PRODUCT-DETAILS

TF42-13

TF42-13 Thermal Overload Relay 10 ... 13 A



Submitted by TECO Group

General Information

Extended Product Type	TF42-13
Product ID	1SAZ721201R1045
EAN	4013614398131
Catalog Description	TF42-13 Thermal Overload Relay 10 ... 13 A
Long Description	The TF42-13 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

© 2026 ABB. All rights reserved.

Data Sheet, Technical Information	2CDC106023D0201
Instructions and Manuals	2CDC106022M6802
Instructions and Manuals (Part 2)	1SAC200017M0002
Ex Operating Instructions	2CDC106076M6801
Time-Current Characteristic Curve	1SAZ700506F0016
CAD Dimensional Drawing	2CDC001079B0201
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	10 ... 13 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)	13 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	3P
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

Submitted by TECO Group

© 2026 ABB. All rights reserved.

	(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 ... 1.2 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 1.3 ... 2.2 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 IEC 60335-2-40 A2L

Submitted by TECO Group

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
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 ... 11 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	2000 m

© 2026 ABB. All rights reserved.

Altitude Permissible	
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 25g
Resistance to Vibrations	5g 3 ... 150 Hz
RoHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Declaration	2CMT2021-006277
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

ABB EcoSolutions	Yes
ABB Site Meeting Group Waste To Landfill Target	UL 2799 Zero Waste To Landfill Validation available
End Of Life Disassembling Instructions	1SAC200429H0001
Environmental Information	1SAC200057H0009
Environmental Product Declaration - EPD	1SAC200373H0001

Submitted by TECO Group

Certificates and Declarations

A2L Certificate – IEC	1SAA941000-4601
ABS Certificate	1SAA941001-0102
ATEX Certificate	1SAA941010-3901
BV Certificate	1SAA941001-0203
CB Certificate	1SAA941009-2001
CCC Certificate	2024010304658956
CQC Certificate	CQC2011010309464423
Declaration of Conformity - CCC	2020980304001788
Declaration of Conformity - CE	1SAD101100-3503
Declaration of Conformity - UKCA	1SAD201100-3503
DNV GL Certificate	1SAA941001-0302
EAC Certificate	1SAA941002-2701
GL Certificate	1SAA941007-0401
IECEx Certificate	1SAA941003-4001
LR Certificate	1SAA941001-0502
RINA Certificate	1SAA941000-0802
RMRS Certificate	1SAA941000-0704
UL Certificate	E48139-20090126

© 2026 ABB. All rights reserved.

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	4013614398131
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	4013614440175

External Classifications and Standards

Object Classification Code	F
ETIM 9	EC000106 - Thermal overload relay
ETIM 10	EC000106 - Thermal overload relay
eClass	V11.0 : 27371501
UNSPSC	39122330
IDEA Granular Category Code (IGCC)	5366 >> Thermal overload relay
E-Number (Finland)	3706126
E-Number (Norway)	4116767
E-Number (Sweden)	3211970

Submitted by TECO Group

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 push button	KPR-101L	1	piece

© 2026 ABB. All rights reserved.

Categories

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



ABB Eco Solutions™

Submitted by TECO Group

© 2026 ABB. All rights reserved.