

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

## General Information

<b>Extended Product Type:</b>	TBC7-31-00-62
<b>Product ID:</b>	GJL1313461R6002
<b>EAN:</b>	4013614264283
<b>Catalog Description:</b>	TBC7-31-00-62 Mini Contactor 77-143VDC
<b>Long Description:</b>	The TBC7-31-00 mini contactor is a compact 4 pole contactor with 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 buildings, commercial buildings and industrial applications for the control of single or three-phase loads up to 5.5 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.

## 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>	2CDC102001C0202

## Dimensions

<b>Product Net Width:</b>	52.5 mm
<b>Product Net Height:</b>	46.5 mm
<b>Product Net Depth:</b>	57.5 mm
<b>Product Net Weight:</b>	0.185 kg

## Technical

<b>Number of Poles:</b>	4
<b>Mini Contactor Type:</b>	Mini Contactor
<b>Rated Operational Voltage:</b>	Main Circuit 12 ... 690 V AC/DC Main Circuit 690 V AC
<b>Rated Frequency (f):</b>	Control Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	Main Circuit 6 kV

<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	690 V acc. to UL/CSA 600 V
<b>Number of Main Contacts NC:</b>	1
<b>Number of Main Contacts NO:</b>	3
<b>Rated Operational Current AC-1 (I<sub>e</sub>):</b>	(220 / 240 V) 40 °C 20 A (220 / 240 V) 55 °C 16 A (380 / 440 V) 40 °C 20 A (380 / 440 V) 55 °C 16 A (690 V) 40 °C 6 A (690 V) 55 °C 6 A
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(220 / 230 / 240 V) 3 kW (400 V) 5.5 kW (400 V) Three Phase 5.5 kW (440 V) 5.5 kW (500 V) 5.5 kW (690 V) 3 kW
<b>Rated Short-time Withstand Current (I<sub>cw</sub>):</b>	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A
<b>Number of Auxiliary Contacts NC:</b>	0
<b>Number of Auxiliary Contacts NO:</b>	0
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	Main Circuit 20 A
<b>Rated Control Circuit Voltage (U<sub>c</sub>):</b>	110 V DC
<b>Coil Operating Limits:</b>	(acc. to IEC 60947-4-1) for DC supply U <sub>c</sub> Min. ... U <sub>c</sub> Max. (at θ ≤ 55 °C)
<b>Degree of Protection:</b>	Control Circuit Terminals IP20 Main Circuit Terminals IP20
<b>Mechanical Durability:</b>	10000000 cycle
<b>Maximum Electrical Switching Frequency:</b>	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
<b>Connecting Capacity Main Circuit:</b>	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>
<b>Connecting Capacity Auxiliary Circuit:</b>	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>
<b>Connecting Capacity Control Circuit:</b>	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>

<b>Wire Stripping Length:</b>	Main Circuit 9 mm
<b>Tightening Torque:</b>	Control Circuit 0.8 ... 1.1 N·m Main 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 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 2 W
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1
<b>Remarks:</b>	No CA6 or CAF6 mountable

## Environmental

<b>Ambient Air Temperature:</b>	Operation -30 ... +70 °C Storage -40 ... +85 °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>	5g / 5 ... 150 Hz
<b>RoHS Status:</b>	Following EU Directive 2011/65/EU

## Technical UL/CSA

<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V AC
<b>Full Load Amps Motor Use:</b>	(240 V AC) Single Phase 10 A (440 ... 480 V AC) Three Phase 7.6 A
<b>Horsepower Rating UL/CSA:</b>	(208 V AC) Three Phase 1 Hp (220 ... 240 V AC) Single Phase 1.5 Hp (220 ... 240 V AC) Three Phase 3 Hp (440 ... 480 V AC) Three Phase 5 Hp (550 ... 600 V AC) Three Phase 5 Hp
<b>General Use Rating UL/CSA:</b>	(600 V AC) 16 A

## Certificates and Declarations (Document Number)

<b>Declaration of Conformity - CE:</b>	1SAD938512-0001
<b>EAC Certificate:</b>	1SAA920000-2702
<b>Instructions and Manuals:</b>	2CDC102001C0202
<b>KC Certificate:</b>	1SAA938000-1501
<b>RoHS Information:</b>	1SAD938512-0001

## Container Information

<b>Package Level 1 Units:</b>	10 piece
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<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>	1.92 kg
<b>Package Level 1 EAN:</b>	4013614419034

## Classifications

<b>Object Classification Code:</b>	Q
<b>ETIM 4:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 5:</b>	EC000066 - Magnet contactor, AC-switching
<b>ETIM 6:</b>	EC000066 - Power contactor, AC switching
<b>ETIM 7:</b>	EC000066 - Power contactor, AC switching
<b>eClass:</b>	7.0 27371003
<b>UNSPSC:</b>	39121529

## Accessories

<b>Identifier</b>	<b>Description</b>	<b>Type</b>	<b>Qty</b>	<b>Unit Of Measure</b>
GJL1201317R0002	CA6-11E Auxiliary Contact	CA6-11E	1	piece
GJL1201317R0003	CA6-11M Auxiliary Contact	CA6-11M	1	piece
GJL1201317R0004	CA6-11N Auxiliary Contact	CA6-11N	1	piece
GJL1201330R0002	CAF6-11E Auxiliary Contact	CAF6-11E	1	piece
GJL1201330R0003	CAF6-11M Auxiliary Contact	CAF6-11M	1	piece
GJL1201330R0004	CAF6-11N Auxiliary Contact	CAF6-11N	1	piece
GJL1201330R0006	CAF6-20E Auxiliary Contact	CAF6-20E	1	piece
GJL1201330R0007	CAF6-20M Auxiliary Contact	CAF6-20M	1	piece
GJL1201330R0008	CAF6-20N Auxiliary Contact	CAF6-20N	1	piece
GJL1201330R0010	CAF6-02E Auxiliary Contact	CAF6-02E	1	piece
GJL1201330R0011	CAF6-02M Auxiliary Contact	CAF6-02M	1	piece
GJL1201330R0012	CAF6-02N Auxiliary Contact	CAF6-02N	1	piece
GJL1201904R0001	BN6 Plunger	BN6	1	piece
GJL1201906R0001	LT6-B Cover Cap	LT6-B	1	piece
GJL1201907R0001	LP6 Connecting Link	LP6	1	piece

