PRODUCT-DETAILS

TF42-1.3

TF42-1.3 Thermal Overload Relay



General Information

Extended Product Type	TF42-1.3
Product ID	1SAZ721201R1025
EAN	4013614398056
Catalog Description	TF42-1.3 Thermal Overload Relay
Long Description	The TF42-1.3 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 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.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	2CDC106023D0201
Data Sheet, Technical Information (Part 3)	1SAZ70051101 1SAZ700504
Instructions and Manuals	2CDC106022M6802

Instructions and Manuals (Part 2)	2CDC106076M6801
Time-Current Characteristic Curve	1SAZ700506F0009
Dimension Diagram	1SAZ700405F0001

Dimensions

Product Net Width	45 mm
Product Net Height	88.3 mm
Product Net Depth / Length	70.5 mm
Product Net Weight	0.13 kg

Technical

Setting Range	1.0 ... 1.3 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC Main Circuit 600 V DC
Rated Operational Current (I_e)	1.3 A
Rated Operational Current AC-3 (I_e)	1.3 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 Main Circuit	Flexible with Ferrule 1/2x 0.75 ... 4 mm² Flexible with Insulated Ferrule 1/2x 0.75 ... 4 mm² Flexible 1/2x 0.75 ... 4 mm² Rigid 1/2x 0.75 ... 4 mm²
Tightening Torque	Auxiliary Circuit 1 ... 1.5 N·m Main Circuit 1.5 ... 2.5 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	AF09 AF12 AF16 AF26 AF30 AF38
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	1.3 A
Contact Rating UL/CSA	(NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 18-10 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 ... 13 in·lb Main Circuit 13 ... 22 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 25g
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 3 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

ABS Certificate	1SAA941001-0102
ATEX Certificate	1SAA941001-3901
BV Certificate	1SAA941001-0203

CB Certificate	1SAA941009-2001
CQC Certificate	CQC2011010309464423
cUL Certificate	1SAA941001-1702
cUR Certificate	cUL_E48139
Declaration of Conformity - CCC	2020980304001788
Declaration of Conformity - CE	1SAD938511-0181
DNV GL Certificate	1SAA941001-0302
EAC Certificate	1SAA941002-2701
Environmental Information	1SAC200057H0009
GL Certificate	1SAA941007-0401
GOST Certificate	1SAA941001-2701
Instructions and Manuals	2CDC106022M6802
Instructions and Manuals (Part 2)	2CDC106076M6801
LR Certificate	1SAA941001-0502
RINA Certificate	1SAA941000-0802
RMRS Certificate	1SAA941000-0704
RoHS Information	1SAD938508-0181
Time-Current Characteristic Curve	1SAZ700506F0009
UL Certificate	cUL_E48139

Container Information

Package Level 1 Units	carton 1 piece
Package Level 1 Width	48 mm
Package Level 1 Height	92 mm
Package Level 1 Depth / Length	78 mm
Package Level 1 Gross Weight	0.145 kg
Package Level 1 EAN	4013614398056
Package Level 2 Units	carton 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	7.346 kg
Package Level 2 EAN	4013614440090

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)	3706118
E-Number (Sweden)	3211962

Accessories

Identifier	Description	Type Quantity		Unit Of Measure
1SAZ701902R0001	DB42 Single Mounting Kit	DB42	1	piece
1SAX101911R1001	DRS-F-01 Remote Reset Coil	DRS-F-01	1	piece
1SAX101911R1002	DRS-F-02 Remote Reset Coil	DRS-F-02	1	piece
1SAX101911R1003	DRS-F-03 Remote Reset Coil	DRS-F-03	1	piece
1SAX101911R1004	DRS-F-04 Remote Reset Coil	DRS-F-04	1	piece
1SAZ701904R1001	DRS-F-TF-01 Remote Coil	DRS-F-TF-01	1	piece
1SAZ701904R1002	DRS-F-TF-02 Remote Coil	DRS-F-TF-02	1	piece
1SAZ701904R1003	DRS-F-TF-03 Remote Coil	DRS-F-TF-03	1	piece
1SAZ701904R1004	DRS-F-TF-04 Remote Coil	DRS-F-TF-04	1	piece
1SAZ701903R1001	WRH-F Holder	WRH-F	1	piece
1SAZ701903R1011	WRB-400 Bowden Wire	WRB-400	1	piece
1SAZ701903R1012	WRB-600 Bowden Wire	WRB-600	1	piece
1SAZ701903R1013	WRB-1000 Bowden Wire	WRB-1000	1	piece
1SAZ701903R1030	WRBG Gasket	WRBG	1	piece
1SFA616162R1014	KPR3-101L Reset Pushbutton	KPR-101L	1	piece

Categories

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

