

TF42-38

ABB contact for United States
of America



General Information

Extended Product Type:	TF42-38
Product ID:	1SAZ721201R1055
EAN:	4013614398179
Catalog Description:	TF42-38 Thermal Overload Relay
Long Description:	The TF42-38 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.

Categories

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

Accessories

Identifier	Description	Type
1SAZ701902R0001	DB42 Single Mounting Kit	DB42

Ordering

EAN:	4013614398179
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Dimensions

Product Net Width:	45.0 mm
Product Net Height:	88.3 mm
Product Net Depth:	70.5 mm
Product Net Weight:	0.145 kg

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	48.0 mm
Package Level 1 Height:	92.0 mm
Package Level 1 Length:	78.0 mm
Package Level 1 Gross Weight:	0.16 kg
Package Level 2 Units:	48 piece
Package Level 2 Width:	280.0 mm
Package Level 2 Height:	210 mm
Package Level 2 Length:	395.0 mm
Package Level 2 Gross Weight:	8.066 kg

Package Level 2 EAN: 4013614440236

Technical

Setting Range:	35.0 ... 38.0 A
Rated Operational Voltage:	Main Circuit 690 V AC Auxiliary Circuit 600 V AC/DC
Rated Operational Current (I_e):	38.0 A
Rated Operational Current AC-3 (I_e):	38.0 A
Rated Frequency (f):	Main Circuit 50 Hz Main Circuit 60 Hz Auxiliary Circuit DC Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz
Rated Impulse Withstand Voltage (U_{imp}):	Main Circuit 6 kV Auxiliary 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):	(120V) NC 3 A (240V) NC 3 A (400V) NC 0.75 A (500V) NC 0.75 A (120V) NO 0.75 A (240V) NO 0.75 A (400V) NO 0.75 A (500V) NO 0.75 A
Rated Operational Current DC-13 (I_e):	(24V) NC 1.25 A (60V) NC 0.55 A (125V) NC 0.55 A (250V) NC 0.27 A (500V) NC 0.15 A (24V) NO 1.25 A (60V) NO 0.55 A (125V) NO 0.55 A (250V) NO 0.27 A (500V) NO 0.15 A
Degree of Protection:	IP20
Pollution Degree:	3
Connecting Capacity-Auxiliary Circuit:	Rigid 1/2x 0.75 ... 4 mm ² 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
Connecting Capacity-Main Circuit:	Rigid 1/2x 1.5 ... 2.5 mm ² Rigid 1/2x 2.5 ... 10 mm ²

Flexible with Ferrule 1/2x 1.5 ... 2.5 mm²
 Flexible with Ferrule 1/2x 2.5 ... 10 mm²
 Flexible with Insulated Ferrule 1/2x 1.5 ... 6 mm²
 Flexible 1/2x 2.5 ... 4 mm²
 Flexible 1/2x 4 ... 6 mm²

Tightening Torque: Main Circuit 2.5 ... 2.7 N·m
 Auxiliary Circuit 1 ... 1.5 N·m

Wire Stripping Length: Main Circuit 12 mm
 Auxiliary Circuit 9 mm

Recommended Screw Driver: Pozidriv 2

Mounting Position: Position 1 to 5

Power Loss: Per Pole 2.1 ... 2.8 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

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 2002/95/EC August 18, 2005 and amendment

Technical UL/CSA

Maximum Operating Voltage UL/CSA: Main Circuit 600 V AC

Ampere Rating UL/CSA: 38.0 A

Contact Rating UL/CSA: (NC:) B600
 (NC:) Q600
 (NO:) D300
 (NO:) Q600

Connecting Capacity-Main Circuit UL/CSA: Stranded 1/2x 14 ... 6 AWG
 Flexible 1/2x 14 ... 6 AWG

Connecting Capacity-Auxiliary Circuit UL/CSA: Stranded 1/2x 18 ... 12 AWG
 Flexible 1/2x 18 ... 12 AWG

Tightening Torque UL/CSA: Main Circuit 22 in·lb
Auxiliary Circuit 9 ... 13 in·lb

Certificates and Declarations (Document Number)

ABS Certificate:	1SAA941001-0101
ATEX Certificate:	1SAA941001-3901
BV Certificate:	1SAA941001-0201
CB Certificate:	1SAA941009-2001
CCC Certificate:	1SAA941002-3805
cUL Certificate:	1SAA941001-1702
cUR Certificate:	cUL_E48139
Declaration of Conformity - CE:	1SAD938504-0181
DNV Certificate:	1SAA941002-0301
GL Certificate:	1SAA941007-0401
GOST Certificate:	1SAA941001-2701
LR Certificate:	1SAA941001-0501
RINA Certificate:	1SAA941000-0801
RMRS Certificate:	1SAA941000-0703
RoHS Information:	1SAA941006-4402
UL Certificate:	UL_E48139

Classifications

Object Classification Code:	F
E-nummer:	3211976
ETIM 4.0:	EC000106 - Thermal overload relay
ETIM 5.0:	EC000106 - Thermal overload relay

