

# ESB40-40-230AC/DC



## ESB40-40-230AC/DC Installation Contactor

### General Information

|                       |  |
|-----------------------|--|
| Extended Product Type | ESB40-40-230AC/DC  |
| Product ID            | GHE3491102R0006  |
| EAN                   | 4013614084867  |
| Catalog Description   | ESB40-40-230AC/DC Installation Contactor   |
| Long Description      | The ESB40 installation contactor is a 4 pole contactor suitable for modular switchboards. They are specially designed fitting to modular DIN rail products and for applications where customers want to use the panel design with high finger protection. Installation contactors are used in residential, commercial and industrial applications for the control of single or three-phase loads up to 40 A or switching of control signals. Further features are the noiseless and hum-free DC coil, the integrated overvoltage protection up to 5 kV and a switch position indication. Auxiliary contacts, distance pieces and sealing cover for protection against unauthorized changes are available as accessory. |

### Ordering

|                        |               |
|------------------------|---------------|
| Package Level 1 EAN    | 4013614421082 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85365080      |

### Popular Downloads

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 2CDC103025M6801 |
|--------------------------|-----------------|

### Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 54 mm    |
| Product Net Height         | 85 mm    |
| Product Net Depth / Length | 65 mm    |
| Product Net Weight         | 0.405 kg |

### Technical

|   |   |
|---|---|
| Rated Operational Voltage                       | Main Circuit 220 V DC<br>Main Circuit 400 V AC  |
| Rated Control Circuit Voltage (U <sub>c</sub> ) | 230 V   |
| Rated Frequency (f)                             | Control Circuit DC<br>Control Circuit 50 Hz<br>Control Circuit 60 Hz<br>Control Circuit 400 Hz<br>Main Circuit DC |

|   |  |
|---|--|
|   | Main Circuit 50 Hz<br>Main Circuit 60 Hz   |
| Rated Operational Current AC-1 ( $I_e$ )      | (NC) 30 A<br>(NO) 40 A   |
| Rated Operational Current AC-3 ( $I_e$ )      | (230 V) Single Phase 22 A<br>(400 V) Three Phase 22 A  |
| Rated Operational Power AC-1 ( $P_e$ )        | (230 V) Single Phase 9.2 kW<br>(400 V) Single Phase 26 kW  |
| Rated Operational Power AC-3 ( $P_e$ )        | (230 V) Single Phase 3.7 kW<br>(400 V) Three Phase 11 kW   |
| Rated Operational Current AC-7a ( $I_e$ )     | (NC) 30 A<br>(NO) 40 A   |
| Rated Operational Power AC-7a ( $P_e$ )       | (230 V) Single Phase 9.2 kW<br>(400 V) Three Phase 26 kW   |
| Rated Operational Current AC-7b ( $I_e$ )     | (230 V) Single Phase 22 A<br>(400 V) Three Phase 22 A  |
| Rated Operational Power AC-7b ( $P_e$ )       | (230 V) Single Phase 3.7 kW<br>(400 V) Three Phase 11 kW   |
| Recommended Screw Driver                      | Control Circuit Pozidriv 1<br>Main Circuit Pozidriv 2  |
| Rated Impulse Withstand Voltage ( $U_{imp}$ ) | 6 kV   |
| Rated Insulation Voltage ( $U_i$ )            | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 500 V   |
| Connecting Capacity Main Circuit              | Flexible with Ferrule 1x 1.5 ... 16 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 1.5 ... 16 mm <sup>2</sup><br>Flexible 1x 1.5 ... 16 mm <sup>2</sup><br>Rigid 1x 1.5 ... 25 mm <sup>2</sup><br>Rigid 2x 10 mm <sup>2</sup>   |
| Connecting Capacity Control Circuit           | Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Ferrule 2x 0.75 ... 1 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible 1x 1 ... 4.0 mm <sup>2</sup><br>Flexible 2x 1 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup><br>Rigid 2x 2.5 mm <sup>2</sup> |
| Tightening Torque                             | Control Circuit 0.9 N·m<br>Main Circuit 2.5 N·m  |
| Wire Stripping Length                         | Control Circuit 7 mm<br>Main Circuit 13 mm   |
| Degree of Protection                          | IP20   |
| Electrical Durability                         | AC-1 150000 cycle<br>AC-3 170000 cycle<br>AC-7a 150000 cycle<br>AC-7b 170000 cycle   |
| Mechanical Durability                         | 1000000 cycle  |
| Number of Poles                               | 4  |
| Number of Auxiliary Contacts NC               | 0  |
| Number of Auxiliary Contacts NO               | 0  |
| Number of Main Contacts NC                    | 0  |
| Number of Main Contacts NO                    | 4  |
| Width in Number of Modular Spacings           | 3  |
| Pollution Degree                              | 3  |
| Standards                                     | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 60947-5-1<br>IEC/EN 61095<br>UL 60947-1<br>UL 60947-4-1   |
| Remarks                                       | Installation contactor, noiseless/humfree, high insulation, reliable function, long life   |

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## Environmental

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|--|--|
| Ambient Air Temperature                        | Operation -25 ... +55 °C<br>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 / 3 ... 150 Hz                                  |
| RoHS Status                                    | Following EU Directive 2011/65/EU                  |

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## Technical UL/CSA

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| Maximum Operating Voltage UL/CSA           | Main Circuit 480 V AC  |
| Horsepower Rating UL/CSA                   | (220 ... 240 V AC) Single Phase 7.5 Hp<br>(440 ... 480 V AC) Three Phase 15 Hp |
| Connecting Capacity Main Circuit UL/CSA    | Stranded 16-4 AWG  |
| Connecting Capacity Control Circuit UL/CSA | Stranded 16-10 AWG   |
| Tightening Torque UL/CSA                   | Control Circuit 8 in-lb<br>Main Circuit 20 in-lb                               |

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## Certificates and Declarations (Document Number)

|                                |                  |
|--------------------------------|------------------|
| BV Certificate                 | 1SAA920000-0204  |
| CB Certificate                 | 1SAA920001-2003  |
| CCC Certificate                | 1SAA920000-3805  |
| CEBEC Certificate              | 1SAA920001-2001  |
| cUL Certificate                | cUL E191658      |
| Declaration of Conformity - CE | 1SAD938511-0007  |
| DNV Certificate                | 1SAA920000-0306  |
| EAC Certificate                | 1SAA920000-2702  |
| Environmental Information      | 1SAA920002-2401  |
| Instructions and Manuals       | 2CDC103025M6801  |
| KC Certificate                 | 1SAA920001-1501  |
| NF Certificate                 | 1SAA920000-1202  |
| RMRS Certificate               | 1SAA920000-0704  |
| RoHS Information               | 1SAD938509-0007_ |

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## Container Information

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|--------------------------------|---------------|
| Package Level 1 Units          | 3 piece       |
| Package Level 1 Width          | 89 mm         |
| Package Level 1 Height         | 69 mm         |
| Package Level 1 Depth / Length | 165 mm        |
| Package Level 1 Gross Weight   | 1.26 kg       |
| Package Level 1 EAN            | 4013614421082 |

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## Classifications

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|----------------------------|--|
| Object Classification Code | Q  |
| ETIM 4                     | EC001653 - Installation contactor for distribution board |

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| ETIM 5 | EC001653 - Installation contactor for distribution board |
| ETIM 6 | EC001653 - Installation contactor for distribution board |
| ETIM 7 | EC001653 - Installation contactor for distribution board |
| eClass | 7.0 27142308   |
| UNSPSC | 39121529   |

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## Categories

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

Low Voltage Products and Systems → Modular DIN Rail Products → Modular DIN Rail Components MDRCs → Installation Contactors

