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TF96-78

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General Information

Extended Product Type:

TF96-78

Product ID:

1SAZ911201R1004

EAN:

4013614483011

Catalog Description:

TF96-78 Thermal Overload Relay 65 ... 78 A

Long Description:

The TF96-78 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),... [Show more](#)

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1 piece

Customs Tariff Number:

85364900

Popular Downloads**Data Sheet, Technical Information:**[Data sheet - Thermal Overload Relay TF65, TF96](#)**Instructions and Manuals:**[Operating instructions - Thermal overload relay TF96](#)**Instructions and Manuals (Part 2):**[Contactors and Overload relays guide](#)**Ex Operating Instructions:**[ATEX - Operating instructions for thermal overload relay TF96 for potentially explosive areas](#)**Time-Current Characteristic Curve:**[Tripping characteristic - Thermal overload relay TF96-78](#)**CAD Dimensional Drawing:**[Information - 2D and 3D files for CAD systems](#)**Dimension Diagram:**[Dimension Drawing - TF96 Thermal Overload Relay](#)**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:

65 ... 78 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):

78 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 mm²Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm²Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm²Flexible 1/2x 0.75 ... 1 mm²Flexible 1/2x 1 ... 2.5 mm²Rigid 1/2x 0.75 ... 4 mm²**Connecting Capacity Main Circuit:**Flexible with Ferrule 1/2x 6 ... 35 mm²Flexible with Ferrule 1x 6 ... 50 mm²Flexible with Insulated Ferrule 1/2x 6 ... 16 mm²Flexible with Insulated Ferrule 1x 6 ... 50 mm²Flexible 1/2x 6 ... 35 mm²Flexible 1x 6 ... 50 mm²Rigid 1/2x 6 ... 35 mm²Rigid 1x 6 ... 50 mm²**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:

1 ... 6

Power Loss:

at Rated Operating Conditions per Pole 2.7 ... 3.8 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

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 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 53 ... 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:

5g 3 ... 150 Hz

RoHS Status:

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

Toxic Substances Control Act - TSCA:[Toxic Substances Control Act \(TSCA\) declaration for Contactors](#)**Material Compliance****Conflict Minerals Reporting Template (CMRT):**[CMRT - Conflict Minerals Reporting Template](#)**REACH Declaration:**[REACH - Letter of Confirmation for block contactors, contactor relays, installation contactors, mini contactors, mini contactor relays, thermal overload relays, electronic overload relays and related accessories](#)**RoHS Information:**[RoHS II declaration for block contactors, installation contactors, mini contactors, mini contactor relays, thermal overload relays, electronic overload relays and related accessories](#)**WEEE B2C / B2B:**

Business To Business

WEEE Category:

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

ABB EcoSolutions**End Of Life Disassembling Instructions:**[End of life instruction TF65 / TF96 / TF140](#)**Environmental Information:**[Product Environmental Information TF96 thermal overload relays](#)**Environmental Product Declaration - EPD:**[Environmental Product Declaration PEP TF65/TF96](#)**Certificates and Declarations**

A2L Certificate – IEC:[A2L Certificate - T16, TF42, TF65, TF96 series - Thermal Overload Relays](#)**ABS Certificate:**[ABS Certificate - TF65, TF96 - Thermal Overload Relays](#)**ATEX Certificate:**[AtexCertificate - TF96](#)**BV Certificate:**[BV Certificate - T16, TF42, TF65, TF96 - Thermal Overload Relays](#)**CB Certificate:**[CB Certificate - TF65, TF96 - Thermal Overload Relay](#)**CQC Certificate:**[CQC2014010309689434](#)**Declaration of Conformity - CCC:**[2020980309000292](#)**Declaration of Conformity - CE:**[EU Declaration of Conformity - TF42, TF65, TF96 - Thermal Overload Relay](#)**Declaration of Conformity - UKCA:**[UK Declaration of Conformity - TF42, TF65, TF96 - Thermal Overload Relay](#)**DNV GL Certificate:**[DNV GL Certificate - TF65, TF96, TF140DU, TF140DU-V1000](#)**EAC Certificate:**[1SAA941002-2701](#)**IECEx Certificate:**[IECEx Certificate - TF96 - Thermal Overload Relays](#)**LR Certificate:**[LR Certificate - TF65, TF96 - Thermal Overload Relays](#)**RINA Certificate:**[RINA_ELE098115XG](#)**RMRS Certificate:**[RMRS Certificate TF65, TF96, TF140DU, TF140DU-V1000](#)**UL Certificate:**[UL Certificate of Compliance - TF65, TF96, DB65, DB96, DRS-x - Thermal Overload Relays](#)**Container Information****Package Level 1 Units:**

box 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:

4013614483011

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:

4013614485459

External Classifications and Standards

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):

3706593

E-Number (Norway):

4116797

E-Number (Sweden):

3210273

Accessories

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Identifier	Description	Type	Qty	Unit Of Measure	Actions
1SAZ901901R1001	DB96 Single Mounting Kit	DB96	1	piece	
1SAX101911R1001	DRS-F-01 Remote Reset Coil	DRS-F-01	1	piece	
1SAX101911R1002	DRS-F-02 Remote Reset Coil	DRS-F-02	1	piece	
1SAX101911R1003	DRS-F-03 Remote Reset Coil	DRS-F-03	1	piece	
1SAX101911R1004	DRS-F-04 Remote Reset Coil	DRS-F-04	1	piece	



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