TF140DU-142

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.

Categories

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

Ordering

EAN:	4013614446849
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Dimensions

Product Net Width:	89 mm
Product Net Height:	140 mm
Product Net Depth:	126 mm
Product Net Weight:	0.82 kg

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	165 mm
Package Level 1 Height:	133 mm
Package Level 1 Length:	151 mm
Package Level 1 Gross Weight:	0.945 kg
Package Level 2 Units:	4 piece
Package Level 2 Width:	280 mm
Package Level 2 Height:	210 mm
Package Level 2 Length:	395 mm
Package Level 2 Gross Weight:	8.786 kg
Package Level 2 EAN:	4013614494383

Technical

Setting Range:	110 ... 142 A
Rated Operational Voltage:	Auxiliary Circuit 440 V DC Auxiliary Circuit 500 V AC Main Circuit 690 V AC
Rated Operational Current (I_e):	140 A
Rated Operational Current AC-3 (I_e):	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
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 10 A Auxiliary Circuit NO 6 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 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
Degree of Protection:	Housing IP20 Main Circuit Terminals IP10
Pollution Degree:	3
Connecting Capacity-Auxiliary Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible 1/2x 0.75 ... 2.5 mm² Rigid 1/2x 0.75 ... 4 mm²
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1/2x 16 ... 70 mm² Flexible with Insulated Ferrule 1/2x 16 ... 70 mm² Flexible 1/2x 16 ... 70 mm² Rigid 1/2x 16 ... 70 mm²
Tightening Torque:	Auxiliary Circuit 0.8 ... 1.2 N·m Main Circuit 8 ... 10 N·m
Wire Stripping Length:	Auxiliary Circuit 9 mm Main Circuit 25 mm
Recommended Screw Driver:	Auxiliary Circuit Pozidriv 2 Main Circuit Hexagon 4
Mounting Position:	Position 1 to 5
Power Loss:	at Rated Operating Conditions per Pole 3.1 ... 5.1 W
Suitable For:	AF116 AF140
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 ... +55 °C Operation Compensated -25 ... +55 °C Storage -40 ... +70 °C
Ambient Air Temperature Compensation:	Yes
Maximum Operating Altitude Permissible:	2000 m
Resistance to Shock acc. to IEC 60068-2-27:	11 ms Pulse 12g
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:	142 A
Contact Rating UL/CSA:	(NC:) B600 (NO:) C300
Connecting Capacity Main Circuit UL/CSA:	Flexible 1/2x 6 ... 2/0 AWG Stranded 1/2x 6 ... 2/0 AWG
Connecting Capacity Auxiliary Circuit UL/CSA:	Flexible 1/2x 18 ... 14 AWG Stranded 1/2x 18 ... 14 AWG
Tightening Torque UL/CSA:	Auxiliary Circuit 12 in·lb

Certificates and Declarations (Document Number)

ABS Certificate:	1SAA941004-0101
BV Certificate:	1SAA941003-0201
CB Certificate:	1SAA941012-2001
CCC Certificate:	1SAA941009-3801
cUL Certificate:	cUL_E48139
Declaration of Conformity - CE:	1SAD938502-0185

DNV Certificate:	1SAA941004-0301
EAC Certificate:	1SAA941002-2701
GOST Certificate:	1SAA941001-2701
LR Certificate:	1SAA941004-0501
RINA Certificate:	RINA_ELE098115XG
RoHS Information:	1SAA941006-4403
UL Certificate:	UL_E48139

Classifications

Object Classification Code:	F
eClass:	7.0 27371501
ETIM 4:	EC000106 - Thermal overload relay
ETIM 5:	EC000106 - Thermal overload relay
UNSPSC:	39121521