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## Detailed information for: TF96-60

This page contains technical data sheet, documents library and links to offering related to this product. If you require any other information, please contact us using form located at the bottom of the page. [Print...](#) [Print to Pdf...](#)

[Data Sheet](#)
[Downloads](#)

### TF96-60

#### General Information

Extended Product Type:

TF96-60

Product ID:

1SAZ911201R1002

EAN:

4013614482991

Catalog Description:

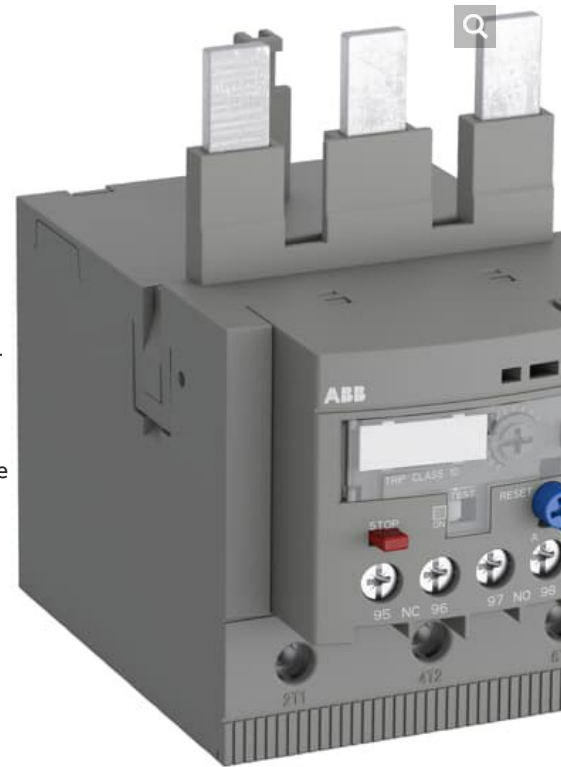
TF96-60 Thermal Overload Relay

Long Description:

The TF96-60 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.

#### Categories

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



#### + Accessories

#### Ordering

Minimum Order Quantity:

1 piece

Customs Tariff Number:

85364900

#### Popular Downloads

Data Sheet, Technical Information:

[2CDC106069D0201](#)

Data Sheet, Technical Information (Part 3):

[1SAZ800503](#)

[1SAZ900506](#)

Instructions and Manuals:

[2CDC106052M6803](#)

Instructions and Manuals (Part 2):

[2CDC106086M6801](#)

Time-Current Characteristic Curve:

[1SAZ900502F0002](#)

Dimension Diagram:

[1SAZ900401F0001](#)

#### Dimensions

Product Net Width:

69.9 mm

Product Net Height:

106.9 mm

Product Net Depth / Length:

106.3 mm

Product Net Weight:

0.52 kg

#### Technical

Setting Range:

48 ... 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 Operational Current AC-3 ( $I_e$ ):

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:

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 0.5 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<sup>2</sup>

Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm<sup>2</sup>

Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm<sup>2</sup>

Flexible 1/2x 0.75 ... 1 mm<sup>2</sup>

Flexible 1/2x 1 ... 2.5 mm<sup>2</sup>

Rigid 1/2x 0.75 ... 4 mm<sup>2</sup>

Connecting Capacity Main Circuit:

Flexible with Ferrule 1/2x 6 ... 35 mm<sup>2</sup>

Flexible with Ferrule 1x 6 ... 50 mm<sup>2</sup>

Flexible with Insulated Ferrule 1/2x 6 ... 16 mm<sup>2</sup>

Flexible with Insulated Ferrule 1x 6 ... 50 mm<sup>2</sup>

Flexible 1/2x 6 ... 35 mm<sup>2</sup>

Flexible 1x 6 ... 50 mm<sup>2</sup>

Rigid 1/2x 6 ... 35 mm<sup>2</sup>

Rigid 1x 6 ... 50 mm<sup>2</sup>

Tightening Torque:

Auxiliary Circuit 1 ... 1.2 N·m

Main Circuit 6.0 ... 9.0 N·m

Wire Stripping Length:

Auxiliary Circuit 9 mm

Main Circuit 20 mm

Recommended Screw Driver:

Auxiliary Circuit Pozidriv 2

Main Circuit Hexagon 4

Mounting Position:

Position 1 to 6

Power Loss:

at Rated Operating Conditions per Pole 3 W

Suitable For:

AF80

AF96

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

Ampere Rating UL/CSA:

60 A

Contact Rating UL/CSA:

(NC:) B600

(NC:) Q600

(NO:) Q600

(NO:) D300

Connecting Capacity Main Circuit UL/CSA:

Flexible 1x 8-1 AWG

Flexible 2x 8-3 AWG

Stranded 1x 8-1 AWG

Stranded 2x 8-3 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 50 ... 80 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 acc. to IEC 60068-2-6:

5g / 3 ... 150 Hz

RoHS Status:

Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

ABS Certificate:

[1SAA941003-0101](#)

ATEX Certificate:

[1SAA941006-3901](#)

BV Certificate:

[1SAA941001-0203](#)

CB Certificate:

[1SAA941016-2001](#)

CQC Certificate:

[CQC2014010309689434](#)

cUL Certificate:

[cUL\\_E48139](#)

Declaration of Conformity - CCC:

[2020980309000292](#)

Declaration of Conformity - CE:

[1SAD938512-0187](#)

DNV GL Certificate:

[1SAA941004-0301](#)

EAC Certificate:

[1SAA941002-2701](#)

Environmental Information:

[1SAC200059H0009](#)

GOST Certificate:

[1SAA941001-2701](#)

Instructions and Manuals:

[2CDC106052M6803](#)

Instructions and Manuals (Part 2):

[2CDC106086M6801](#)

LR Certificate:

1SAA941003-0501

RINA Certificate:

RINA\_ELE098115XG

RMRS Certificate:

1SAA941002-0701

RoHS Information:

1SAD938512-0187

Time-Current Characteristic Curve:

1SAZ900502F0002

UL Certificate:

cUL\_E48139

## Container Information

Package Level 1 Units:

1 piece

Package Level 1 Width:

97 mm

Package Level 1 Height:

121 mm

Package Level 1 Depth / Length:

97 mm

Package Level 1 Gross Weight:

0.62 kg

Package Level 1 EAN:

4013614482991

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:

7.826 kg

Package Level 2 EAN:

4013614485435

## 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

eClass:

V11.0 : 27371501

UNSPSC:

39121520

IDEA Granular Category Code (IGCC):

5364 >> Overload relay

E-Number (Finland):

3706591

E-Number (Sweden):

3210271

## Contact us

Submit your inquiry and we will contact you

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