PRODUCT-DETAILS

# K6S-31Z-2.8-72

# K6S-31Z-2.8-72 Mini Contactor Relay 17-32VDC, 2.8W




## General Information

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|---|---|
| Extended Product Type | K6S-31Z-2.8-72 |
| Product ID | GJH1213001R7312 |
| EAN | 4013614185403 |
| Catalog Description | K6S-31Z-2.8-72 Mini Contactor Relay 17-32VDC, 2.8W |
| Long Description | The K6S-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 buldings, 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, the integrated protective circuit with diodes and additional overvoltage protection, a switch position indication and the integrated possibility for rail or wall mounting. |

## Ordering

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| EAN | 4013614185403 |
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85365080 |

## Dimensions

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

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| Product Net Weight | 0.175 kg |

## Container Information

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| 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 | 1.82 kg |
| Package Level 1 EAN | 4013614411229 |

## Environmental

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|---|---|
| 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

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|---|---|
| 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 |
| Connecting Capacity Auxiliary Circuit UL/CSA | Stranded 1/2x 22-10 AWG |
| Tightening Torque UL/CSA | Auxiliary Circuit 7 in·lb<br>Control Circuit 7 in·lb |
| Pilot Duty of Contact Elements acc. UL508 | A600 |

## Additional Information

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|---|---|
| Coil Consumption | Average Holding Value 50 Hz 2.8 V·A<br>Average Pull-in Value 50 Hz 2.8 V·A |
| Coil Operating Limits | (acc. to IEC 60947-4-1) for DC supply Uc Min. ... Uc Max. (at θ ≤ 55 °C)<br>(acc. to IEC 60947-5-1) for DC supply 0.85 ... 1.1 x Uc (at θ ≤ 55 °C) |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| Connecting Capacity Control Circuit | Flexible with Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm²<br>Flexible 1/2x 1 ... 2.5 mm²<br>Rigid 1/2x 1 ... 4 mm² |
| 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 |
| Maximum Electrical Switching Frequency | (AC-15) 600 cycles per hour<br>(DC-13) 600 cycles per hour |

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| 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>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 | K6S |
| 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<br>acc. to UL/CSA 600 V |
| Rated Operational 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 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<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 |
| Wire Stripping Length | Auxiliary Circuit 9 mm |

## Certificates and Declarations (Document Number)

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|---|---|
| CB Certificate | 1SAA938001-2001 |
| Data Sheet, Technical Information | 1SBC100214C0201 |
| Declaration of Conformity - CE | 1SAD938517-0001 |

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| Declaration of Conformity - UKCA | 1SAD938500-1001 |
| EAC Certificate | 1SAA938001-2701 |
| Environmental Information | 1SAC200069H0009 |
| Instructions and Manuals | 2CDC102047M6801 |
| RMRS Certificate | 1SAA938001-0704 |
| RoHS Information | 1SAD938517-0001 |
| Dimension Diagram | GJL1200436F0001 |

## Classifications

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| 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

