TF42-0.41



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

| General Information | |
|------------------------|---|
| Extended Product Type: | TF42-0.41 |
| Product ID: | 1SAZ721201R1014 |
| EAN: | 4013614404719 |
| Catalog Description: | TF42-0.41 Thermal Overload Relay |
| Long Description: | The TF42-0.41 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 compe nsation, trip contact (NC), signal contact (NO), automatic- or manual reset selectable, trip-fr ee mechanism, STOP function and a trip indication. The overload relays are connected dir ectly to the block contactors. Single mounting kits are available as accessory. |

Additional Information

| ABS Certificate: | 1SAA941001-0102 |
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| ATEX Certificate: | 1SAA941001-3901 |
| Ambient Air Temperature: | Operation -25 +60 °C Operation Compensated -25 +60 °C Storage -50 +80 °C |
| Ambient Air Temperature Compensation: | Yes |
| Ampere Rating UL/CSA: | 0.41 A |
| BV Certificate: | 1SAA941001-0202 |
| CB Certificate: | 1SAA941009-2001 |
| CCC Certificate: | 1SAA941006-3804 |
| Co-ordination with Short-Circuit Protective Devices - Type 1: | gG Type Fuses 2 A |
| Co-ordination with Short-Circuit Protective Devices - Type 2: | gG Type Fuses 2 A |
| Connecting Capacity Auxiliary Circuit UL/CSA: | Flexible 1/2x 18-12 AWG Stranded 1/2x 18-12 AWG |
| Connecting Capacity Main Circuit UL/CSA: | Flexible 1/2x 18-10 AWG Stranded 1/2x 18-10 AWG |
| Connecting Capacity Auxiliary Circuit: | 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 $1/2x \ 1 \ \ 2.5 \ mm^2$ Rigid $1/2x \ 0.75 \ \ 4 \ mm^2$ |
| Connecting Capacity Main Circuit: | Flexible with Ferrule $1/2x 0.75 \dots 4 \text{ mm}^2$ Flexible with Insulated Ferrule $1/2x 0.75 \dots 4 \text{ mm}^2$ Flexible $1/2x 0.75 \dots 4 \text{ mm}^2$ Rigid $1/2x 0.75 \dots 4 \text{ mm}^2$ |
| Contact Rating UL/CSA: | (NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300 |
| Conventional Free-air Thermal Current (I _{th}): | Auxiliary Circuit NC 6 A Auxiliary Circuit NO 4 A |
| Country of Origin: | Germany (DE) |
| Customs Tariff Number: | 85364900 |
| Data Sheet, Technical Information: | 2CDC106023D0201 |
| Data Sheet, Technical Information (Part 2): | 1SAZ700506F0005 |
| Declaration of Conformity - CE: | 1SAD938507-0181 |

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| Degree of Protection: | IP20 |
| Dimension Diagram: | 1SAZ700405F0001 |
| E-nummer: | 3211958 |
| EAC Certificate: | 1SAA941002-2701 |
| EAN: | 4013614404719 |
| 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: | TF42-0.41 Thermal Overload Relay Trip class 10, 0.31-0.41 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 Position: Mounting Type: | Position 1 to 5 Mounted on Contactor |
| | |
| Mounting Type: | Mounted on Contactor |
| Mounting Type: Number of Auxiliary Contacts NC: | Mounted on Contactor 1 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: | Mounted on Contactor 1 1 1 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: | Mounted on Contactor 1 1 3 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: | Mounted on Contactor 1 3 3 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: | Mounted on Contactor 1 1 3 3 F |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: | Mounted on Contactor 1 1 3 3 F 4013614404719 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 1 Width: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 1 Width: Package Level 2 EAN: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 1 Width: Package Level 2 EAN: Package Level 2 Gross Weight: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 2 EAN: Package Level 2 Gross Weight: Package Level 2 Height: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Height: Package Level 1 Units: Package Level 1 Units: Package Level 2 EAN: Package Level 2 Gross Weight: Package Level 2 Height: Package Level 2 Height: Package Level 2 Length: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm 395 mm |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 2 EAN: Package Level 2 Gross Weight: Package Level 2 Height: Package Level 2 Length: Package Level 2 Length: Package Level 2 Units: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm 395 mm 48 piece |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 EAN: Package Level 1 Height: Package Level 1 Height: Package Level 1 Units: Package Level 2 EAN: Package Level 2 EAN: Package Level 2 Height: Package Level 2 Height: Package Level 2 Length: Package Level 2 Units: Package Level 2 Units: Package Level 2 Width: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm 395 mm 48 piece 280 mm Yes 3 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 2 EAN: Package Level 2 Gross Weight: Package Level 2 Height: Package Level 2 Length: Package Level 2 Length: Package Level 2 Units: Package Level 2 Units: Package Level 2 Width: Package Level 2 Width: Phase Loss Sensitive: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm 395 mm 48 piece 280 mm Yes 3 1 at Rated Operating Conditions per Pole 1.1 2.0 W |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 EAN: Package Level 1 Height: Package Level 1 Height: Package Level 1 Height: Package Level 1 Units: Package Level 2 EAN: Package Level 2 EAN: Package Level 2 Height: Package Level 2 Height: Package Level 2 Length: Package Level 2 Units: Package Level 2 Units: Package Level 2 Units: Package Level 2 Width: Package Level 2 Width: Phase Loss Sensitive: Pollution Degree: Product Main Type: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm 395 mm 48 piece 280 mm Yes 3 |
| Mounting Type: Number of Auxiliary Contacts NC: Number of Auxiliary Contacts NO: Number of Poles: Number of Protected Poles: Object Classification Code: Package Level 1 EAN: Package Level 1 Gross Weight: Package Level 1 Height: Package Level 1 Height: Package Level 1 Length: Package Level 1 Units: Package Level 2 I Units: Package Level 2 EAN: Package Level 2 Height: Package Level 2 Height: Package Level 2 Length: Package Level 2 Units: Package Level 2 Units: Package Level 2 Width: Package Level 2 Width: Phase Loss Sensitive: Pollution Degree: Power Loss: | Mounted on Contactor 1 1 3 3 F 4013614404719 0.145 kg 92 mm 78 mm 1 piece 48 mm 4013614440052 7.346 kg 210 mm 395 mm 48 piece 280 mm Yes 3 1 at Rated Operating Conditions per Pole 1.1 2.0 W |

| Product Net Height: | 88.3 mm |
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| Product Net Weight: | 0.13 kg |
| Product Net Width: | 45 mm |
| RINA Certificate: | 1SAA941000-0801 |
| RMRS Certificate: | 1SAA941000-0703 |
| Rated Current (In): | 0.41 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 (Ui): | 690 V |
| Rated Operational Current (Ie): | 0.41 A |
| Rated Operational Current AC-15 (I _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 AC-3 (l _e): | 0.41 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 |
| Rated Operational Voltage: | Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC |
| Recommended Screw Driver: | Main Circuit Pozidriv 2 |
| 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 Date: | 1360 |
| RoHS Information: | 1SAA941006-4402 |
| RoHS Status: | Following EU Directive 2002/95/EC August 18, 2005 and amendment |
| Selling Unit of Measure: | piece |
| Setting Range: | 0.31 0.41 A |
| Short Description: | TF42-0.41 Thermal Overload Relay |
| Short-Circuit Protective Devices: | Auxiliary Circuit NC - gG Type Fuses 6 A Auxiliary Circuit NO - gG Type Fuses 4 A |
| Standards: | IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 |
| Suitable For: | AF09 AF12 |

| eClass: DNV GL Certificate: | 7.0 27371501 1SAA941001-0302 |
|--------------------------------|--|
| cUR Certificate: | cUL_E48139 |
| cUL Certificate: | 1SAA941001-1702 |
| Wire Stripping Length: | Auxiliary Circuit 9 mm Main Circuit 12 mm |
| UNSPSC: | 39121521 |
| UL Certificate: | UL_E48139 |
| Trip Class: | 10 |
| Tightening Torque UL/CSA: | Auxiliary Circuit 9 11 in·lb Main Circuit 13 22 in·lb |
| Tightening Torque: | Auxiliary Circuit 1 1.2 N·m Main Circuit 2.5 2.7 N·m |
| Terminal Type: | Screw Terminals |
| Suitable for Product Class: | Block Contactors |
| | AF38 |
| | AF30 |
| | AF26 |