



Alternate Catalog No. TA42DU25 Catalog No. 1SAZ311201R1001

Description: TA42DU-25 Thermal Overload Relay

UPC No 4013614216657

Home > Contactors & Starters > Overload Relays

The TA42DU-25 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.

Descriptors

Category	Overload Relays
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Specifications

Product Name	Thermal Overload Relay
Rated Operational Voltage	Auxiliary Circuit 440/500 V DC/V AC Main Circuit 690 V AC
Rated Operational Current	25 A
Setting Range	18 ... 25 A
Rated Impulse Withstand Voltage	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage	690 V
Number of Poles	3
Number of Auxiliary Contacts NC	1
Number of Auxiliary Contacts NO	1
Number of Protected Poles	3
Trip Class	class 10A
Conventional Free-air Thermal Current	Auxiliary Circuit NC 10 A Auxiliary Circuit NO 6 A
Rated Frequency	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Main Circuit 60 Hz Main Circuit 50Hz Main Circuit DC
Rated Operational Current AC-3	25 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP10
Pollution Degree	3
Suitable For	A30 A40 AL30 AL40

Specifications

Rated Operational Current AC-15	(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	(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
Connecting Capacity Main Circuit	Flexible with Ferrule 1x 2.5 ... 25 mm ² Flexible with Ferrule 2x 2.5 ... 10 mm ² Rigid 1x 2.5 ... 25 mm ² Rigid 2x 2.5 ... 16 mm ²
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible 1/2x 0.75 ... 2.5 mm ² Rigid 1/2x 0.75 ... 4 mm ²
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 14 mm
Tightening Torque	Auxiliary Circuit 1 ... 1.3 N·m Main Circuit 4.5 N·m
Mounting Position	Position 1 to 4
Power Loss	at Rated Operating Conditions per Pole 1.8 ... 3.4 W
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Recommended Screw Driver	Auxiliary Circuit Pozidriv 1 Main Circuit Pozidriv 2
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Ampere Rating UL/CSA	25 A
Contact Rating UL/CSA	(NC:) B600 (NO:) C300
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 8-1 AWG Stranded 1/2x 8-1 AWG
Ambient Air Temperature	Operation -25 ... +55 °C Operation Compensated -25 ... +55 °C Storage -40 ... +70 °C
Ambient Air Temperature Compensation	Yes
Connecting Capacity Auxiliary Circuit UL/CSA	Flexible 1/2x 18-14 AWG Stranded 1/2x 18-14 AWG
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 12g
Maximum Operating Altitude Permissible	2000 m
RoHS Status	Following EU Directive 2011/65/EU
Tightening Torque UL/CSA	Auxiliary Circuit 12 in·lb Main Circuit 40 in·lb
Object Classification Code	F

Classifications

ETIM 5.0	EC000106 - Thermal overload relay
ETIM 6.0	EC000106 - Thermal overload relay
ETIM 7	EC000106 - Thermal overload relay
eClass	7.0 27371501
ETIM 4	EC000106 - Thermal overload relay

Dimensions

Product Net Width	54 mm
Product Net Height	90 mm
Product Net Weight	0.335kg
Product Net Depth / Length	111 mm

Package Information

Package Level 1 Units	1 piece
Package Level 1 Width	92 mm
Package Level 1 Depth / Length	61 mm
Package Level 1 Gross Weight	0.36 kg
Package Level 1 EAN	4013614216657
Package Level 1 Height	109 mm
Package Level 2 Width	280 mm
Package Level 2 Units	24 piece
Package Level 2 Depth / Length	395 mm
Package Level 2 EAN	4013614493720
Package Level 2 Gross Weight	8.786 kg
Package Level 2 Height	210 mm

Ordering

ECN	N
Customs Tariff Number	85364900
ECCN	N
ABB MDF Code	3DL - Relays (LV / Control + Protection)