

# K6-31Z-27



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

## General Information

|                               |   |
|-------------------------------|---|
| <b>Extended Product Type:</b> | K6-31Z-27   |
| <b>Product ID:</b>            | GJH1211001R2317   |
| <b>EAN:</b>                   | 4013614049187   |
| <b>Catalog Description:</b>   | K6-31Z-27 Mini Contactor Relay 100V 40-450Hz  |
| <b>Long Description:</b>      | The K6-31Z 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 silent coil, a switch position indication and the integrated possibility for rail or wall mounting. |

## Ordering

|                                |          |
|--------------------------------|----------|
| <b>Minimum Order Quantity:</b> | 1 piece  |
| <b>Customs Tariff Number:</b>  | 85365080 |

## Popular Downloads

|   |                 |
|---|-----------------|
| <b>Data Sheet, Technical Information:</b> | 1SBC100173C0201 |
| <b>Instructions and Manuals:</b>          | 2CDC102047M6801 |
| <b>Dimension Diagram:</b>                 | GJL1200436F0001 |

## Dimensions

|                            |          |
|----------------------------|----------|
| <b>Product Net Width:</b>  | 52.5 mm  |
| <b>Product Net Height:</b> | 57.5 mm  |
| <b>Product Net Depth:</b>  | 46.5 mm  |
| <b>Product Net Weight:</b> | 0.175 kg |

## Technical

|                                   |  |
|-----------------------------------|--|
| <b>Number of Poles:</b>           | 4  |
| <b>Mini Contactor Type:</b>       | Mini Contactor Relay   |
| <b>Rated Operational Voltage:</b> | Auxiliary Circuit 12 ... 240 V DC<br>Auxiliary Circuit 12 ... 500 V AC/DC<br>Auxiliary Circuit 690 V |

|  |   |
|--|---|
| <b>Rated Frequency (f):</b>                                    | Auxiliary Circuit 50 Hz<br>Auxiliary Circuit 60 Hz<br>Auxiliary Circuit DC<br>Control Circuit 400 Hz<br>Control Circuit 50 Hz<br>Control Circuit 60 Hz<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC |
| <b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>      | Auxiliary Circuit 6 kV  |
| <b>Rated Insulation Voltage (U<sub>i</sub>):</b>               | 690 V<br>acc. to UL/CSA 600 V   |
| <b>Number of Main Contacts NC:</b>                             | 0   |
| <b>Number of Main Contacts NO:</b>                             | 0   |
| <b>Number of Auxiliary Contacts NC:</b>                        | 1   |
| <b>Number of Auxiliary Contacts NO:</b>                        | 3   |
| <b>Rated Operational Current AC-15 (I<sub>e</sub>):</b>        | (120 V) 4 A<br>(220 / 240 V) 4 A<br>(240 V) 4 A<br>(24 V) 4 A<br>(380 / 400 V) 3 A<br>(500 V) 2 A   |
| <b>Rated Operational Current DC-13 (I<sub>e</sub>):</b>        | (110 V) 0.7 A<br>(220 / 240 V) 0.4 A<br>(24 V) 2.5 A  |
| <b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b> | Auxiliary Circuit 6 A   |
| <b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>          | 100 V AC  |
| <b>Coil Operating Limits:</b>                                  | (acc. to IEC 60947-5-1) for AC supply 0.85 ... 1.1 x U <sub>c</sub> (at θ ≤ 55 °C)  |
| <b>Degree of Protection:</b>                                   | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20  |
| <b>Mechanical Durability:</b>                                  | 10000000 cycle  |
| <b>Minimum Switching Capacity:</b>                             | 17 V<br>5 mA  |
| <b>Maximum Electrical Switching Frequency:</b>                 | AC-15 600 cycles per hour<br>DC-13 600 cycles per hour  |
| <b>Connecting Capacity Auxiliary Circuit:</b>                  | 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>               |

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|---|---|
| <b>Connecting Capacity Control Circuit:</b> | 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> |
| <b>Wire Stripping Length:</b>               | Auxiliary Circuit 9 mm  |
| <b>Tightening Torque:</b>                   | Auxiliary Circuit 0.8 ... 1.1 N·m<br>Control Circuit 0.8 ... 1.1 N·m  |
| <b>Mounting on DIN Rail:</b>                | 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  |
| <b>Standards:</b>                           | 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  |

## Environmental

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|--|--|
| <b>Ambient Air Temperature:</b>                        | Operation -25 ... +55 °C<br>Storage -40 ... +80 °C |
| <b>Maximum Operating Altitude Permissible:</b>         | 2000 m   |
| <b>Resistance to Shock acc. to IEC 60068-2-27:</b>     | 11 ms Pulse 15g                                    |
| <b>Resistance to Vibrations acc. to IEC 60068-2-6:</b> | 3g / 3 ... 150 Hz                                  |
| <b>RoHS Status:</b>                                    | Following EU Directive 2011/65/EU                  |

## Technical UL/CSA

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

## Certificates and Declarations (Document Number)

|  |                 |
|--|-----------------|
| <b>CB Certificate:</b>                 | 1SAA938001-2001 |
| <b>CCC Certificate:</b>                | 1SAA938000-3804 |
| <b>cUL Certificate:</b>                | cUL_E48139      |
| <b>Declaration of Conformity - CE:</b> | 1SAD938512-0001 |
| <b>EAC Certificate:</b>                | 1SAA938001-2701 |
| <b>Environmental Information:</b>      | 1SAA938002-2401 |

|                                  |                 |
|----------------------------------|-----------------|
| <b>Instructions and Manuals:</b> | 2CDC102047M6801 |
| <b>RMRS Certificate:</b>         | 1SAA938001-0704 |
| <b>RoHS Information:</b>         | 1SAD938512-0001 |
| <b>UL Certificate:</b>           | UL_E48139       |

## Container Information

|                                      |               |
|--------------------------------------|---------------|
| <b>Package Level 1 Units:</b>        | 10 piece      |
| <b>Package Level 1 Width:</b>        | 115 mm        |
| <b>Package Level 1 Height:</b>       | 54 mm         |
| <b>Package Level 1 Length:</b>       | 280 mm        |
| <b>Package Level 1 Gross Weight:</b> | 1.82 kg       |
| <b>Package Level 1 EAN:</b>          | 4013614410260 |

## Classifications

|                                    |                            |
|------------------------------------|----------------------------|
| <b>Object Classification Code:</b> | K                          |
| <b>ETIM 4:</b>                     | EC000196 - Contactor relay |
| <b>ETIM 5:</b>                     | EC000196 - Contactor relay |
| <b>ETIM 6:</b>                     | EC000196 - Contactor relay |
| <b>ETIM 7:</b>                     | EC000196 - Contactor relay |
| <b>eClass:</b>                     | 7.0 27371001               |
| <b>UNSPSC:</b>                     | 39121500                   |

