

## PRODUCT-DETAILS

# KC6-31Z-P-1.4-81

## KC6-31Z-P-1.4-81 Mini Contactor Relay 24VDC, 1.4W



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | KC6-31Z-P-1.4-81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Product ID            | GJH1213009R8311                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EAN                   | 4013614050268                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Catalog Description   | KC6-31Z-P-1.4-81 Mini Contactor Relay 24VDC, 1.4W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Long Description      | <p>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 buildings, commercial buildings and industrial applications for switching of control signals up to 3 A / 400 V (AC-15). Due to the low coil consumption, this device can be directly controlled by a PLC. Further features are the noiseless and hum-free coil and a switch position indication.</p> |

### Ordering

|                        |               |
|------------------------|---------------|
| EAN                    | 4013614050268 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85365080      |

### Dimensions

|                            |         |
|----------------------------|---------|
| Product Net Width          | 47.5 mm |
| Product Net Height         | 45.5 mm |
| Product Net Depth / Length | 51.5 mm |
| Product Net Weight         | 0.17 kg |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 10 piece      |
| Package Level 1 Width          | 108 mm        |
| Package Level 1 Height         | 69 mm         |
| Package Level 1 Depth / Length | 247 mm        |
| Package Level 1 Gross Weight   | 1.775 kg      |
| Package Level 1 EAN            | 4013614411793 |

## Environmental

|                                                |                                                    |
|------------------------------------------------|----------------------------------------------------|
| Ambient Air Temperature                        | Operation -25 ... +55 °C<br>Storage -40 ... +80 °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 |
| Contact Rating UL/CSA                     | A600                          |
| General Use Rating UL/CSA                 | (600 V AC) 5 A                |
| Pilot Duty of Contact Elements acc. UL508 | A600                          |

## Additional Information

|                                                          |                                                                                                                |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Coil Consumption                                         | Average Holding Value DC 1.4 W<br>Average Pull-in Value DC 1.4 W                                               |
| Coil Operating Limits                                    | (acc. to IEC 60947-5-1) for DC supply 0.85 ... 1.1 x U <sub>c</sub> (at $\theta \leq 55^\circ\text{C}$ )       |
| 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<br>Main Circuit Terminals IP20              |
| Maximum Electrical Switching Frequency                   | (AC-15) 600 cycles per hour<br>(DC-13) 600 cycles per hour                                                     |
| Mechanical Durability                                    | 10000000 cycle                                                                                                 |
| Mini Contactor Type                                      | Interface 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>PCB                                                                                                |
| Number of Auxiliary Contacts NC                          | 1                                                                                                              |
| Number of Auxiliary Contacts NO                          | 3                                                                                                              |

|                                                  |                                                                                                                                                                 |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Poles                                  | 4                                                                                                                                                               |
| Number of Main Contacts<br>NC                    | 0                                                                                                                                                               |
| Number of Main Contacts<br>NO                    | 0                                                                                                                                                               |
| Power Loss                                       | at Rated Operating Conditions per Pole 2 W                                                                                                                      |
| Product Main Type                                | KC6-P                                                                                                                                                           |
| Product Name                                     | Mini Contactor Relay                                                                                                                                            |
| Rated Control Circuit<br>Voltage ( $U_c$ )       | 24 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<br>Voltage ( $U_{imp}$ ) | Auxiliary Circuit 6 kV                                                                                                                                          |
| Rated Insulation Voltage<br>( $U_i$ )            | 690 V<br>acc. to UL/CSA 600 V                                                                                                                                   |
| Rated Operational Current<br>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<br>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<br>UL 60947-1<br>UL 60947-4-1                                                                            |
| Terminal Type                                    | Soldering Pins                                                                                                                                                  |

## Certificates and Declarations (Document Number)

|                                      |                     |
|--------------------------------------|---------------------|
| CB Certificate                       | 1SAA938001-2001     |
| CQC Certificate                      | CQC2003010304064035 |
| cUR Certificate                      | 1SAA938000-1901     |
| Data Sheet, Technical<br>Information | 1SBC100214C0201     |
| Declaration of Conformity<br>- CCC   | 2020980304001309    |
| Declaration of Conformity<br>- CE    | 1SAD938516-0001     |
| EAC Certificate                      | 1SAA938001-2701     |
| Environmental Information            | 1SAC200069H0009     |
| Instructions and Manuals             | 2CDC102047M6801     |
| RMRS Certificate                     | 1SAA938001-0704     |
| RoHS Information                     | 1SAD938516-0001     |
| UR Certificate                       | 1SAA938000-1801     |
| Dimension Diagram                    | GJL1200438F0001     |

## 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

