

TF42-20

General Information

Extended Product Type:	TF42-20
Product ID:	1SAZ721201R1049
EAN:	4016779764971
Catalog Description:	TF42-20 Thermal Overload Relay
Long Description:	The TF42-20 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

Dimensions

Product Net Width:	45 mm
Product Net Height:	88.3 mm
Product Net Depth / Length:	70.5 mm
Product Net Weight:	0.135 kg

Popular Downloads

Data Sheet, Technical Information:	2CDC106023D0201
Data Sheet, Technical Information (Part 2):	1SAZ700506F0019
Data Sheet, Technical Information (Part 3):	1SAZ70051101 1SAZ700504
Instructions and Manuals:	2CDC106022M6802
Instructions and Manuals (Part 2):	2CDC106076M6801
Dimension Diagram:	1SAZ700405F0001

Technical

Setting Range:	16 ... 20 A
Rated Operational Voltage:	Auxiliary Circuit 600 V AC/DC Main Circuit 690 V AC

Rated Operational Current 20 A**(I_e):****Rated Operational Current** 20 A**AC-3 (I_e):**

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 6 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:	IP20
------------------------------	------

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 0.75 ... 4 mm ²
	Flexible with Insulated Ferrule 1/2x 0.75 ... 4 mm ²

	Flexible 1/2x 0.75 ... 4 mm ² Rigid 1/2x 0.75 ... 4 mm ²
Tightening Torque:	Auxiliary Circuit 1 ... 1.5 N·m Main Circuit 1.5 ... 2.5 N·m
Wire Stripping Length:	Auxiliary Circuit 9 mm Main Circuit 12 mm
Recommended Screw Driver:	Main Circuit Pozidriv 2
Mounting Position:	Position 1 to 5
Power Loss:	at Rated Operating Conditions per Pole 1.8 ... 2.6 W
Suitable For:	AF09 AF12 AF16 AF26 AF30 AF38
Standards:	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1

Environmental

Ambient Air Temperature:	Operation -25 ... +60 °C Operation Compensated -25 ... +60 °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
Technical UL/CSA	
Maximum Operating Voltage UL/CSA:	Main Circuit 600 V AC
Ampere Rating UL/CSA:	20 A
Contact Rating UL/CSA:	(NC:) B600 (NC:) Q600 (NO:) Q600 (NO:) D300
Connecting Capacity Main Circuit UL/CSA:	Flexible 1/2x 18-10 AWG Stranded 1/2x 18-10 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 ... 13 in·lb Main Circuit 13 ... 22 in·lb

Certificates and Declarations (Document Number)

ABS Certificate:	<u>1SAA941001-0102</u>
ATEX Certificate:	<u>1SAA941001-3901</u>
BV Certificate:	<u>1SAA941001-0202</u>
CB Certificate:	<u>1SAA941009-2001</u>
CCC Certificate:	<u>1SAA941006-3804</u>
cUL Certificate:	<u>1SAA941001-1702</u>
cUR Certificate:	<u>cUL_E48139</u>
Declaration of Conformity - CE:	<u>1SAD938508-0181</u>
DNV GL Certificate:	<u>1SAA941001-0302</u>
EAC Certificate:	<u>1SAA941002-2701</u>
GL Certificate:	<u>1SAA941007-0401</u>
GOST Certificate:	<u>1SAA941001-2701</u>
Instructions and Manuals:	<u>2CDC106022M6802</u>
LR Certificate:	<u>1SAA941001-0502</u>
RINA Certificate:	<u>1SAA941000-0802</u>
RMRS Certificate:	<u>1SAA941000-0704</u>
RoHS Information:	<u>1SAD938508-0181</u>
UL Certificate:	<u>UL_E48139</u>

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	48 mm
Package Level 1 Height:	92 mm
Package Level 1 Depth / Length:	78 mm
Package Level 1 Gross Weight:	0.15 kg
Package Level 1 EAN:	4016779764971
Package Level 2 Units:	48 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:	7.586 kg
Package Level 2 EAN:	4013614440199

Classifications

Object Classification Code: F

E-nummer:	3211972
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:	7.0 27371501

UNSPSC:

39121521



© Copyright 2018 ABB