

General Information

Extended Product Type:	TF42-1.0
Product ID:	1SAZ721201R1023
EAN:	4013614398049
Catalog Description:	TF42-1.0 Thermal Overload Relay
Long Description:	The TF42-1.0 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

ABS Certificate:	1SAA941001-0102
ATEX Certificate:	1SAA941001-3901
Ambient Air Temperature:	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C
Ambient Air Temperature Compensation:	Yes
Ampere Rating UL/CSA:	1 A
BV Certificate:	1SAA941001-0202
CB Certificate:	1SAA941009-2001
CCC Certificate:	1SAA941006-3804
Co-ordination with Short-Circuit Protective Devices - Type 1:	gG Type Fuses 6 A
Co-ordination with Short-Circuit Protective Devices - Type 2:	gG Type Fuses 6 A
Connecting Capacity Auxiliary Circuit UL/CSA:	Flexible 1/2x 18-12 AWG Stranded 1/2x 18-12 AWG
Connecting Capacity Main Circuit UL/CSA:	Flexible 1/2x 18-10 AWG Stranded 1/2x 18-10 AWG
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Flexible 1/2x 0.75 ... 1 mm ² Flexible 1/2x 1 ... 2.5 mm ² Rigid 1/2x 0.75 ... 4 mm ²
Connecting Capacity Main Circuit:	Flexible with Ferrule 1/2x 0.75 ... 4 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 4 mm ² Flexible 1/2x 0.75 ... 4 mm ² Rigid 1/2x 0.75 ... 4 mm ²
Contact Rating UL/CSA:	(NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300
Conventional Free-air Thermal Current (I_{th}):	Auxiliary Circuit NC 6 A Auxiliary Circuit NO 4 A
Country of Origin:	Germany (DE)
Customs Tariff Number:	85364900
Data Sheet, Technical Information:	2CDC106023D0201
Data Sheet, Technical Information (Part 2):	1SAZ700506F0008
Declaration of Conformity - CE:	1SAD938507-0181

Degree of Protection:	IP20
Dimension Diagram:	1SAZ700405F0001
E-nummer:	3211961
EAC Certificate:	1SAA941002-2701
EAN:	4013614398049
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:	TF42-1.0 Thermal Overload Relay Trip class 10, 0.74-1.00 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:	4013614398049
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:	4013614440083
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

Product Net Height:	88.3 mm
Product Net Weight:	0.13 kg
Product Net Width:	45 mm
RINA Certificate:	1SAA941000-0801
RMRS Certificate:	1SAA941000-0703
Rated Current (I_n):	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
Rated Operational Current (I_e):	1 A
Rated Operational Current AC-15 (I_e):	(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
Rated Operational Current AC-3 (I_e):	1 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
Rated Operational Voltage:	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC
Recommended Screw Driver:	Main Circuit Pozidriv 2
Resistance to Shock acc. to IEC 60068-2-27:	11 ms Pulse 25g
Resistance to Vibrations acc. to IEC 60068-2-6:	5g / 3 ... 150 Hz
RoHS Date:	1360
RoHS Information:	1SAA941006-4402
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment
Selling Unit of Measure:	piece
Setting Range:	0.74 ... 1 A
Short Description:	TF42-1.0 Thermal Overload Relay
Short-Circuit Protective Devices:	Auxiliary Circuit NC - gG Type Fuses 6 A Auxiliary Circuit NO - gG Type Fuses 4 A
Standards:	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Suitable For:	AF09 AF12 AF10

AF16
AF26
AF30
AF38

Suitable for Product Class:	Block Contactors
Terminal Type:	Screw Terminals
Tightening Torque:	Auxiliary Circuit 1 ... 1.2 N·m Main Circuit 2.5 ... 2.7 N·m
Tightening Torque UL/CSA:	Auxiliary Circuit 9 ... 11 in·lb Main Circuit 13 ... 22 in·lb
Trip Class:	10
UL Certificate:	UL_E48139
UNSPSC:	39121521
Wire Stripping Length:	Auxiliary Circuit 9 mm Main Circuit 12 mm
cUL Certificate:	1SAA941001-1702
cUR Certificate:	cUL_E48139
eClass:	7.0 27371501
DNV GL Certificate:	1SAA941001-0302