

General Information

Extended Product Type: TF42-35

Product ID: 1SAZ721201R1053 **EAN:** 4013614398162

Catalog Description: TF42-35 Thermal Overload Relay

Long Description: The TF42-35 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

Ordering

 EAN:
 4013614398162

 Minimum Order Quantity:
 1 piece

 Customs Tariff Number:
 85364900

Dimensions

Product Net Width:45 mmProduct Net Height:88.3 mmProduct Net Depth:70.5 mmProduct Net Weight:0.145 kg

Container Information

Package Level 1 Units: 1 piece Package Level 1 Width: 48 mm Package Level 1 Height: 92 mm Package Level 1 Length: 78 mm Package Level 1 Gross Weight: $0.16 \, kg$ Package Level 2 Units: 48 piece Package Level 2 Width: 280 mm Package Level 2 Height: 210 mm Package Level 2 Length: 395 mm Package Level 2 Gross Weight: 8.066 kg Package Level 2 EAN: 4013614440229

Technical

Setting Range: 29 ... 35 A

Rated Operational Voltage: Auxiliary Circuit 600 V AC/DC

Main Circuit 690 V AC

Rated Operational Current (I_e): 35 A Rated Operational Current AC-3 (I_e): 35 A

Rated Frequency (f): Auxiliary Circuit 50 Hz

Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz Auxiliary Circuit 6 kV

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 NC: 1
Number of Auxiliary Contacts NO: 1
Number of Protected Poles: 3

Conventional Free-air Thermal

Current (Ith):

Auxiliary Circuit NC 6 A Auxiliary Circuit NO 4 A

Rated Operational Current AC-15

(l_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
Rated Operational Current	(500 V) NO 0.75 A t DC-13 (125 V) NC 0.55 A
(l _e):	(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-Auxil Circuit:	liary Flexible with Ferrule 1/2x 0.75 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 2.5 mm²
Circuit.	Flexible with Insulated Ferrule 2x 0.75 2.5 min
	Flexible 1/2x 0.75 1 mm ²
	Flexible 1/2x 1 2.5 mm² Rigid 1/2x 0.75 4 mm²
Connecting Capacity-Main	•
J. J	Flexible with Ferrule 1/2x 1.5 2.5 mm ²
	Flexible with Insulated Ferrule 1/2x 1.5 6 mm ² Flexible 1/2x 2.5 4 mm ²
	Flexible 1/2x 4 6 mm ²
	Rigid 1/2x 1.5 2.5 mm ²
Tightoning Torque	Rigid 1/2x 2.5 10 mm²
Tightening Torque:	Auxiliary Circuit 1 1.5 N·m Main Circuit 2.5 2.7 N·m
Wire Stripping Length:	Auxiliary Circuit 9 mm
	Main Circuit 12 mm
Recommended Screw Driv Mounting Position:	ver: Main Circuit Pozidriv 2 Position 1 to 5
Power Loss:	at Rated Operating Conditions per Pole 2.1 2.8 W
Suitable For:	AF09
	AF12
	AF16
	ΛE26
	AF26 AF30
	AF30 AF38
Standards:	AF30 AF38 IEC/EN 60947-1
Standards:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1
Standards:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1
Standards:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1
Standards: Environmental	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1
	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C
Environmental	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C
Environmental Ambient Air Temperature:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes ide 2000 m
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes ide 2000 m
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible: Resistance to Shock acc. t 60068-2-27: Resistance to Vibrations acc.	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m To IEC 11 ms Pulse 25g
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible: Resistance to Shock acc. t 60068-2-27: Resistance to Vibrations ac 60068-2-6:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m O IEC 11 ms Pulse 25g cc. to IEC 5g / 3 150 Hz
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible: Resistance to Shock acc. t 60068-2-27: Resistance to Vibrations acc.	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m To IEC 11 ms Pulse 25g
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible: Resistance to Shock acc. t 60068-2-27: Resistance to Vibrations ac 60068-2-6:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m O IEC 11 ms Pulse 25g cc. to IEC 5g / 3 150 Hz
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitupermissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations acc 60068-2-6: RoHS Status:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m To IEC 11 ms Pulse 25g Cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitute Permissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations and 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m To IEC 11 ms Pulse 25g Cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitute Permissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations and 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m O IEC 11 ms Pulse 25g cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Ige Main Circuit 600 V AC 35 A (NC:) B600
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitupermissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations at 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA: Ampere Rating UL/CSA:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m In Ims Pulse 25g Cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Inge Main Circuit 600 V AC 35 A (NC:) B600 (NC:) Q600
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitupermissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations at 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA: Ampere Rating UL/CSA:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m O IEC 11 ms Pulse 25g cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Ige Main Circuit 600 V AC 35 A (NC:) B600
Environmental Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible: Resistance to Shock acc. t 60068-2-27: Resistance to Vibrations ac 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-4-1 UL 60947-4-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes Ide 2000 m O IEC 11 ms Pulse 25g cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Ige Main Circuit 600 V AC 35 A (NC:) B600 (NC:) Q600 (NC:) Q600 (NC:) D300 I Circuit Flexible 1/2x 14 6 AWG
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitupermissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations at 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main UL/CSA:	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-4-1 UL 60947-4
Environmental Ambient Air Temperature Compensation: Maximum Operating Altitu Permissible: Resistance to Shock acc. t 60068-2-27: Resistance to Vibrations ac 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-4-1 UL 60947-4
Environmental Ambient Air Temperature: Ambient Air Temperature Compensation: Maximum Operating Altitupermissible: Resistance to Shock acc. to 60068-2-27: Resistance to Vibrations at 60068-2-6: RoHS Status: Technical UL/CSA Maximum Operating Volta UL/CSA: Ampere Rating UL/CSA: Contact Rating UL/CSA: Connecting Capacity Main UL/CSA: Connecting Capacity Auxiliance Capacity Cap	AF30 AF38 IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-4-1 UL 60947-4-1 UL 60947-4-1 Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C Yes ide 2000 m to IEC 11 ms Pulse 25g cc. to IEC 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment ige Main Circuit 600 V AC 35 A (NC:) B600 (NC:) C600 (NC:) D300 I Circuit Flexible 1/2x 14 6 AWG Stranded 1/2x 14 6 AWG Stranded 1/2x 18 12 AWG

Main Circuit 22 in·lb

Certificates and Declarations (Document Number)

ABS Certificate: 1SAA941001-0101 ATEX Certificate: 1SAA941001-3901 BV Certificate: 1SAA941001-0202 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	Cortinoatoc ana Docianatione (2 ocanioni italiao.
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RMRS Certificate: 1SAA941000-0703 RoHS Information: 1SAA941006-4402	LR Certificate:	1SAA941001-0501
RoHS Information: 1SAA941006-4402	RINA Certificate:	1SAA941000-0801
	RMRS Certificate:	1SAA941000-0703
UL_E48139	RoHS Information:	1SAA941006-4402
	UL Certificate:	UL_E48139

Classifications

<u> </u>	
Object Classification Code:	F
eClass:	7.0 27371501
E-nummer:	3211975
ETIM 4:	EC000106 - Thermal overload relay
ETIM 5:	EC000106 - Thermal overload relay
UNSPSC:	39121521

