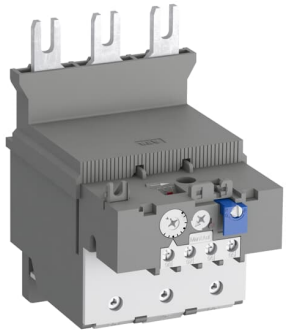
PRODUCT-DETAILS

TF140DU-142

TF140DU-142 Thermal Overload Relay 110 ... 142 A



General Information

Extended Product Type	TF140DU-142
Product ID	1SAZ431201R1004
EAN	4013614446849
Catalog Description	TF140DU-142 Thermal Overload Relay 110 ... 142 A
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.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	2CDC106061D0201
Instructions and Manuals	2CDC106050M6802
Instructions and Manuals (Part 2)	1SAC200017M0002

Time-Current Characteristic Curve	1SAZ400503F0004
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	1SAZ400404F0001

Dimensions

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

Technical

Setting Range	110 ... 142 A
Rated Operational Voltage	Auxiliary Circuit 440 V DC Auxiliary Circuit 500 V AC Main Circuit 690 V AC Main Circuit 440 V DC
Rated Operational Current (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	IP20 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	any
Power Loss	at Rated Operating Conditions per Pole 2.3 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

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
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

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 25g 2 shocks 13 ms
Resistance to Vibrations acc. to IEC 60068-2-6	5g, 20 cycles at 5 ... 150 ... 5 Hz with load 0.8 In
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Eco Transparency

Environmental Information	1SAC200090H0009

Certificates and Declarations

ABS Certificate	1SAA941004-0101
BV Certificate	1SAA941003-0201
CB Certificate	1SAA941012-2001
CQC Certificate	CQC2016010309922935
Declaration of Conformity - CCC	2020980304001320
Declaration of Conformity - CE	1SAD101100-3507

Declaration of Conformity - UKCA	1SAD201100-3507
DNV GL Certificate	1SAA941004-0301
EAC Certificate	1SAA941002-2702
LR Certificate	1SAA941004-0501
RINA Certificate	RINA_ELE098115XG
RMRS Certificate	1SAA941002-0701
UL Certificate	E48139-20120831

Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	165 mm
Package Level 1 Height	133 mm
Package Level 1 Depth / Length	151 mm
Package Level 1 Gross Weight	0.945 kg
Package Level 1 EAN	4013614446849
Package Level 2 Units	4 piece
Package Level 2 Width	280 mm
Package Level 2 Height	210 mm
Package Level 2 Depth / Length	395 mm
Package Level 2 Gross Weight	8.786 kg
Package Level 2 EAN	4013614494383

Classifications

Object Classification Code	F
ETIM 4	EC000106 - Thermal overload relay
ETIM 5	EC000106 - Thermal overload relay
ETIM 6	EC000106 - Thermal overload relay
ETIM 7	EC000106 - Thermal overload relay
ETIM 8	EC000106 - Thermal overload relay
eClass	V11.0 : 27371501
UNSPSC	39122330
IDEA Granular Category Code (IGCC)	5366 >> Thermal overload relay
E-Number (Finland)	3706579
E-Number (Sweden)	3210244

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
1SFA616162R1014	KPR3-101L Reset push button	KPR3-101L	1	piece

Categories

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