

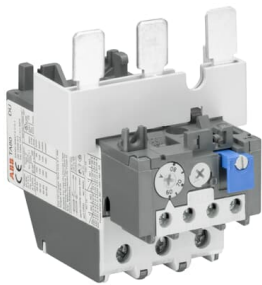



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 PRODUCT-DETAILS

## TA80DU-52

### TA80DU-52 Thermal Overload Relay 36 ... 52 A




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#### General Information

Extended Product Type	TA80DU-52
Product ID	1SAZ331201R1004
EAN	4013614216763
Catalog Description	TA80DU-52 Thermal Overload Relay 36 ... 52 A

Long Description	<p>The TA80DU-52 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.</p>
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#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

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#### Popular Downloads

Instructions and Manuals	2CDC106080M6802
Time-Current Characteristic Curve	1SAZ300501F0004
Dimension Diagram	1SAZ300403F0001

## Dimensions

Product Net Width	78 mm
Product Net Height	97 mm
Product Net Depth / Length	111 mm
Product Net Weight	0.365 kg

## Technical

Setting Range	36 ... 52 A
Rated Operational Voltage	Auxiliary Circuit 440 V DC Auxiliary Circuit 500 V AC Main Circuit 690 V AC Main Circuit 440 V DC
Rated Operational Current ( $I_e$ )	52 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	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 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 1.2 A (400 V) NC 0.75 A (400 V) NO 0.37 A (440 V) NC 0.75 A (440 V) NO 0.37 A (500 V) NC 0.3 A (500 V) NO 0.25 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	IP20

	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 with Ferrule 1x 2.5 ... 25 mm <sup>2</sup> Flexible with Ferrule 2x 2.5 ... 10 mm <sup>2</sup> Rigid 1x 2.5 ... 25 mm <sup>2</sup> Rigid 2x 2.5 ... 16 mm <sup>2</sup>
Tightening Torque	Auxiliary Circuit 1 ... 1.3 N·m Main Circuit 4.5 N·m
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 14 mm
Recommended Screw Driver	Auxiliary Circuit Pozidriv 1 Main Circuit Pozidriv 2
Mounting Position	any
Power Loss	at Rated Operating Conditions per Pole 1.7 ... 3.5 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
Contact Rating UL/CSA	(NC:) B600 (NO:) C600
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 8-1 AWG Stranded 1/2x 8-1 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 Main Circuit 40 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 25g 2 shocks 13 ms
Resistance to Vibrations	20 Cycles with Load 0.8 In: 5g 5 ... 150 ... 5 Hz
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525

## Material Compliance

REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## Certificates and Declarations

ABS Certificate	1SAA941000-0102
BV Certificate	1SAA941000-0201
CB Certificate	1SAA941017-2001
CQC Certificate	CQC2016010309922938
Declaration of Conformity - CCC	2020980304001323
Declaration of Conformity - CE	1SAD101100-3509
Declaration of Conformity - UKCA	1SAD201100-3509
DNV Certificate	1SAA941000-0304
DNV GL Certificate	1SAA941000-0304
EAC Certificate	1SAA941002-2702
GL Certificate	1SAA941000-0304
LR Certificate	1SAA941000-0504
RMRS Certificate	1SAA941000-0704
UL Certificate	E48139-19960918

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	105 mm
Package Level 1 Height	90 mm
Package Level 1 Depth / Length	125 mm
Package Level 1 Gross Weight	0.405 kg
Package Level 1 EAN	4013614216763
Package Level 2 Units	16 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	4013614494017

## 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
ETIM 8	EC000106 - Thermal overload relay
eClass	V11.0 : 27371501

UNSPSC	39122330
IDEA Granular Category Code (IGCC)	5366 >> Thermal overload relay
E-Number (Finland)	3709352

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## Categories

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

