



PRODUCT-DETAILS

VBC6A-30-10-04

VBC6A-30-10-04 Mini Reversing Contactor

110 ... 125 V DC - 3 NO - 0 NC - Screw

Terminals



General Information

|                       |                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------|
| Extended Product Type | VBC6A-30-10-04                                                                           |
| Product ID            | GJL1213911R0104                                                                          |
| EAN                   | 4013614213755                                                                            |
| Catalog Description   | VBC6A-30-10-04 Mini Reversing Contactor 110 ... 125 V DC - 3 NO - 0 NC - Screw Terminals |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Long Description | The VBC6A-30-10 mini reversing contactor is a compact 3 pole contactor with 1 auxiliary contact, screw terminals and mechanical interlock and safety blocking. They are ideally suited for applications where reliability is a must and space is at a premium. Mini reversing contactors are used in residential buldings, commercial buildings and industrial applications for the control of three-phase motor loads up to 4 kW (AC-3). Further features are the noiseless and hum-free coil, a a switch position indication and the integrated possibility for rail or wall mounting. |
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Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85365080 |

Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals          | 2CDC102046M6801 |
| CAD Dimensional Drawing           | 2CDC001079B0201 |
| Dimension Diagram                 | GJL1200447F0001 |

Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 96.2 mm  |
| Product Net Height         | 57.5 mm  |
| Product Net Depth / Length | 46.7 mm  |
| Product Net Weight         | 0.355 kg |

Technical

|                                                                   |                                                                                                                                                        |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Poles                                                   | 3                                                                                                                                                      |
| Rated Operational Voltage                                         | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 250 V DC<br>Main Circuit 690 V AC<br>Main Circuit 220 V DC                                             |
| Rated Frequency (f)                                               | Control Circuit DC<br>Main Circuit 60 Hz<br>Main Circuit 50 Hz<br>Main Circuit DC                                                                      |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )               | Main Circuit 6 kV                                                                                                                                      |
| Rated Insulation Voltage (U <sub>i</sub> )                        | 690 V<br>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>e</sub> )                  | (220 / 240 V) 40 °C 20 A<br>(220 / 240 V) 55 °C 16 A<br>(380 / 440 V) 40 °C 20 A<br>(380 / 440 V) 55 °C 16 A<br>(690 V) 40 °C 6 A<br>(690 V) 55 °C 6 A |
| Rated Operational Power AC-3 (P <sub>e</sub> )                    | (230 V) Three Phase 2.2 kW<br>(400 V) Three Phase 4 kW<br>(500 V) Three Phase 4 kW<br>(690 V) Three Phase, NO 3 kW                                     |
| Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 64 A                                                                                        |
| Number of Auxiliary Contacts NC                                   | 0                                                                                                                                                      |
| Number of Auxiliary Contacts NO                                   | 1                                                                                                                                                      |
| Rated Operational Current AC-15 (I <sub>e</sub> )                 | (440 V AC) 3 A<br>(24 V) 4 A<br>(120 V) 4 A<br>(240 V) 4 A<br>(500 V) 2 A<br>(380 / 400 V) 3 A                                                         |
| Rated Operational Current DC-13 (I <sub>e</sub> )                 | (24 V) 2.5 A<br>(110 V) 0.7 A<br>(220 / 240 V) 0.4 A                                                                                                   |
| Conventional Free-air Thermal Current (I <sub>th</sub> )          | Main Circuit 20 A                                                                                                                                      |
| Rated Control Circuit Voltage (U <sub>c</sub> )                   | 110 ... 125 V DC                                                                                                                                       |
| Coil Operating Limits                                             | (acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x U <sub>c</sub> (at θ ≤ 55 °C)                                                                     |
| Degree of Protection                                              | Auxiliary Circuit Terminals IP20                                                                                                                       |

|                                        |                                                                                                                                                                                    |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | Control Circuit Terminals IP20<br>Main Circuit Terminals IP20                                                                                                                      |
| Pollution Degree                       | 3                                                                                                                                                                                  |
| Mechanical Durability                  | 10000000 cycle                                                                                                                                                                     |
| Minimum Switching Capacity             | Auxiliary Circuit 17 V<br>Auxiliary Circuit 5 mA                                                                                                                                   |
| Maximum Electrical Switching Frequency | (AC-1) 300 cycles per hour<br>(AC-15) 600 cycles per hour<br>(AC-3) 600 cycles per hour<br>(DC-1) 600 cycles per hour<br>(DC-13) 600 cycles per hour<br>(DC-3) 600 cycles per hour |
| Connecting Capacity Main 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 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                            |
| Wire Stripping Length                  | Auxiliary Circuit 9 mm<br>Main Circuit 9 mm                                                                                                                                        |
| Tightening Torque                      | Control Circuit 0.8 ... 1.1 N·m<br>Main Circuit 0.8 ... 1.1 N·m                                                                                                                    |
| Recommended Screw Driver               | M3<br>Pozidriv 1                                                                                                                                                                   |
| Mounting on DIN Rail                   | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715                                                                     |
| Power Loss                             | at Rated Operating Conditions AC-1 per Pole 1 W                                                                                                                                    |
| 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                                                                                               |

Technical UL/CSA

|                                              |                                                                                                                                                                                                                        |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Operating Voltage UL/CSA             | Main Circuit 600 V AC                                                                                                                                                                                                  |
| Full Load Amps Motor Use                     | (115 V AC) Single Phase 5.8 A<br>(200 V AC) Three Phase 4.8 A<br>(220 ... 240 V AC) Three Phase 6.8 A<br>(230 V AC) Single Phase 4.9 A<br>(440 ... 480 V AC) Three Phase 4.8 A<br>(550 ... 600 V AC) Three Phase 1.7 A |
| Horsepower Rating UL/CSA                     | (115 V AC) Single Phase 0.25 Hp<br>(200 V AC) Three Phase 1 Hp<br>(220 ... 240 V AC) Three Phase 2 Hp<br>(230 V AC) Single Phase 0.5 Hp<br>(440 ... 480 V AC) Three Phase 3 Hp<br>(550 ... 600 V AC) Three Phase 1 Hp  |
| General Use Rating UL/CSA                    | (300 V AC) 12 A                                                                                                                                                                                                        |
| Contact Rating UL/CSA                        | A600                                                                                                                                                                                                                   |
| Connecting Capacity Main Circuit UL/CSA      | Stranded 1/2x 22-10 AWG                                                                                                                                                                                                |
| 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<br>Main Circuit 7 in·lb                                                                                                                                           |

Environmental

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Ambient Air Temperature                       | Operation -20 ... +55 °C<br>Storage -40 ... +80 °C |
| Maximum Operating<br>Altitude Permissible     | 2000 m                                             |
| Resistance to Shock acc.<br>to IEC 60068-2-27 | 11 ms Pulse 15g                                    |
| Resistance to Vibrations                      | 5g 5 ... 150 Hz                                    |

Material Compliance

|                                                   |                                                                        |
|---------------------------------------------------|------------------------------------------------------------------------|
| Conflict Minerals<br>Reporting Template<br>(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<br>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                      | 1SAA938000-2002     |
| CQC Certificate                     | CQC2003010304064033 |
| Declaration of Conformity<br>- CCC  | 2020980304001854    |
| Declaration of Conformity<br>- CE   | 1SAD101100-3101     |
| Declaration of Conformity<br>- UKCA | 1SAD201100-3101     |
| DNV GL Certificate                  | 1SAA938000-0306     |
| EAC Certificate                     | 1SAA920000-2702     |
| KC Certificate                      | 1SAA938000-1501     |
| RMRS Certificate                    | 1SAA938000-0704     |
| UL Certificate                      | E191658-19881208    |

Container Information

|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | 5 piece       |
| Package Level 1 Width             | 115 mm        |
| Package Level 1 Height            | 54 mm         |
| Package Level 1 Depth /<br>Length | 280 mm        |
| Package Level 1 Gross<br>Weight   | 1.845 kg      |
| Package Level 1 EAN               | 4013614416279 |

Classifications

|                            |                                           |
|----------------------------|-------------------------------------------|
| Object Classification Code | Q                                         |
| ETIM 4                     | EC000066 - Magnet contactor, AC-switching |
| ETIM 5                     | EC000010 - Starter combination            |
| ETIM 6                     | EC000010 - Combination of contactors      |
| ETIM 7                     | EC000010 - Combination of contactors      |
| ETIM 8                     | EC000010 - Combination of contactors      |
| eClass                     | V11.0 : 27371009                          |
| UNSPSC                     | 39121529                                  |

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## Categories

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

