



# **General Information**

Extended Product Type: BC6-30-10-01 Product ID: GJL1213001R0101 EAN: 4013614052880 Catalog Description: BC6-30-10-01 Mini Contactor

# Long Description:

The BC6-30-10 mini contactor is a compact 3 pole contactor with 1 auxiliary contact and screw terminals. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors are used in residential buldings, commercial buildings and industrial applications for the control of single or three-phase loads up to 4 kW (AC-3) and 20 A / 690 V (AC-1) or switching of control signals. Further features are the noiseless and hum-free coil, a switch position indication and the integrated possibility for rail or wall mounting.



## Dimensions

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

## **Container Information**

Package Level 1 Units: 10 piece Package Level 1 Width: 115.0 mm Package Level 1 Height: 54.0 mm Package Level 1 Length: 280.0 mm Package Level 1 Gross Weight: 1.820 kg Package Level 1 EAN: 4013614414541

# Technical

Number of Poles: 4 Mini Contactor Type: Mini Contactor **Rated Operational Voltage:** Auxiliary Circuit 12 ... 240 V DC Auxiliary Circuit 12 ... 500 V AC DC V Main Circuit 12 ... 690 V AC DC V Main Circuit 690 V AC Rated Frequency (f): Control Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC Rated Impulse Withstand Voltage (U<sub>imp</sub>): Auxiliary Circuit 6 kV Main Circuit 6 kV Rated Insulation Voltage (U<sub>i</sub>): 690 V acc. to UL/CSA 600 V Number of Main Contacts NC: 0 Number of Main Contacts NO: 3 Rated Operational Current AC-1 (I<sub>a</sub>): (220/240V) 40°C 20 A (220/240V) 55°C 16 A (380/440V) 40°C 20 A (380/440V) 55°C 16 A (690V) 40°C 6 A (690V) 55°C 6 A Rated Operational Power AC-3 (Pe): (220 / 230 / 240V) 2.20 kW (400V) 4.00 kW (400V) Three Phase 4.00 kW (440V) 4.00 kW (500V) 4.00 kW (690V) 3.00 kW Rated Short-time Withstand Current (I<sub>cw</sub>): at 40°C Ambient Temp, in Free Air, from a Cold State 10s 64 A Number of Auxiliary Contacts NC: 0 Number of Auxiliary Contacts NO: 1

Conventional Free-air Thermal Current (I<sub>th</sub>): Main Circuit 20.00 A Rated Control Circuit Voltage (U<sub>c</sub>): 24 V DC **Coil Operating Limits:** (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x Uc (at  $\theta \le 55$  °C) **Degree of Protection:** Auxiliary Circuit Terminals IP20 **Control Circuit Terminals IP20** Main Circuit Terminals IP20 **Mechanical Durability:** 1000000 cycle **Maximum Electrical Switching Frequency:** AC-1 300 cycles per hour AC-15 360 cycles per hour AC-3 600 cycles per hour DC-1 600 cycles per hour DC-13 360 cycles per hour DC-3 600 cycles per hour **Connecting Capacity-Main 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-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> Wire Stripping Length: Auxiliary Circuit 9 mm Main Circuit 9 mm **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 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 Power Loss: Per Pole 2 W Standards: IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1

# Environmental

Ambient Air Temperature: Operation -20 ... +55 °C Storage -40 ... +80 °C Maximum Operating Altitude Permissible: 2000 m Resistance to Shock acc. to IEC 60068-2-27: 11 ms Pulse 15g Resistance to Vibrations acc. to IEC 60068-2-6: 5g / 5 ... 150 Hz RoHS Status: Following EU Directive 2002/95/EC August 18, 2005 and amendment

# **Technical UL/CSA**

Maximum Operating Voltage UL/CSA: Main Circuit 600 V AC Connecting Capacity-Main Circuit UL/CSA: Stranded 1/2x 22 ... 10 AWG Connecting Capacity-Auxiliary Circuit UL/CSA: Stranded 1/2x 22 ... 10 AWG Horse Power Rating UL/CSA: 208V AC Three Phase 1.00 Hp 220 ... 240V AC Three Phase 2.00 Hp 440 ... 480V AC Three Phase 3.00 Hp 550 ... 600V AC Three Phase 1.00 Hp Tightening Torque UL/CSA: Auxiliary Circuit 7 in-lb Control Circuit 7 in Ib Main Circuit 7 in-Ib General Use Rating UL/CSA: 300V AC 12.00 A

#### Certificates and Declarations (Document Number)

**BV Certificate:** 1SAA938000-0203 **CB Certificate:** 1SAA938000-2002 **CCC Certificate:** 1SAA938001-3804 cUL Certificate: 1SAA938003-1701 **Declaration of Conformity - CE:** 1SAD938510-0001 **DNV Certificate:** 1SAA938000-0305 **EAC Certificate:** 1SAA920000-2702 **GL Certificate:** 1SAA938000-0403 LR Certificate: 1SAA938000-0503 **RMRS Certificate:** 1SAA938000-0703 **RoHS Information:** 1SAA938001-4402 **UL Certificate:** 1SAA938000-1604

#### Classifications

eClass: 7.0 27371003 Object Classification Code: Q E-nummer: 3210051 ETIM 4.0: EC000066 - Magnet contactor, AC-switching ETIM 5.0: EC000066 - Magnet contactor, AC-switching UNSPSC: 39121529