

## PRODUCT-DETAILS

# TAE50-40-00 90-150V DC

## TAE50-40-00 90-150V DC Contactor



### General Information

|                       |                                  |
|-----------------------|----------------------------------|
| Extended Product Type | TAE50-40-00 90-150V DC           |
| Product ID            | 1SBL359261R6600                  |
| EAN                   | 3471522115676                    |
| Catalog Description   | TAE50-40-00 90-150V DC Contactor |

#### Long Description

TAE50 4-pole contactors are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces...) and generally for controlling power circuits up to 690 V AC and 440 V DC. The contactors can also be used for many other applications such lighting... The TAE... series 4-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 4 N.O. main poles, front and side-mounted add-on auxiliary contact blocks - Control circuit: DC operated with standard double-winding DC coils (with add-on factory-mounted lagging contact for insertion of the "holding" winding). TAE... contactors offer a large coil voltage range - Accessories: a wide range of accessories is available.

### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

### Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SNC001003C0202 |
| Instructions and Manuals          | FPTC407701P0003 |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 104 mm   |
| Product Net Depth / Length | 119.5 mm |
| Product Net Height         | 110 mm   |
| Product Net Weight         | 1.43 kg  |

## Technical

|                                                              |                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts NO                                   | 4                                                                                                                                                                                                                                                                  |
| Number of Main Contacts NC                                   | 0                                                                                                                                                                                                                                                                  |
| Number of Auxiliary Contacts NO                              | 0                                                                                                                                                                                                                                                                  |
| Number of Auxiliary Contacts NC                              | 0                                                                                                                                                                                                                                                                  |
| Rated Operational Voltage                                    | Main Circuit 1000 V                                                                                                                                                                                                                                                |
| Conventional Free-air Thermal Current ( $I_{th}$ )           | acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 100 A                                                                                                                                                                                                |
| Rated Operational Current AC-1 ( $I_e$ )                     | (690 V) $40^\circ\text{C}$ 100<br>(690 V) $55^\circ\text{C}$ 85                                                                                                                                                                                                    |
| Rated Operational Current AC-3 ( $I_e$ )                     | (415 V) $55^\circ\text{C}$ 50 A<br>(440 V) $55^\circ\text{C}$ 45 A<br>(500 V) $55^\circ\text{C}$ 45 A<br>(690 V) $55^\circ\text{C}$ 35 A<br>(1000 V) $55^\circ\text{C}$ 23 A<br>(380 / 400 V) $55^\circ\text{C}$ 50 A<br>(220 / 230 / 240 V) $55^\circ\text{C}$ 53 |
| Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1           | 8 x $I_e$ AC-3                                                                                                                                                                                                                                                     |
| Short-Circuit Protective Devices                             | gG Type Fuses 100 A                                                                                                                                                                                                                                                |
| Maximum Breaking Capacity                                    | $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 1300 A<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 630 A                                                                                                            |
| Maximum Electrical Switching Frequency                       | (AC-1) 300 cycles per hour<br>(AC-2 / AC-4) 150 cycles per hour<br>(AC-3) 300 cycles per hour                                                                                                                                                                      |
| Rated Insulation Voltage ( $U_i$ )                           | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V                                                                                                                                                                                                                  |
| Rated Impulse Withstand Voltage ( $U_{imp}$ )                | 8 kV                                                                                                                                                                                                                                                               |
| Mechanical Durability                                        | 5 million                                                                                                                                                                                                                                                          |
| Maximum Mechanical Switching Frequency                       | 3600 cycles per hour                                                                                                                                                                                                                                               |
| Rated Control Circuit Voltage ( $U_c$ )                      | DC Operation 90 ... 150 V                                                                                                                                                                                                                                          |
| Coil Consumption                                             | Holding DC ( $U_{min}$ / $U_{max}$ ) 1.7 / 6.5 W<br>Pull-in at Max. Rated Control Circuit Voltage DC 450 W<br>Pull-in DC ( $U_{min}$ / $U_{max}$ ) 120 / 250 W                                                                                                     |
| Operate Time                                                 | Between Coil De-energization and NO Contact Opening 5 ... 15 ms<br>Between Coil Energization and NO Contact Closing 30 ... 30 ms                                                                                                                                   |
| Connecting Capacity Main Circuit                             | Flexible with Cable End 6 ... 16 mm <sup>2</sup><br>Rigid Cable 6 ... 25 mm <sup>2</sup>                                                                                                                                                                           |
| Connecting Capacity Auxiliary Circuit                        | Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup><br>Rigid Cable 1 ... 4 mm <sup>2</sup>                                                                                                                                                                        |
| Degree of Protection                                         | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20                                                                                                                                                                                                       |
| Connecting Terminals (delivered in open position) Main Poles | M 6 (+, -) pozidriv 2 screws with 1x (13 x 10 mm) connector                                                                                                                                                                                                        |

Terminal Type

Screw Terminals

## Environmental

|                                            |                                                                                                                                                                                              |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Air Temperature                    | Close to Contactor for Storage -60 ... +80 °C<br>Near Contactor for Operation in Free Air -40 ... +55 °C                                                                                     |
| Climatic Withstand                         | acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II                                                                                                                        |
| Maximum Operating Altitude Permissible     | 3000 m                                                                                                                                                                                       |
| Resistance to Shock acc. to IEC 60068-2-27 | Closed, Shock Direction: B1 10 K40<br>Open, Shock Direction: B1 5 K40<br>Shock Direction: A 20 K40<br>Shock Direction: B2 15 K40<br>Shock Direction: C1 20 K40<br>Shock Direction: C2 20 K40 |
| RoHS Status                                | Following EU Directive 2011/65/EU                                                                                                                                                            |

## Certificates and Declarations (Document Number)

|                                |                          |
|--------------------------------|--------------------------|
| Declaration of Conformity - CE | 1SBD250804U1000          |
| EAC Certificate                | EAC_RU C-FR ME77 B01010  |
| Environmental Information      | 1SBD250024E1003          |
| GOST Certificate               | GOST_POCCFRME77B07175    |
| Instructions and Manuals       | FPTC407701P0003          |
| RoHS Information               | 1SBD250804U1000          |
| UL Certificate                 | UL_20120830-E312527-10-1 |
| UL Listing Card                | UL_E312527               |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 1 piece       |
| Package Level 1 Width          | 142 mm        |
| Package Level 1 Depth / Length | 190 mm        |
| Package Level 1 Height         | 136 mm        |
| Package Level 1 Gross Weight   | 1.43 kg       |
| Package Level 1 EAN            | 3471522115676 |
| Package Level 2 Units          | box 8 piece   |
| Package Level 2 Gross Weight   | 11.44 kg      |

## Classifications

|                            |                                           |
|----------------------------|-------------------------------------------|
| Object Classification Code | Q                                         |
| ETIM 4                     | EC000066 - Magnet contactor, AC-switching |
| ETIM 5                     | EC000066 - Magnet contactor, AC-switching |
| ETIM 6                     | EC000066 - Power contactor, AC switching  |
| ETIM 7                     | EC000066 - Power contactor, AC switching  |
| eClass                     | V11.0 : 27371018                          |
| UNSPSC                     | 39121529                                  |

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

