



 PRODUCT-DETAILS

TF65-60

TF65-60 Thermal Overload Relay 50 ... 60 A



General Information

Extended Product Type:	TF65-60
Product ID:	1SAZ811201R1006
EAN:	4013614482960
Catalog Description:	TF65-60 Thermal Overload Relay 50 ... 60 A
Long Description:	The TF65-60 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.
Display Name:	TF65-60

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

Data Sheet, Technical Information:	2CDC106069D0201
Instructions and Manuals:	2CDC106051M6803
Instructions and Manuals (Part 2):	1SAC200017M0002
Ex Operating Instructions:	2CDC106085M6801
Time-Current Characteristic Curve:	1SAZ800502F0006
CAD Dimensional Drawing:	2CDC001079B0201
Dimension Diagram:	1SAZ800401F0001

Dimensions

Product Net Width:	54.9 mm
Product Net Height:	101.4 mm
Product Net Depth / Length:	106.9 mm
Product Net Weight:	0.382 kg

Technical

Setting Range:	50 ... 60 A
Rated Operational Voltage:	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC Main Circuit 440 V DC
Rated Operational Current (I_e):	60 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:	3P
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 0.5 A (240 V) NC 3 A (240 V) NO 0.5 A (400 V) NC 0.75 A (400 V) NO 0.5 A (500 V) NC 0.75 A (500 V) NO 0.5 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 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 2.5 ... 10 mm ² Flexible with Ferrule 1x 2.5 ... 35 mm ² Flexible with Insulated Ferrule 1x 2.5 ... 35 mm ² Flexible with Insulated Ferrule 1/2x 2.5 ... 10 mm ² Flexible 1/2x 2.5 ... 16 mm ² Flexible 1x 2.5 ... 35 mm ² Rigid 1/2x 2.5 ... 16 mm ² Rigid 1x 2.5 ... 35 mm ²
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:	1 ... 6
Power Loss:	at Rated Operating Conditions per Pole 2.3 ... 3.4 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 IEC 60335-2-40 A2L

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V AC
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

Environmental

Ambient Air Temperature: Operation -40 ... +70 °C
Operation Compensated -40 ... +70 °C
Storage -50 ... +80 °C

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: 5g 3 ... 150 Hz

RoHS Information: Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Toxic Substances Control Act - TSCA: 2CMT2023-006525

Material Compliance

Conflict Minerals Reporting Template (CMRT): 9AKK108467A5658

REACH Declaration: 2CMT2021-006202

RoHS Declaration: 2CMT2021-006277

WEEE B2C / B2B: Business To Business

WEEE Category: 5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

ABB EcoSolutions: Yes

ABB Site Meeting Group Waste To Landfill Target: UL 2799 Zero Waste To Landfill Validation available

EcoSolutions Profile: 1SFC100125C0355

End Of Life Disassembling Instructions: 1SAC200334H0001

Environmental Information: 1SAC200058H0009

Environmental Product Declaration - EPD: 1SAC200249H0001

Improved Energy Efficiency for Customers: Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line

Recyclability Rate of the Product acc. to EN45555: Design for Closing Resource Loops - Standard EN45555 - 93.3 %

Certificates and Declarations

A2L Certificate – IEC: 1SAA941000-4601

ABS Certificate: 1SAA941003-0101

ATEX Certificate: 1SAA941005-3901

BV Certificate: 1SAA941001-0203

CB Certificate:	1SAA941015-2001
CCC Certificate:	2024010304636179
CQC Certificate:	CQC2014010309689432
Declaration of Conformity - CCC:	2020980309000291
Declaration of Conformity - CE:	1SAD101100-3503
Declaration of Conformity - UKCA:	1SAD201100-3503
DNV GL Certificate:	1SAA941004-0301
EAC Certificate:	1SAA941002-2701
IECEX Certificate:	1SAA941001-4001
LR Certificate:	1SAA941003-0501
RINA Certificate:	RINA_ELE098115XG
RMRS Certificate:	1SAA941002-0701
UL Certificate:	E48139-20130329

Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	123 mm
Package Level 1 Height:	121 mm
Package Level 1 Depth / Length:	82 mm
Package Level 1 Gross Weight:	0.466 kg
Package Level 1 EAN:	4013614482960
Package Level 2 Units:	12 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:	5.978 kg
Package Level 2 EAN:	4013614485367

External Classifications and Standards

Object Classification Code:	F
ETIM 9:	EC000106 - Thermal overload relay
ETIM 10:	EC000106 - Thermal overload relay
eClass:	V11.0 : 27371501
UNSPSC:	39122330
IDEA Granular Category Code (IGCC):	5366 >> Thermal overload relay
E-Number (Finland):	3706588
E-Number (Norway):	4116792
E-Number (Sweden):	3210268

Accessories

Identifier	Description	Qty	Type	Unit Of Measure
1SAZ801901R1001	DB65 Single Mounting Kit	1	DB65	piece
1SAX101911R1001	DRS-F-01 Remote Reset Coil	1	DRS-F-01	piece
1SAX101911R1002	DRS-F-02 Remote Reset Coil	1	DRS-F-02	piece
1SAX101911R1003	DRS-F-03 Remote Reset Coil	1	DRS-F-03	piece
1SAX101911R1004	DRS-F-04 Remote Reset Coil	1	DRS-F-04	piece
1SAZ701904R1001	DRS-F-TF-01 Remote Coil	1	DRS-F-TF-01	piece
1SAZ701904R1002	DRS-F-TF-02 Remote Coil	1	DRS-F-TF-02	piece
1SAZ701904R1003	DRS-F-TF-03 Remote Coil	1	DRS-F-TF-03	piece
1SAZ701904R1004	DRS-F-TF-04 Remote Coil	1	DRS-F-TF-04	piece
1SAZ701903R1001	WRH-F Holder	1	WRH-F	piece
1SAZ701903R1011	WRB-400 Bowden Wire	1	WRB-400	piece
1SAZ701903R1012	WRB-600 Bowden Wire	1	WRB-600	piece
1SAZ701903R1013	WRB-1000 Bowden Wire	1	WRB-1000	piece
1SAZ701903R1030	WRBG Gasket	1	WRBG	piece
1SFA616162R1014	KPR3-101L Reset push button	1	KPR-101L	piece

Categories

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

