IIT Publishing Status:	Level 0 - Information enabled
Industrial IT Certification Level:	0
Instructions and Manuals:	2CDC106022M6802
Instructions and Manuals (Part 2):	2CDC106076M6801
Invoice Description:	TF42-2.3 Thermal Overload Relay Trip class 10, 1.70-2.30 A
LR Certificate:	1SAA941001-0502
Maximum Operating Altitude Permissible:	2000 m
Maximum Operating Voltage UL/CSA:	Main Circuit 600 V AC
Minimum Order Quantity:	1 piece
Mounting Position:	Position 1 to 5
Mounting Type:	Mounted on Contactor
Number of Auxiliary Contacts NC:	1
Number of Auxiliary Contacts NO:	1
Number of Poles:	3
Number of Protected Poles:	3
Object Classification Code:	F
Package Level 1 EAN:	4013614398070
Package Level 1 Gross Weight:	0.145 kg
Package Level 1 Height:	92 mm
Package Level 1 Length:	78 mm
Package Level 1 Units:	1 piece
Package Level 1 Width:	48 mm
Package Level 2 EAN:	4013614440113
Package Level 2 Gross Weight:	7.346 kg
Package Level 2 Height:	210 mm
Package Level 2 Length:	395 mm
Package Level 2 Units:	48 piece
Package Level 2 Width:	280 mm
Phase Loss Sensitive:	Yes
Pollution Degree:	3
Power Loss:	at Rated Operating Conditions per Pole 1.1 ... 2.0 W
Product Main Type:	TF42
Product Name:	Thermal Overload Relay
Product Net Depth:	70.5 mm

<b>Product Net Height:</b>	88.3 mm
<b>Product Net Weight:</b>	0.13 kg
<b>Product Net Width:</b>	45 mm
<b>RINA Certificate:</b>	1SAA941000-0801
<b>RMRS Certificate:</b>	1SAA941000-0703
<b>Rated Current (I<sub>n</sub>):</b>	2.3 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 (U<sub>imp</sub>):</b>	Auxiliary Circuit 6 kV Main Circuit 6 kV
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	690 V
<b>Rated Operational Current (I<sub>e</sub>):</b>	2.3 A
<b>Rated Operational Current AC-15 (I<sub>e</sub>):</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 (I<sub>e</sub>):</b>	2.3 A
<b>Rated Operational Current DC-13 (I<sub>e</sub>):</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 25g
<b>Resistance to Vibrations acc. to IEC 60068-2-6:</b>	5g / 3 ... 150 Hz
<b>RoHS Date:</b>	1360
<b>RoHS Information:</b>	1SAA941006-4402
<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>	1.7 ... 2.3 A
<b>Short Description:</b>	TF42-2.3 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>	AF09 AF12 AF10

AF16  
AF26  
AF30  
AF38

<b>Suitable for Product Class:</b>	Block Contactors
<b>Terminal Type:</b>	Screw Terminals
<b>Tightening Torque:</b>	Auxiliary Circuit 1 ... 1.2 N·m Main Circuit 2.5 ... 2.7 N·m
<b>Tightening Torque UL/CSA:</b>	Auxiliary Circuit 9 ... 11 in·lb Main Circuit 13 ... 22 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>	1SAA941001-1702
<b>cUR Certificate:</b>	cUL_E48139
<b>eClass:</b>	7.0 27371501
<b>DNV GL Certificate:</b>	1SAA941001-0302

