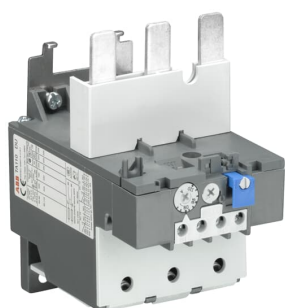


PRODUCT-DETAILS

# TA110DU-110

## TA110DU-110 Thermal Overload Relay



### General Information

Extended Product Type	TA110DU-110
Product ID	1SAZ411201R1002
EAN	4013614216800
Catalog Description	TA110DU-110 Thermal Overload Relay
Long Description	The TA110DU-110 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 10A. Further features are the temperature compensation, trip contact (NC), signal contact (NO), automatic- or manual reset selectable, trip-free mechanism, STOP- and Test function and a trip indication. The overload relays are connected directly to the block contactors. Single mounting kits are available as accessory.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Dimensions

Product Net Width	80 mm
Product Net Height	120 mm
Product Net Depth / Length	120 mm
Product Net Weight	0.755 kg

## Popular Downloads

Data Sheet, Technical Information	1SBC100173C0201
Data Sheet, Technical Information (Part 2)	1SAZ400501F0002
Instructions and Manuals	2CDC106027M6802
Dimension Diagram	1SAZ400403F0001

## Technical

Setting Range	80 ... 110 A
Rated Operational Voltage	Auxiliary Circuit 440 V DC Auxiliary Circuit 500 V AC Main Circuit 690 V AC
Rated Operational Current ( $I_e$ )	110 A
Rated Operational Current AC-3 ( $I_e$ )	110 A
Rated Frequency (f)	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC
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 5 A Auxiliary Circuit NO 5 A
Rated Operational Current AC-15 ( $I_e$ )	(120 V) NC 3 A (120 V) NO 1.5 A (240 V) NC 3 A (240 V) NO 1.5 A (400 V) NC 1.9 A (400 V) NO 1 A (440 V) NC 1 A (440 V) NO 1 A (500 V) NC 1 A (500 V) NO 1 A
Rated Operational Current DC-13 ( $I_e$ )	(125 V) NC 0.25 A (125 V) NO 0.25 A (24 V) NC 1.25 A (24 V) NO 1.25 A (250 V) NC 0.12 A (250 V) NO 0.04 A (60 V) NC 0.25 A (60 V) NO 0.25 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 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 4 mm <sup>2</sup>
Connecting Capacity Main Circuit	Flexible 1x 16 ... 35 mm <sup>2</sup> Rigid 1x 16 ... 35 mm <sup>2</sup>

Tightening Torque	Auxiliary Circuit 1 ... 1.3 N-m Main Circuit 7.2 ... 9.6 N-m
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 25 mm
Recommended Screw Driver	Auxiliary Circuit Pozidriv 2 Main Circuit Hexagon 4
Mounting Position	Position 1 to 4
Power Loss	at Rated Operating Conditions per Pole 2.5 ... 4.7 W
Suitable For	A95 A110 AE95 AE110
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	110 A
Contact Rating UL/CSA	(NC:) B600 (NO:) C600
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 6-2/0 AWG Stranded 1/2x 6-2/0 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Flexible 1/2x 18-14 AWG Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 12 in-lb

### Environmental

Ambient Air Temperature	Operation -25 ... +55 °C Operation Compensated -25 ... +55 °C Storage -40 ... +70 °C
Ambient Air Temperature Compensation	Yes
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 12g
RoHS Status	Following EU Directive 2011/65/EU

### Certificates and Declarations (Document Number)

ABS Certificate	1SAA941000-0102
BV Certificate	1SAA941000-0201
CB Certificate	1SAA941004-2003
CCC Certificate	1SAA941001-3804
cUL Certificate	cUL_E48139
Declaration of Conformity - CE	1SAD938517-0043
DNV Certificate	1SAA941000-0304
DNV GL Certificate	1SAA941000-0304
EAC Certificate	1SAA941002-2702
Environmental Information	1SAA941001-2401
GL Certificate	1SAA941000-0304

GOST Certificate	1SAA941000-2704
Instructions and Manuals	2CDC106027M6802
LR Certificate	1SAA941000-0504
RMRS Certificate	1SAA941000-0704
RoHS Information	1SAD938514-0043
UL Certificate	UL_E48139 1SAA938001-1604

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## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	165 mm
Package Level 1 Height	133 mm
Package Level 1 Depth / Length	151 mm
Package Level 1 Gross Weight	0.88 kg
Package Level 1 EAN	4013614216800
Package Level 2 Units	4 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	8.786 kg
Package Level 2 EAN	4013614494208

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## 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	7.0 27371501
UNSPSC	39121521

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## Categories

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

