

PRODUCT-DETAILS

# KC6-31Z-03

## KC6-31Z-03 Mini Contactor Relay 60VDC



### General Information

Extended Product Type	KC6-31Z-03
Product ID	GJH1213001R0313
EAN	4013614049729
Catalog Description	KC6-31Z-03 Mini Contactor Relay 60VDC

Long Description	<p>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.</p>
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### Ordering

EAN	4013614049729
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

### Dimensions

Product Net Width	52.5 mm
Product Net Height	57.5 mm
Product Net Depth /	46.5 mm

Length	
Product Net Weight	0.175 kg

### Container Information

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	4013614410932

### Environmental

Ambient Air Temperature	Operation -25 ... +55 °C 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
Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 22-10 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 7 in-lb Control Circuit 7 in-lb
Pilot Duty of Contact Elements acc. UL508	A600

### Additional Information

Coil Consumption	Average Holding Value DC 3.5 W 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 $\theta \leq 55$ °C)
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> 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> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup>

Conventional Free-air Thermal Current ( $I_{th}$ )	Auxiliary Circuit 6 A
Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20
Maximum Electrical Switching Frequency	AC-15 600 cycles per hour DC-13 600 cycles per hour
Mechanical Durability	10000000 cycle
Mini Contactor Type	Mini Contactor Relay
Minimum Switching Capacity	17 V 5 mA
Mounting on DIN Rail	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Mounting Position	Any, Position 1-6
Mounting Type	DIN-rail 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	KC6
Product Name	Mini Contactor Relay
Rated Control Circuit Voltage ( $U_c$ )	60 V DC
Rated Frequency (f)	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Control Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Auxiliary Circuit 6 kV
Rated Insulation Voltage ( $U_i$ )	690 V acc. to UL/CSA 600 V
Rated Operational Current AC-15 ( $I_{\theta}$ )	(120 V) 4 A (220 / 240 V) 4 A (240 V) 4 A (24 V) 4 A (380 / 400 V) 3 A (500 V) 2 A
Rated Operational Current DC-13 ( $I_{\theta}$ )	(110 V) 0.7 A (220 / 240 V) 0.4 A (24 V) 2.5 A
Rated Operational Voltage	Auxiliary Circuit 12 ... 240 V DC Auxiliary Circuit 12 ... 500 V AC/DC Auxiliary Circuit 690 V
RoHS Date	0056
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1

	UL 60947-4-1
Terminal Type	Screw Terminals
Tightening Torque	Auxiliary Circuit 0.8 ... 1.1 N·m Control Circuit 0.8 ... 1.1 N·m
Wire Stripping Length	Auxiliary Circuit 9 mm

### Certificates and Declarations (Document Number)

CB Certificate	1SAA938001-2001
CCC Certificate	1SAA938000-3804
cULus Certificate	1SAA938002-1701
Data Sheet, Technical Information	1SBC100173C0201
Declaration of Conformity - CE	1SAD938516-0001
EAC Certificate	1SAA938001-2701
Instructions and Manuals	2CDC102047M6801
RMRS Certificate	1SAA938001-0704
RoHS Information	1SAD938514-0001
UL Certificate	1SAA938002-1601
Dimension Diagram	GJL1200436F0001

### 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	7.0 27371001

### Categories

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

