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PRODUCT-DETAILS

# MC2A310ATW

# MC2A310ATW Mini Contactor 50 Hz 415 ... 440 V AC - 3 NO - 0 NC - Screw Terminals



**360**°

| General Information   |  |
|-----------------------|--|
| Extended Product Type | MC2A310ATW   |
| Product ID            | 1SAL135704R9902  |
| EAN                   | 4013614544170  |
| Catalog Description   | MC2A310ATW Mini Contactor 50 Hz 415 440 V AC - 3 NO - 0 NC - Screw Terminals   |
| Long Description      | The MC2A310ATW mini contactor is a dimension optimized 3 pole contactor with 1 NO auxiliary contact and screw terminals. This device is a great solution when high performances are needed but the space is limited. Mini contactors are used in residential buldings, 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. The product is suitable for wall or rail mounting. |

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

#### **Popular Downloads**

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| Data Sheet, Technical<br>Information | 1SBC100214C0202 - Chapter 4 (InDesign) - Main catalog Motor Protection and control |
|--------------------------------------|--|
| Instructions and<br>Manuals          | 2CDC103061M6801  |
| CAD Dimensional<br>Drawing           | 2CDC001079B0201  |

| Dimensions                 |         |
|----------------------------|---------|
| Product Net Width          | 45 mm   |
| Product Net Height         | 48 mm   |
| Product Net Depth / Length | 56 mm   |
| Product Net Weight         | 0.17 kg |

| Technical   |  |
|---|--|
| Number of Poles   | 3F   |
| Mini Contactor Type   | Mini Contactor   |
| Rated Operational<br>Voltage  | Auxiliary Circuit 690 V AC<br>Auxiliary Circuit 440 V DC<br>Main Circuit 690 V AC<br>Main Circuit 440 V DC   |
| Rated Frequency (f)   | Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit 60 Hz Auxiliary Circuit DC Control Circuit 50 Hz Control Circuit 60 Hz Main Circuit 50 Hz Main Circuit 60 Hz |
| Rated Impulse<br>Withstand Voltage (U <sub>imp</sub><br>)               | Auxiliary Circuit 6 kV<br>Main Circuit 6 kV  |
| Rated Insulation Voltage<br>(U <sub>i</sub> )                           | 750 V  |
| Number of Main<br>Contacts NC   | 0  |
| Number of Main<br>Contacts NO   | 3  |
| Rated Operational<br>Current AC-1 (I <sub>e</sub> )                     | (690 V) 55 °C 20 A<br>(690 V) 70 °C 16 A<br>(230 V) 55 °C 20 A<br>(230 V) 70 °C 16 A<br>(400 V) 55 °C 20 A<br>(400 V) 70 °C 16 A<br>(500 V) 55 °C 20 A<br>(500 V) 70 °C 16 A   |
| Rated Operational Power<br>AC-3 (P <sub>e</sub> )                       | (230 V) Three Phase 3 kW<br>(400 V) Three Phase 5.5 kW<br>(500 V) Three Phase 5.5 kW<br>(690 V) Three Phase, NO 4 kW   |
| Rated Short-time<br>Withstand Current Low<br>Voltage (I <sub>cw</sub> ) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A  |
| Number of Auxiliary<br>Contacts NC                                      | 0  |
| Number of Auxiliary<br>Contacts NO                                      | 1  |
| Rated Operational<br>Current AC-15 (I <sub>e</sub> )                    | (240 V) 6 A<br>(400 V) 4 A   |

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|   | (500 V) 2.5 A<br>(690 V) 1.5 A   |
|---|--|
| Rated Operational<br>Current DC-13 (I <sub>e</sub> )        | (24 V) 5 A<br>(48 V) 2.5 A<br>(125 V) 0.55 A<br>(250 V) 0.3 A<br>(440 V) 0.15 A  |
| Conventional Free-air<br>Thermal Current (I <sub>th</sub> ) | Auxiliary Circuit 10 A Main Circuit 20 A   |
| Rated Control Circuit<br>Voltage (U <sub>c</sub> )          | 50 Hz 415 440 V AC<br>60 Hz 480 V AC   |
| Coil Operating Limits                                       | (acc. to IEC 60947-4-1) for AC supply $0.85 \dots 1.1 \times Uc$ (at $\theta \le 55  ^{\circ}C$ )  |
| Degree of Protection  | Auxiliary Circuit Terminals IP20<br>Control Circuit Terminals IP20<br>Main Circuit Terminals IP20  |
| Mechanical Durability                                       | 10000000 cycle   |
| Minimum Switching<br>Capacity                               | Auxiliary Circuit 17 V<br>Auxiliary Circuit 5 mA   |
| Maximum Electrical<br>Switching Frequency                   | (AC-1) 300 cycles per hour<br>(AC-15) 360 cycles per hour<br>(AC-3) 1200 cycles per hour<br>(DC-1) 600 cycles per hour<br>(DC-13) 360 cycles per hour<br>(DC-3) 600 cycles per hour  |
| Connecting Capacity<br>Main Circuit                         | Flexible with Ferrule 1x 0.75 2.5 mm² Flexible with Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible 1/2x 0.75 2.5 mm² Rigid 1x 0.75 4 mm² Rigid 2x 0.75 2.5 mm² |
| Connecting Capacity<br>Auxiliary Circuit                    | Flexible with Ferrule 1x 0.75 2.5 mm² Flexible with Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible 1/2x 0.75 2.5 mm² Rigid 1x 0.75 4 mm² Rigid 2x 0.75 2.5 mm² |
| Connecting Capacity<br>Control Circuit                      | Flexible with Ferrule 1x 0.75 2.5 mm² Flexible with Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 1x 0.75 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible 1/2x 0.75 2.5 mm² Rigid 1/2x 0.75 2.5 mm²                   |
| Wire Stripping Length                                       | Auxiliary Circuit 9 mm<br>Control Circuit 9 mm<br>Main Circuit 9 mm  |
| Tightening Torque   | Auxiliary Circuit 0.8 1.0 N·m<br>Control Circuit 0.8 N·m<br>Main Circuit 0.8 1.0 N·m   |
| Recommended Screw<br>Driver                                 | Pozidriv 2   |
| 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  |
| Power Loss  | at Rated Operating Conditions AC-1 per Pole 0.7 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<br>UL 60947-5-1   |

## Technical UL/CSA

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| Maximum Operating<br>Voltage UL/CSA          | Main Circuit 600 V AC   |
|--|---|
| Full Load Amps Motor<br>Use                  | (115 V AC) Single Phase 9.8 A<br>(200 V AC) Three Phase 11 A<br>(220 240 V AC) Three Phase 9.6 A<br>(230 V AC) Single Phase 12 A<br>(440 480 V AC) Three Phase 11 A<br>(550 600 V AC) Three Phase 11 A    |
| Horsepower Rating<br>UL/CSA                  | (115 V AC) Single Phase 0.5 Hp<br>(200 V AC) Three Phase 3 Hp<br>(220 240 V AC) Three Phase 3 Hp<br>(230 V AC) Single Phase 2 Hp<br>(440 480 V AC) Three Phase 7.5 Hp<br>(550 600 V AC) Three Phase 10 Hp |
| General Use Rating<br>UL/CSA                 | (600 V AC) 20 A   |
| Contact Rating UL/CSA                        | A600<br>Q600  |
| Connecting Capacity Main Circuit UL/CSA      | Stranded 1/2x 18-12 AWG   |
| Connecting Capacity Auxiliary Circuit UL/CSA | Stranded 1/2x 18-12 AWG   |
| Tightening Torque                            | Auxiliary Circuit 7 in lb   |
| UL/CSA                                       | Control Circuit 7 in lb   |
|  | Main Circuit 7 in·lb  |

| Environmental                                 |  |
|---|--|
| Ambient Air<br>Temperature                    | Operation -40 +70 °C<br>Storage -55 +80 °C |
| Maximum Operating<br>Altitude Permissible     | 3000 m                                     |
| Resistance to Shock acc.<br>to IEC 60068-2-27 | 11 ms Pulse 25g                            |
| Resistance to Vibrations                      | 5g 3 150 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 |
| WEEE B2C / B2B                                    | Business To Business   |
| WEEE Category                                     | 5. Small Equipment (No External Dimension More Than 50 cm)             |

| Certificates and Declarations     |                     |
|-----------------------------------|---------------------|
| A2L Certificate – IEC             | 1SAA971000-4601     |
| BV Certificate                    | 1SAA971000-0201     |
| CB Certificate                    | 1SAA971000-2001     |
| CQC Certificate                   | CQC2019010304197131 |
| Declaration of Conformity - CCC   | 2020980304001602    |
| Declaration of<br>Conformity - CE | 1SAD101100-3201     |
| Declaration of                    | 1SAD201100-3201     |

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Conformity - UKCA

| RINA Certificate | 1SAA971001-0801  |
|------------------|------------------|
| UL Certificate   | E191658-19880826 |

| Container Information           |               |
|---------------------------------|---------------|
| Package Level 1 Units           | box 1 piece   |
| Package Level 1 Width           | 46 mm         |
| Package Level 1 Height          | 58 mm         |
| Package Level 1 Depth / Length  | 49 mm         |
| Package Level 1 Gross<br>Weight | 0.175 kg      |
| Package Level 1 EAN             | 4013614544170 |
| Package Level 2 Units           | box 20 piece  |
| Package Level 2 Width           | 237 mm        |
| Package Level 2 Height          | 120 mm        |
| Package Level 2 Depth / Length  | 102 mm        |
| Package Level 2 Gross<br>Weight | 3.55 kg       |
| Package Level 2 EAN             | 4013614544613 |

| Classifications               |   |
|-------------------------------|---|
| Object Classification<br>Code | Q   |
| ETIM 5                        | EC000066 - Magnet contactor, AC-switching |
| ETIM 6                        | EC000066 - Power contactor, AC switching  |
| ETIM 7                        | EC000066 - Power contactor, AC switching  |
| ETIM 8                        | EC000066 - Power contactor, AC switching  |
| eClass                        | V11.0 : 27371003                          |
| UNSPSC                        | 39121529                                  |
| E-Number (Finland)            | 3709685                                   |

### Categories

 $\textbf{Low Voltage Products and Systems} \rightarrow \textbf{Control Products} \rightarrow \textbf{Contactors} \rightarrow \textbf{Mini Contactors}$ 

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