TF65-40

General Information

Extended Product Type:	TF65-40
Product ID:	1SAZ811201R1003
EAN:	4013614482939
Catalog Description:	TF65-40 Thermal Overload Relay
Long Description:	The TF65-40 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

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900
EAN:	4013614482939

Dimensions

Product Net Height:	101.4 mm
Product Net Depth:	106.9 mm
Product Net Weight:	0.372 kg
Product Net Width:	54.9 mm

Container Information

Package Level 1 Width:	123 mm
Package Level 1 Height:	121 mm
Package Level 1 Length:	82 mm
Package Level 1 Gross Weight:	0.456 kg
Package Level 2 Units:	12 piece
Package Level 2 Width:	280 mm
Package Level 2 Height:	210 mm
Package Level 2 Length:	395 mm
Package Level 2 Gross Weight:	5.858 kg
Package Level 2 EAN:	4013614485336
Package Level 1 Units:	1 piece

Technical

Rated Operational Voltage:	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC Main Circuit 440 V DC
Rated Operational Current (I_e):	40 A
Rated Operational Current AC-3 (I_e):	40 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 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 6 A Auxiliary Circuit NO 4 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 (500 V) NO 0.75 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 (60 V) NO 0.55 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 with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Flexible 1/2x 0.75 ... 1 mm² Flexible 1/2x 1 ... 2.5 mm² Rigid 1/2x 0.75 ... 4 mm²
Connecting Capacity Main Circuit:	Flexible with Ferrule 1/2x 2.5 ... 10 mm² Flexible with Ferrule 1x 2.5 … 35 mm² Flexible with Insulated Ferrule 1x 2.5 … 35 mm² Flexible with Insulated Ferrule 1/2x 2.5 ... 10 mm² Flexible 1/2x 2.5 ... 16 mm² Flexible 1x 2.5 … 35 mm² Rigid 1/2x 2.5 ... 16 mm² Rigid 1x 2.5 … 35 mm²
Tightening Torque:	Auxiliary Circuit 1 ... 1.2 N·m Main Circuit 4.0 ... 4.5 N·m
Wire Stripping Length:	Auxiliary Circuit 9 mm Main Circuit 17 mm
Recommended Screw Driver:	Auxiliary Circuit Pozidriv 2 Main Circuit Pozidriv 2
Mounting Position:	Position 1 to 6
Power Loss:	at Rated Operating Conditions per Pole 2.1 ... 3.7 W
Suitable For:	AF40 AF52 AF65
Standards:	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Setting Range:	30 ... 40 A

Environmental

Ambient Air Temperature Compensation:	Yes
Maximum Operating Altitude Permissible:	2000 m
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 Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment
Ambient Air Temperature:	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C

Technical UL/CSA

Ampere Rating UL/CSA:	40 A
Contact Rating UL/CSA:	(NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300
Connecting Capacity Main Circuit UL/CSA:	Flexible 1x 12-2 AWG Flexible 2x 12-6 AWG Stranded 1x 12-2 AWG Stranded 2x 12-6 AWG
Connecting Capacity Auxiliary Circuit UL/CSA:	Flexible 1/2x 18-12 AWG Stranded 1/2x 18-12 AWG

Tightening Torque UL/CSA:	Auxiliary Circuit 9 ... 11 in·lb Main Circuit 35 … 40 in·lb
Maximum Operating Voltage UL/CSA:	Main Circuit 600 V AC

Certificates and Declarations (Document Number)

Data Sheet, Technical Information (Part 2):	1SAZ800502F0004
Instructions and Manuals:	2CDC106051M6803
Instructions and Manuals (Part 2):	2CDC106085M6801
ABS Certificate:	1SAA941003-0101
ATEX Certificate:	1SAA941005-3901
BV Certificate:	1SAA941001-0202
CB Certificate:	1SAA941015-2001
CCC Certificate:	1SAA941012-3801
cUL Certificate:	cUL_E48139
Data Sheet, Technical Information:	2CDC106069D0201
Declaration of Conformity - CE:	1SAD938506-0187
DNV Certificate:	1SAA941004-0301
EAC Certificate:	1SAA941002-2701
GOST Certificate:	1SAA941001-2701
LR Certificate:	1SAA941003-0501
RINA Certificate:	RINA_ELE098115XG
RMRS Certificate:	1SAA941002-0701
RoHS Information:	1SAA941008-4401
UL Certificate:	UL_E48139

Classifications

E-nummer:	3210265
ETIM 4:	EC000106 - Thermal overload relay
ETIM 5:	EC000106 - Thermal overload relay
ETIM 6:	EC000106 - Thermal overload relay
eClass:	7.0 27371501
UNSPSC:	39121521
Object Classification Code:	F