



PRODUCT-DETAILS

# KC6-31Z-P-04

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



| General Information   |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | KC6-31Z-P-04                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product ID            | GJH1213009R0314                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| EAN                   | 4013614050183                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Catalog Description   | KC6-31Z-P-04 Mini Contactor Relay 110-125VDC                                                                                                                                                                                                                                                                                                                                                                                                               |
| Long Description      | The KC6-31Z-P mini contactor relay is a compact 4 pole contactor relay with soldering pins. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors relays are used in residential buldings, 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 a switch position indication. |

| Ordering               |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85365080 |
| Product Main Type      | KC6-P    |

## Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals          | 2CDC102047M6801 |
| CAD Dimensional Drawing           | 2CDC001079B0201 |
| Dimension Diagram                 | GJL1200438F0001 |

## Dimensions

|                            |         |
|----------------------------|---------|
| Product Net Width          | 47.5 mm |
| Product Net Depth / Length | 51.5 mm |
| Product Net Height         | 45.5 mm |
| Product Net Weight         | 0.17 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 $\theta \leq 55^\circ\text{C}$ )                                                        |
| 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>PCB                                                                                                                                                 |
| 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<br>Control Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ) | Auxiliary Circuit 6 kV                                                                                                                                          |
| Rated Insulation Voltage                            | 690 V                                                                                                                                                           |

|                                                   |                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------|
| (U <sub>i</sub> )                                 | acc. to UL/CSA 600 V                                                                 |
| Rated Operational Current AC-15 (I <sub>e</sub> ) | (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 Current DC-13 (I <sub>e</sub> ) | (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                             |
| Short-Circuit Protective 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                                     | Soldering Pins                                                                       |

### Technical UL/CSA

|                                  |                |
|----------------------------------|----------------|
| Contact Rating UL/CSA            | A600           |
| General Use Rating UL/CSA        | (600 V AC) 5 A |
| Maximum Operating Voltage UL/CSA | 600 V AC       |
| Pilot Duty UL/CSA                | A600           |

### Environmental

|                                                          |                                                                    |
|----------------------------------------------------------|--------------------------------------------------------------------|
| Ambient Air Temperature                                  | Operation -25 ... +55 °C<br>Storage -40 ... +80 °C                 |
| Conventional Free-air Thermal Current (I <sub>th</sub> ) | Auxiliary Circuit 6 A                                              |
| Degree of Protection                                     | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20 |
| Maximum Operating Altitude Permissible                   | 2000 m                                                             |
| Resistance to Shock acc. 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 |
| cURus Certificate                   | 1SAA938000-1901     |
| Declaration of<br>Conformity - CCC  | 2020980304001309    |
| Declaration of<br>Conformity - CE   | 1SAD101100-3101     |
| Declaration of<br>Conformity - UKCA | 1SAD201100-3101     |
| EAC Certificate                     | 1SAA938001-2701     |
| RMRS Certificate                    | 1SAA938001-0704     |
| UL Certificate                      | E48139-19881213     |
| UR Certificate                      | 1SAA938000-1801     |

**Container Information**

|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | 10 piece      |
| Package Level 1 Width             | 108 mm        |
| Package Level 1 Depth /<br>Length | 247 mm        |
| Package Level 1 Height            | 69 mm         |
| Package Level 1 Gross<br>Weight   | 1.775 kg      |
| Package Level 1 EAN               | 4013614411656 |

**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<br>Code (IGCC) | 4763 >> Power contactor, DC switching |
| Object Classification<br>Code         | K                                     |
| UNSPSC                                | 39121529                              |

**Categories**

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

