

## PRODUCT-DETAILS

# TA25DU-0.16

## TA25DU-0.16 Thermal Overload Relay



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | TA25DU-0.16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product ID            | 1SAZ211201R1005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EAN                   | 4013614216473                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Catalog Description   | TA25DU-0.16 Thermal Overload Relay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Long Description      | The TA25DU-0.16 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          | 44 mm   |
| Product Net Height         | 80 mm   |
| Product Net Depth / Length | 94 mm   |
| Product Net Weight         | 0.15 kg |

## Popular Downloads

|                                            |                 |
|--------------------------------------------|-----------------|
| Data Sheet, Technical Information          | 1SBC100173C0201 |
| Data Sheet, Technical Information (Part 2) | 1SAZ200501F0001 |
| Instructions and Manuals                   | 2CDC106031M6802 |
| Dimension Diagram                          | 1SAZ200402F0001 |

## Technical

|                                                    |                                                                                                                                                                                        |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Setting Range                                      | 0.10 ... 0.16 A                                                                                                                                                                        |
| Rated Operational Voltage                          | Auxiliary Circuit 440 V DC<br>Auxiliary Circuit 500 V AC<br>Main Circuit 690 V AC                                                                                                      |
| Rated Operational Current ( $I_e$ )                | 0.16 A                                                                                                                                                                                 |
| Rated Operational Current AC-3 ( $I_e$ )           | 0.16 A                                                                                                                                                                                 |
| Rated Frequency (f)                                | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC                                              |
| Rated Impulse Withstand Voltage ( $U_{imp}$ )      | Auxiliary Circuit 6 kV<br>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 10 A<br>Auxiliary Circuit NO 6 A                                                                                                                                  |
| Rated Operational Current AC-15 ( $I_e$ )          | (120 V) NC 3 A<br>(120 V) NO 1.5 A<br>(240 V) NC 3 A<br>(240 V) NO 1.5 A<br>(400 V) NC 1.9 A<br>(400 V) NO 1 A<br>(440 V) NC 1 A<br>(440 V) NO 1 A<br>(500 V) NC 1 A<br>(500 V) NO 1 A |
| Rated Operational Current DC-13 ( $I_e$ )          | (125 V) NC 0.25 A<br>(125 V) NO 0.25 A<br>(24 V) NC 1.25 A<br>(24 V) NO 1.25 A<br>(250 V) NC 0.12 A<br>(250 V) NO 0.04 A<br>(60 V) NC 0.25 A<br>(60 V) NO 0.25 A                       |
| Degree of Protection                               | Housing IP20<br>Main Circuit Terminals IP10                                                                                                                                            |
| Pollution Degree                                   | 3                                                                                                                                                                                      |
| Connecting Capacity Auxiliary Circuit              | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 0.75 ... 4 mm <sup>2</sup>                                         |
| Connecting Capacity Main Circuit                   | Flexible with Ferrule 1x 0.75 ... 4 mm <sup>2</sup><br>Flexible with Ferrule 2x 0.75 ... 4 mm <sup>2</sup>                                                                             |

|                          |                                                                                                                                                                |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                          | Flexible 1x 0.75 ... 4 mm <sup>2</sup><br>Flexible 2x 0.75 ... 4 mm <sup>2</sup><br>Rigid 1x 0.75 ... 4 mm <sup>2</sup><br>Rigid 2x 0.75 ... 4 mm <sup>2</sup> |
| Tightening Torque        | Auxiliary Circuit 1 ... 1.3 N·m<br>Main Circuit 1.5 ... 1.9 N·m                                                                                                |
| Wire Stripping Length    | Auxiliary Circuit 9 mm<br>Main Circuit 12 mm                                                                                                                   |
| Recommended Screw Driver | Auxiliary Circuit Pozidriv 1<br>Main Circuit Pozidriv 2                                                                                                        |
| Mounting Position        | Position 1 to 4                                                                                                                                                |
| Suitable For             | A9<br>A12<br>A16<br>A26<br>A30<br>A40<br>AL9<br>AL12<br>AL16<br>AL26<br>AL30<br>AL40                                                                           |
| Standards                | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>UL 60947-1<br>UL 60947-4-1                                                                           |

## Technical UL/CSA

|                                              |                                                     |
|----------------------------------------------|-----------------------------------------------------|
| Maximum Operating Voltage UL/CSA             | Main Circuit 600 V AC                               |
| Ampere Rating UL/CSA                         | 0.16 A                                              |
| Contact Rating UL/CSA                        | (NC:) B600<br>(NO:) C300                            |
| Connecting Capacity Main Circuit UL/CSA      | Flexible 1/2x 16-8 AWG<br>Stranded 1/2x 16-8 AWG    |
| Connecting Capacity Auxiliary Circuit UL/CSA | Flexible 1/2x 18-14 AWG<br>Stranded 1/2x 18-14 AWG  |
| Tightening Torque UL/CSA                     | Auxiliary Circuit 12 in·lb<br>Main Circuit 12 in·lb |

## Environmental

|                                            |                                                                                            |
|--------------------------------------------|--------------------------------------------------------------------------------------------|
| Ambient Air Temperature                    | Operation -25 ... +55 °C<br>Operation Compensated -25 ... +55 °C<br>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  | 1SAA941000-0202 |
| CB Certificate  | 1SAA941005-2001 |
| CCC Certificate | 1SAA941002-3806 |
| 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       | 2CDC106031M6802 |
| LR Certificate                 | 1SAA941000-0504 |
| RMRS Certificate               | 1SAA941000-0704 |
| RoHS Information               | 1SAD938514-0043 |
| UL Certificate                 | UL_E48139       |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 1 piece       |
| Package Level 1 Width          | 98 mm         |
| Package Level 1 Height         | 82 mm         |
| Package Level 1 Depth / Length | 47 mm         |
| Package Level 1 Gross Weight   | 0.17 kg       |
| Package Level 1 EAN            | 4013614216473 |
| 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   | 8.546 kg      |
| Package Level 2 EAN            | 4013614441912 |

## 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                          |

## Categories

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

