

## General Information

<b>Extended Product Type:</b>	TF42-24
<b>Product ID:</b>	1SAZ721201R1051
<b>EAN:</b>	4013614398155
<b>Catalog Description:</b>	TF42-24 Thermal Overload Relay
<b>Long Description:</b>	The TF42-24 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 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>	24 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 63 A
<b>Co-ordination with Short-Circuit Protective Devices - Type 2:</b>	gG Type Fuses 63 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 14-6 AWG Stranded 1/2x 14-6 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 2.5 ... 10 mm <sup>2</sup> Flexible with Ferrule 1/2x 1.5 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 1.5 ... 6 mm <sup>2</sup> Flexible 1/2x 2.5 ... 4 mm <sup>2</sup> Flexible 1/2x 4 ... 6 mm <sup>2</sup> Rigid 1/2x 1.5 ... 2.5 mm <sup>2</sup> Rigid 1/2x 2.5 ... 10 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>	2CDC106022D0204

Data Sheet, Technical Information:	2CDC106022M6802
Data Sheet, Technical Information (Part 2):	1SAZ700506F0020
Declaration of Conformity - CE:	1SAD938507-0181
Degree of Protection:	IP20
Dimension Diagram:	1SAZ700405F0001
E-nummer:	3211973
EAC Certificate:	1SAA941002-2701
EAN:	4013614398155
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:	TF42-24 Thermal Overload Relay Trip class 10, 20.0-24.0 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:	4013614398155
Package Level 1 Gross Weight:	0.16 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:	4013614440205
Package Level 2 Gross Weight:	8.066 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 1.8 ... 2.6 W
Product Main Type:	TF42

<b>Product Name:</b>	Thermal Overload Relay
<b>Product Net Depth:</b>	70.5 mm
<b>Product Net Height:</b>	88.3 mm
<b>Product Net Weight:</b>	0.145 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>	24 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>	24 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>	24 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>	20 ... 24 A
<b>Short Description:</b>	TF42-24 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 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 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

