

## PRODUCT-DETAILS

# TKC6-31Z-51

## TKC6-31Z-51 Mini Contactor Relay 17-32VDC



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | TKC6-31Z-51                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product ID            | GJH1213061R5311                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| EAN                   | 4013614224669                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Catalog Description   | TKC6-31Z-51 Mini Contactor Relay 17-32VDC                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Long Description      | The TKC6-31Z mini contactor relay is a compact 4 pole contactor relay with screw terminals. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors relays are used in residential buildings, commercial buildings and industrial applications for switching of control signals up to 3 A / 400 V (AC-15). Further features are the noiseless and hum-free coil and a switch position indication. |

### Ordering

|                        |               |
|------------------------|---------------|
| EAN                    | 4013614224669 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85365080      |

### Dimensions

|                     |         |
|---------------------|---------|
| Product Net Width   | 52.5 mm |
| Product Net Height  | 57.5 mm |
| Product Net Depth / | 46.5 mm |

Length

|                    |         |
|--------------------|---------|
| Product Net Weight | 0.18 kg |
|--------------------|---------|

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 10 piece      |
| Package Level 1 Width          | 115 mm        |
| Package Level 1 Height         | 54 mm         |
| Package Level 1 Depth / Length | 280 mm        |
| Package Level 1 Gross Weight   | 1.87 kg       |
| Package Level 1 EAN            | 4013614411922 |

## Environmental

|                                                |                                                    |
|------------------------------------------------|----------------------------------------------------|
| Ambient Air Temperature                        | Operation -30 ... +70 °C<br>Storage -40 ... +85 °C |
| Maximum Operating Altitude Permissible         | 2000 m                                             |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 3g / 3 ... 150 Hz                                  |
| Resistance to Shock acc. to IEC 60068-2-27     | 11 ms Pulse 15g                                    |
| RoHS Status                                    | Following EU Directive 2011/65/EU                  |

## Technical UL/CSA

|                                  |                               |
|----------------------------------|-------------------------------|
| Maximum Operating Voltage UL/CSA | Auxiliary Circuit 600 V AC/DC |
| General Use Rating UL/CSA        | (600 V AC) 5 A                |

## Additional Information

|                                                    |                                                                                                                                                                                                              |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coil Consumption                                   | Average Holding Value DC 5 W<br>Average Pull-in Value DC 5 W                                                                                                                                                 |
| Coil Operating Limits                              | (acc. to IEC 60947-4-1) for DC supply $U_c$ Min. ... $U_c$ Max. (at $\theta \leq 55^\circ\text{C}$ )<br>(acc. to IEC 60947-5-1) for DC supply $U_c$ Min. ... $U_c$ Max. (at $\theta \leq 55^\circ\text{C}$ ) |
| Connecting Capacity Auxiliary Circuit              | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup>      |
| Connecting Capacity Control Circuit                | Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup>      |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Auxiliary Circuit 6 A                                                                                                                                                                                        |
| Degree of Protection                               | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20                                                                                                            |
| Fire and Smoke Standards                           | EN 45545 (Hazard levels HL2, HL3)                                                                                                                                                                            |

|                                               |                                                                                                                                                                 |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Electrical Switching Frequency        | (AC-15) 600 cycles per hour<br>(DC-13) 600 cycles per hour                                                                                                      |
| Mechanical Durability                         | 10000000 cycle                                                                                                                                                  |
| Mini Contactor Type                           | Mini Contactor Relay                                                                                                                                            |
| Minimum Switching Capacity                    | 17 V<br>5 mA                                                                                                                                                    |
| Mounting on DIN Rail                          | TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715<br>TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715                                                  |
| Mounting Position                             | Any, Position 1-6                                                                                                                                               |
| Mounting Type                                 | DIN-rail<br>Screw                                                                                                                                               |
| Number of Auxiliary Contacts NC               | 1                                                                                                                                                               |
| Number of Auxiliary Contacts NO               | 3                                                                                                                                                               |
| Number of Poles                               | 4                                                                                                                                                               |
| Number of Main Contacts NC                    | 0                                                                                                                                                               |
| Number of Main Contacts NO                    | 0                                                                                                                                                               |
| Power Loss                                    | at Rated Operating Conditions per Pole 2 W                                                                                                                      |
| Product Main Type                             | TKC6                                                                                                                                                            |
| Product Name                                  | Mini Contactor Relay                                                                                                                                            |
| Rated Control Circuit Voltage ( $U_c$ )       | 17 ... 32 V DC                                                                                                                                                  |
| Rated Frequency (f)                           | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC<br>Control 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                                                                                                                                          |
| Rated Insulation Voltage ( $U_i$ )            | 690 V                                                                                                                                                           |
| Rated Operational Current AC-1 ( $I_e$ )      | (220 / 240 V) 40 °C 20 A<br>(220 / 240 V) 55 °C 16 A<br>(380 / 440 V) 40 °C 20 A<br>(380 / 440 V) 55 °C 16 A                                                    |
| Rated Operational Current AC-15 ( $I_e$ )     | (24 V) 4 A<br>(120 V) 4 A<br>(240 V) 4 A<br>(500 V) 2 A<br>(220 / 240 V) 4 A<br>(380 / 400 V) 3 A                                                               |
| Rated Operational Current DC-13 ( $I_e$ )     | (24 V) 2.5 A<br>(110 V) 0.7 A<br>(220 / 240 V) 0.4 A                                                                                                            |
| Rated Operational Voltage                     | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 250 V DC                                                                                                        |
| Remarks                                       | No CA6 or CAF6 mountable                                                                                                                                        |
| RoHS Date                                     | 0056                                                                                                                                                            |
| Standards                                     | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1                                                                                                          |
| Terminal Type                                 | Screw Terminals                                                                                                                                                 |

|                       |                                                                      |
|-----------------------|----------------------------------------------------------------------|
| Tightening Torque     | Auxiliary Circuit 0.8 ... 1.1 N·m<br>Control Circuit 0.8 ... 1.1 N·m |
| Wire Stripping Length | Auxiliary Circuit 9 mm                                               |

### Certificates and Declarations (Document Number)

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0201 |
| Declaration of Conformity - CE    | 1SAD938516-0001 |
| EAC Certificate                   | 1SAA938001-2701 |
| Environmental Information         | 1SAC200069H0009 |
| Instructions and Manuals          | 2CDC102001C0202 |
| RoHS Information                  | 1SAD938516-0001 |

### Classifications

|                            |                                                            |
|----------------------------|------------------------------------------------------------|
| ETIM 4                     | EC000196 - Contactor relay                                 |
| ETIM 5                     | EC000196 - Contactor relay                                 |
| ETIM 6                     | EC000196 - Contactor relay                                 |
| ETIM 7                     | EC000196 - Contactor relay                                 |
| Object Classification Code | K                                                          |
| UNSPSC                     | 39121500                                                   |
| WEEE Category              | 5. Small Equipment (No External Dimension More Than 50 cm) |
| eClass                     | V11.0 : 27371001                                           |

### Categories

Low Voltage Products and Systems → Control Products → Contactors → Mini Contactor Relays

