



PRODUCT-DETAILS

# KC6-31Z-04

## KC6-31Z-04 Mini Contactor Relay 110-125VDC



| General Information   |  |
|-----------------------|--|
| Extended Product Type | KC6-31Z-04   |
| Product ID            | GJH1213001R0314  |
| EAN                   | 4013614049736  |
| Catalog Description   | KC6-31Z-04 Mini Contactor Relay 110-125VDC   |
| Long Description      | The KC6-31Z 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               |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85365080 |
| Product Main Type      | KC6      |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals          | 2CDC102047M6801 |
| CAD Dimensional Drawing           | 2CDC001079B0201 |
| Dimension Diagram                 | GJL1200436F0001 |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 52.5 mm  |
| Product Net Depth / Length | 46.5 mm  |
| Product Net Height         | 57.5 mm  |
| Product Net Weight         | 0.175 kg |

## Technical

|   |   |
|---|---|
| Coil Consumption                                | Average Holding Value DC 3.5 W<br>Average Pull-in Value DC 3.5 W  |
| Coil Operating Limits                           | (acc. to IEC 60947-5-1) for DC supply 0.85 ... 1.1 x U <sub>c</sub> (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> |
| 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 Mounting Distance                       | Other Device Same Type, Horizontal 0 mm   |
| Minimum Switching Capacity                      | 17 V<br>5 mA  |
| Mounting Position                               | 1 ... 6   |
| Mounting Type                                   | DIN-Rail<br>Screw   |
| Mounting on DIN Rail                            | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715  |
| Number of Auxiliary Contacts NC                 | 1   |
| Number of Auxiliary Contacts NO                 | 3   |
| Number of Main Contacts NC                      | 0   |
| Number of Main Contacts NO                      | 0   |
| Number of Poles                                 | 4   |
| Power Loss                                      | at Rated Operating Conditions per Pole 0.32 W   |
| Rated Control Circuit Voltage (U <sub>c</sub> ) | 110 ... 125 V DC  |
| Rated Frequency (f)                             | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC  |

|  |  |
|--|--|
|  | Control Circuit DC   |
|  | Main Circuit 60 Hz   |
|  | Main Circuit 50 Hz   |
|  | Main Circuit DC  |
| Rated Impulse<br>Withstand Voltage ( $U_{imp}$ ) | Auxiliary Circuit 6 kV   |
| Rated Insulation Voltage<br>( $U_i$ )            | 690 V<br>acc. to UL/CSA 600 V  |
| Rated Operational<br>Current AC-15 ( $I_e$ )     | (24 V) 4 A<br>(120 V) 4 A<br>(240 V) 4 A<br>(400 V) 3 A<br>(500 V) 2 A                               |
| Rated Operational<br>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<br>Voltage                     | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 250 V DC   |
| Recommended Screw<br>Driver                      | M3<br>Pozidriv 1   |
| Short-Circuit Protective<br>Devices              | gG Type Fuses 6 A  |
| 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                 |
| Terminal Type                                    | Screw Terminals  |
| Tightening Torque                                | Auxiliary Circuit 0.8 ... 1.1 N·m<br>Control Circuit 0.8 ... 1.1 N·m<br>Main Circuit 0.8 ... 1.1 N·m |
| Wire Stripping Length                            | Auxiliary Circuit 9 mm   |

## Technical UL/CSA

|   |  |
|---|--|
| Connecting Capacity<br>Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG                              |
| Contact Rating UL/CSA                           | A600   |
| General Use Rating<br>UL/CSA                    | (600 V AC) 5 A                                       |
| Maximum Operating<br>Voltage UL/CSA             | 600 V AC   |
| Pilot Duty UL/CSA                               | A600   |
| Tightening Torque<br>UL/CSA                     | Auxiliary Circuit 7 in·lb<br>Control Circuit 7 in·lb |

## Environmental

|   |  |
|---|--|
| Ambient Air<br>Temperature                            | Operation -25 ... +55 °C<br>Storage -40 ... +80 °C                 |
| Conventional Free-air<br>Thermal Current ( $I_{th}$ ) | Auxiliary Circuit 6 A  |
| Degree of Protection                                  | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20 |
| Maximum Operating<br>Altitude Permissible             | 2000 m   |
| Resistance to Shock acc.<br>to IEC 60068-2-27         | 11 ms Pulse 15g  |
| Resistance to Vibrations                              | 3g 3 ... 150 Hz  |

## Material Compliance

|   |  |
|---|--|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658  |
| REACH Declaration                           | 2CMT2021-006202  |
| RoHS Information                            | 2CMT2021-006277  |
| RoHS Status                                 | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances Control Act - TSCA         | 2CMT2023-006525  |
| WEEE B2C / B2B                              | Business To Business   |
| WEEE Category                               | 5. Small Equipment (No External Dimension More Than 50 cm)             |

## Certificates and Declarations

|                                  |                     |
|----------------------------------|---------------------|
| CB Certificate                   | 1SAA938001-2001     |
| CQC Certificate                  | CQC2003010304064035 |
| Declaration of Conformity - CCC  | 2020980304001309    |
| Declaration of Conformity - CE   | 1SAD101100-3101     |
| Declaration of Conformity - UKCA | 1SAD201100-3101     |
| EAC Certificate                  | 1SAA938001-2701     |
| RMRS Certificate                 | 1SAA938001-0704     |
| UL Certificate                   | E48139-19881213     |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 10 piece      |
| Package Level 1 Width          | 115 mm        |
| Package Level 1 Depth / Length | 280 mm        |
| Package Level 1 Height         | 54 mm         |
| Package Level 1 Gross Weight   | 1.82 kg       |
| Package Level 1 EAN            | 4013614410949 |

## Classifications

|                                    |                                       |
|------------------------------------|---------------------------------------|
| eClass                             | V11.0 : 27371001                      |
| ETIM 6                             | EC000196 - Contactor relay            |
| ETIM 7                             | EC000196 - Contactor relay            |
| ETIM 8                             | EC000196 - Contactor relay            |
| ETIM 9                             | EC000196 - Contactor relay            |
| IDEA Granular Category Code (IGCC) | 4763 >> Power contactor, DC switching |
| Object Classification Code         | K                                     |
| UNSPSC                             | 39121529                              |

---

## Categories

---

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

Medium Voltage Products and Systems → Service → Spares and Consumables → Parts → All Spare Parts (Relays-SWG-CB)

