



PRODUCT-DETAILS

K6-31Z-01

K6-31Z-01 Mini Contactor Relay 24V 40-450Hz



General Information	
Extended Product Type	K6-31Z-01
Product ID	GJH1211001R0311
EAN	4013614048999
Catalog Description	K6-31Z-01 Mini Contactor Relay 24V 40-450Hz
Long Description	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 buldings, 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	
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080
Product Main Type	K6

## Popular Downloads

Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	2CDC102047M6801
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	GJL1200436F0001

## Dimensions

Product Net Width	52.5 mm
Product Net Depth / Length	46.5 mm
Product Net Height	57.5 mm
Product Net Weight	0.175 kg

## Technical

Coil Consumption	Average Holding Value 50 Hz 3.5 V-A Average Pull-in Value 50 Hz 3.5 V-A
Coil Operating Limits	(acc. to IEC 60947-5-1) for AC supply 0.85 ... 1.1 x U <sub>c</sub> (at $\theta \leq 55^\circ\text{C}$ )
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>
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 Mounting Distance	Other Device Same Type, Horizontal 0 mm
Minimum Switching Capacity	17 V 5 mA
Mounting Position	1 ... 6
Mounting Type	DIN-Rail Screw
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 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> )	24 V AC
Rated Frequency (f)	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC

	Control Circuit 400 Hz Control Circuit 50 Hz Control Circuit 60 Hz 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 ( $I_e$ )	(24 V) 4 A (120 V) 4 A (240 V) 4 A (400 V) 3 A (500 V) 2 A
Rated Operational Current DC-13 ( $I_e$ )	(24 V) 2.5 A (110 V) 0.7 A (220 / 240 V) 0.4 A
Rated Operational Voltage	Auxiliary Circuit 690 V AC Auxiliary Circuit 250 V DC
Recommended Screw Driver	M3 Pozidriv 1
Short-Circuit Protective Devices	gG Type Fuses 6 A
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 Main Circuit 0.8 ... 1.1 N·m
Wire Stripping Length	Auxiliary Circuit 9 mm

## Technical UL/CSA

Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 22-10 AWG
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
Tightening Torque UL/CSA	Auxiliary Circuit 7 in·lb Control Circuit 7 in·lb

## Environmental

Ambient Air Temperature	Operation -25 ... +55 °C Storage -40 ... +80 °C
Conventional Free-air Thermal Current ( $I_{th}$ )	Auxiliary Circuit 6 A
Degree of Protection	Auxiliary Circuit Terminals IP20 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
Declaration of Conformity - CCC	2020980304001309
Declaration of Conformity - CE	1SAD101100-3101
Declaration of Conformity - UKCA	1SAD201100-3101
EAC Certificate	1SAA938001-2701
RMRS Certificate	1SAA938001-0704
UL Certificate	E48139-19881213

Container Information

Package Level 1 Units	10 piece
Package Level 1 Width	115 mm
Package Level 1 Depth / Length	280 mm
Package Level 1 Height	54 mm
Package Level 1 Gross Weight	1.82 kg
Package Level 1 EAN	4013614410147

Classifications

eClass	V11.0 : 27371001
E-Number (Finland)	3709126
E-Number (Sweden)	3210110
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
ETIM 9	EC000196 - Contactor relay
IDEA Granular Category Code (IGCC)	4761 >> Magnet contactor, AC-switching
Object Classification Code	K
UNSPSC	39121529

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**Categories**

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

