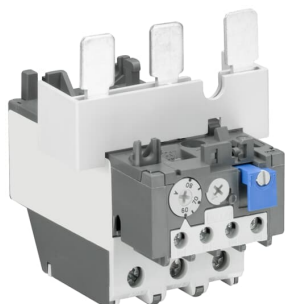


## PRODUCT-DETAILS

# TA80DU-42M

## TA80DU-42M Thermal Overload Relay 29 ... 42 A



### General Information

Extended Product Type	TA80DU-42M
Product ID	1SAZ331201R2003
EAN	4013614483912
Catalog Description	TA80DU-42M Thermal Overload Relay 29 ... 42 A

Long Description	TA80DU-42M (29.0-42.0A) 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.
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### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Instructions and Manuals	2CDC106080M6802
Time-Current Characteristic Curve	1SAZ300501F0003
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	78 mm
Product Net Height	97 mm
Product Net Depth / Length	111 mm
Product Net Weight	0.36 kg

Technical

Setting Range	29 ... 42 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 <sub>e</sub> )	42 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 <sub>imp</sub> )	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage (U <sub>i</sub> )	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 <sub>th</sub> )	Auxiliary Circuit NC 5 A Auxiliary Circuit NO 5 A
Rated Operational Current AC-15 (I <sub>e</sub> )	(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 <sub>e</sub> )	(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 mm² Flexible 1/2x 0.75 ... 2.5 mm² Rigid 1/2x 0.75 ... 4 mm²
Connecting Capacity Main Circuit	Flexible with Ferrule 1x 2.5 ... 25 mm² Flexible with Ferrule 2x 2.5 ... 10 mm² Rigid 1x 2.5 ... 25 mm² Rigid 2x 2.5 ... 16 mm²

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 1.5 ... 3.2 W
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
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

## Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	No declaration needed
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## Certificates and Declarations

CB Certificate	1SAA941014-2001
CCS Certificate	1SAA941000-0901
CQC Certificate	CQC2016010309922937
Declaration of Conformity - CCC	2020980304001322
Declaration of Conformity - CE	1SAD101100-3501
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	0.4 kg
Package Level 1 EAN	4013614483912
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

Classifications

Object Classification Code	F
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	39121520
IDEA Granular Category Code (IGCC)	5364 >> Overload relay

Categories

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

