

TF140DU-142



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

General Information

Extended Product Type:	TF140DU-142
Product ID:	1SAZ431201R1004
EAN:	4013614446849
Catalog Description:	TF140DU-142 Thermal Overload Relay
Long Description:	The TF140DU-142 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 10A. Further features are the temperature compensation, trip contact (NC), signal contact (NO), automatic- or manual reset selectable, trip-free mechanism, STOP- and Test function and a trip indication. The overload relays are connected directly to the block contactors.

Additional Information

ABS Certificate:	1SAA941004-0101
Ambient Air Temperature:	Operation -25 ... +55 °C Operation Compensated -25 ... +55 °C Storage -40 ... +70 °C
Ambient Air Temperature Compensation:	Yes
Ampere Rating UL/CSA:	142 A
BV Certificate:	1SAA941003-0201
CB Certificate:	1SAA941012-2001
CCC Certificate:	1SAA941009-3801
Co-ordination with Short-Circuit Protective Devices - Type 1:	gG Type Fuses 250 A
Co-ordination with Short-Circuit Protective Devices - Type 2:	gG Type Fuses 250 A
Connecting Capacity Auxiliary Circuit UL/CSA:	Flexible 1/2x 18-14 AWG Stranded 1/2x 18-14 AWG
Connecting Capacity Main Circuit UL/CSA:	Flexible 1/2x 6-2/0 AWG Stranded 1/2x 6-2/0 AWG
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible 1/2x 0.75 ... 2.5 mm ² Rigid 1/2x 0.75 ... 4 mm ²
Connecting Capacity Main Circuit:	Flexible with Ferrule 1/2x 16 ... 70 mm ² Flexible with Insulated Ferrule 1/2x 16 ... 70 mm ² Flexible 1/2x 16 ... 70 mm ² Rigid 1/2x 16 ... 70 mm ²
Contact Rating UL/CSA:	(NC:) B600 (NO:) C300
Conventional Free-air Thermal Current (I_{th}):	Auxiliary Circuit NC 10 A Auxiliary Circuit NO 6 A
Country of Origin:	Czech Republic (CZ)
Customs Tariff Number:	85364900
Data Sheet, Technical Information:	2CDC106061D0201
Data Sheet, Technical Information (Part 3):	1SAZ400503F0004
Declaration of Conformity - CE:	1SAD938502-0185
Degree of Protection:	Housing IP20 Main Circuit Terminals IP10
Dimension Diagram:	1SAZ400404F0001
E-nummer:	3210244
EAC Certificate:	1SAA941002-2701

EAN:	4013614446849
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
GOST Certificate:	1SAA941001-2701
Instructions and Manuals:	2CDC106050M6802
Invoice Description:	TF140DU-142 Thermal Overload Relay Trip class 10A, 110-142A
LR Certificate:	1SAA941004-0501
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 Type:	Mounted on Contactor
Number of Auxiliary Contacts NC:	1
Number of Auxiliary Contacts NO:	1
Number of Poles:	3
Number of Protected Poles:	3
Object Classification Code:	F
Package Level 1 EAN:	4013614446849
Package Level 1 Gross Weight:	0.945 kg
Package Level 1 Height:	133 mm
Package Level 1 Length:	151 mm
Package Level 1 Units:	1 piece
Package Level 1 Width:	165 mm
Package Level 2 EAN:	40136144494383
Package Level 2 Gross Weight:	8.786 kg
Package Level 2 Height:	210 mm
Package Level 2 Length:	395 mm
Package Level 2 Units:	4 piece
Package Level 2 Width:	280 mm
Phase Loss Sensitive:	Yes
Pollution Degree:	3
Power Loss:	at Rated Operating Conditions per Pole 3.1 ... 5.1 W
Product Frame Size:	4
Product Main Type:	TF140DU
Product Name:	Thermal Overload Relay
Product Net Depth:	126 mm
Product Net Height:	140 mm
Product Net Weight:	0.82 kg
Product Net Width:	89 mm
RINA Certificate:	RINA_ELE098115XG
RMRS Certificate:	1SAA941002-0701
Rated Current (I_n):	140 A
Rated Frequency (f):	Auxiliary Circuit 50 Hz

	Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC
Rated Impulse Withstand Voltage (U_{imp}):	Auxiliary Circuit 6 kV Main Circuit 8 kV
Rated Insulation Voltage (U_i):	690 V
Rated Operational Current (I_e):	140 A
Rated Operational Current AC-15 (I_e):	(120 V) NC 3 A (120 V) NO 1.5 A (240 V) NC 3 A (240 V) NO 1.5 A (400 V) NC 1.9 A (400 V) NO 1 A (440 V) NC 1 A (440 V) NO 1 A (500 V) NC 1 A (500 V) NO 1 A
Rated Operational Current AC-3 (I_e):	140 A
Rated Operational Current DC-13 (I_e):	(125 V) NC 0.25 A (125 V) NO 0.25 A (24 V) NC 1.25 A (24 V) NO 1.25 A (250 V) NC 0.12 A (250 V) NO 0.04 A (60 V) NC 0.25 A (60 V) NO 0.25 A
Rated Operational Voltage:	Auxiliary Circuit 440 V DC Auxiliary Circuit 500 V AC Main Circuit 690 V AC
Recommended Screw Driver:	Auxiliary Circuit Pozidriv 2 Main Circuit Hexagon 4
Resistance to Shock acc. to IEC 60068-2-27:	11 ms Pulse 12g
RoHS Date:	1360
RoHS Information:	1SAA941006-4403
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment
Selling Unit of Measure:	piece
Setting Range:	110 ... 142 A
Short Description:	TF140DU-142 Thermal Overload Relay
Short-Circuit Protective Devices:	Auxiliary Circuit NC - gG Type Fuses 10 A Auxiliary Circuit NO - gG Type Fuses 6 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:	AF116 AF140
Suitable for Product Class:	Block Contactors
Terminal Type:	Screw Terminals
Tightening Torque:	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 8 ... 10 N·m
Tightening Torque UL/CSA:	Auxiliary Circuit 12 in·lb
Trip Class:	10A
UL Certificate:	UL_E48139

UNSPSC:	39121521
Wire Stripping Length:	Auxiliary Circuit 9 mm Main Circuit 25 mm
cUL Certificate:	cUL_E48139
eClass:	7.0 27371501
DNV GL Certificate:	1SAA941004-0301

