

PRODUCT-DETAILS

# TF96-51

## TF96-51 Thermal Overload Relay



### Información General

Tipo de producto extendido	TF96-51
Código de producto	1SAZ911201R1001
EAN	4013614482984
Descripción corta	TF96-51 Thermal Overload Relay
Descripción larga	The TF96-51 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.

### Clasificación

Cantidad mínima de pedido	1 piece
Código arancelario	85364900

### Descargas Populares

Ficha técnica, información técnica	2CDC106069D0201
Data Sheet, Technical Information (Part 2)	1SAC200122W0001
Data Sheet, Technical Information (Part 3)	1SAZ800503 1SAZ900506

Instrucciones y manuales	2CDC106052M6803
Instructions and Manuals (Part 2)	2CDC106086M6801
Time-Current Characteristic Curve	1SAZ900502F0001
Dimension Diagram	1SAZ900401F0001

## Dimensiones

Ancho del product	69.9 mm
Alto del producto	106.9 mm
Largo del product	106.3 mm
Peso del product	0.52 kg

## Technical

Setting Range	40 ... 51 A
Rated Operational Voltage	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC Main Circuit 440 V DC
Rated Operational Current ( $I_e$ )	51 A
Rated Operational Current AC-3 ( $I_e$ )	51 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
Grado de protección	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	1 ... 6
Power Loss	at Rated Operating Conditions per Pole 2.6 ... 4.3 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	51 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

## Ambiente

Temperatura ambiente	Funcionamiento -40 ... +70 °C Operation Compensated -40 ... +70 °C Almacenamiento -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

## Certificados y Declaraciones (Número de Documento)

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
Declaración de conformidad - CE	1SAD938512-0187
Declaration of Conformity - UKCA	1SAD938501-1187
DNV GL Certificate	1SAA941004-0301
EAC Certificate	1SAA941002-2701
Environmental Information	1SAC200059H0009
IECEX Certificate	1SAA941002-4001
Instrucciones y manuales	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	1SAZ900502F0001
UL Certificate	cUL_E48139

## Información de Embalaje

Embalaje Nivel 1 Unidades	1 piece
Embalaje Nivel 1 Ancho	97 mm
Embalaje Nivel 1 Alto	121 mm
Embalaje Nivel 1 Largo	97 mm
Embalaje Nivel 1 Peso	0.62 kg
Embalaje Nivel 1 EAN	4013614482984
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	4013614485428

## Clasificaciones

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)	3706590
E-Number (Sweden)	3210270

## Accessories

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

## Categorías

Productos y sistemas de baja tensión → Aparatos de control → Contactores → Relés térmicos

