



PRODUCT-DETAILS

ESB16-20N-04

ESB16-20N-04 Installation Contactor (NO) 16 A - 2 NO - 0 NC - 110 V - Control Circuit DC



| General Information | |
|-----------------------|--|
| Extended Product Type | ESB16-20N-04 |
| Product ID | 1SBE111111R0420 |
| EAN | 3471523007079 |
| Catalog Description | ESB16-20N-04 Installation Contactor (NO) 16 A - 2 NO - 0 NC - 110 V - Control Circuit DC |
| Long Description | The ESB16..N installation contactors are used to control single loads up to 16 A and can be operated by AC or DC. |
| | These contactors are made for use in household applications as well as in industrial environments. |
| | The following benefits are provided: |
| | Hum-free operation, low power consumption and integrated overvoltage protection. Various contact combinations and accessories are available. |

| Ordering | |
|------------------------|---------------|
| Package Level 1 EAN | 3471523004429 |
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85365080 |

| Popular Downloads | |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 2CDC103051C0201 |
| Instructions and Manuals | 2CDC103043M6801 |
| CAD Dimensional Drawing | 2CDC001079B0201 |
| Dimension Diagram | 1SBB505186D3001 |

| Dimensions | |
|----------------------------|---------|
| Product Net Width | 18 mm |
| Product Net Height | 85 mm |
| Product Net Depth / Length | 65 mm |
| Product Net Weight | 0.14 kg |

| Technical | |
|---|---|
| Rated Operational Voltage | Main Circuit 220 V DC Main Circuit 250 V AC |
| Rated Control Circuit Voltage (U _c) | 110 V |
| Rated Frequency (f) | Control Circuit DC Control Circuit 50 Hz Control Circuit 60 Hz Control Circuit 400 Hz Main Circuit DC Main Circuit 50 Hz Main Circuit 60 Hz |
| Rated Operational Current AC-1 (I _e) | (NO) 16 A |
| Rated Operational Current AC-3 (I _e) | (230 V) Single Phase, NO 6 A |
| Rated Operational Power AC-1 (P _e) | (230 V) Single Phase, NO 3.7 kW |
| Rated Operational Power AC-3 (P _e) | (230 V) Single Phase, NO 0.9 kW |
| Rated Operational Current AC-7a (I _e) | (NO) 16 A |
| Rated Operational Power AC-7a (P _e) | (230 V) Single Phase, NO 3.7 kW |
| Rated Operational Current AC-7b (I _e) | (230 V) Single Phase, NO 6 A |
| Rated Operational Power AC-7b (P _e) | (230 V) Single Phase, NO 0.9 kW |
| Recommended Screw Driver | Control Circuit Pozidriv 1 Main Circuit Pozidriv 1 |
| Rated Impulse Withstand Voltage (U _{imp}) | 6 kV |
| Rated Insulation Voltage (U _i) | 400 V |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1x 1 ... 6 mm ² Flexible with Ferrule 2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 1 ... 6 mm ² Flexible with Insulated Ferrule 2x 1 ... 1.5 mm ² Flexible 1x 1 ... 6 mm ² Flexible 2x 1 ... 4 mm ² Rigid 1x 1 ... 10 mm ² |

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|--|---|
| | Rigid 2x 1 ... 4 mm ² |
| Connecting Capacity | Flexible with Ferrule 1x 1 ... 2.5 mm ² |
| Control Circuit | Flexible with Ferrule 2x 0.75 ... 1.5 mm ² |
| | Flexible with Insulated Ferrule 1x 1 ... 2.5 mm ² |
| | Flexible with Insulated Ferrule 2x 0.75 ... 1 mm ² |
| | Flexible 1x 1 ... 2.5 mm ² |
| | Flexible 2x 1 ... 1.5 mm ² |
| | Rigid 1x 0.5 ... 4 mm ² |
| | Rigid 2x 0.75 ... 2.5 mm ² |
| Tightening Torque | Control Circuit 0.9 N·m |
| | Main Circuit 1.2 N·m |
| Wire Stripping Length | Control Circuit 7 mm |
| | Main Circuit 10 mm |
| Degree of Protection | IP20 |
| Electrical Durability | AC-1 (NO) 150000 cycle |
| | AC-3 (NO) 150000 cycle |
| | AC-7a (NO) 150000 cycle |
| | AC-7b (NO) 150000 cycle |
| Mechanical Durability | 1000000 cycle |
| Number of Poles | 2P |
| Number of Auxiliary Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Main Contacts NC | 0 |
| Number of Main Contacts NO | 2 |
| Width in Number of Modular Spacings | 1.0 |
| Pollution Degree | 3 |
| Standards | IEC/EN 60947-1 |
| | IEC/EN 60947-4-1 |
| | UL 60947-1 |
| | UL 60947-4-1 |
| | IEC/EN 61095 |
| | IEC 60335-2-40 A2L |

Technical UL/CSA

| | |
|---|---|
| Maximum Operating Voltage UL/CSA | Main Circuit 240 V AC |
| Horsepower Rating UL/CSA | (220 ... 240 V AC) Single Phase, NO 0.75 Hp |
| Connecting Capacity Main Circuit UL/CSA | Solid 14-8 AWG |
| | Stranded 14-8 AWG |
| Connecting Capacity Control Circuit UL/CSA | Solid 16-10 AWG |
| | Stranded 16-10 AWG |
| Tightening Torque UL/CSA | Control Circuit 8 in·lb |
| | Main Circuit 11 in·lb |

Environmental

| | |
|---|--|
| Ambient Air Temperature | Operation -25 ... +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 |
| RoHS Status | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

| Material Compliance | |
|---|--|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658 |
| REACH Declaration | 2CMT2021-006202 |
| RoHS Information | 2CMT2021-006277 |
| Toxic Substances Control Act - TSCA | 2CMT2023-006525 |
| WEEE B2C / B2B | Business To Consumer |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

| ABB EcoSolutions | |
|---|-----------------|
| Environmental Product Declaration - EPD | 1SAC200416H0001 |

| Certificates and Declarations | |
|----------------------------------|--|
| A2L Certificate – IEC | 1SAA920000-4601 |
| ABS Certificate | 1SAA920000-0101 |
| CB Certificate | 1SAA920007-2001 |
| CQC Certificate | CQC2018010304057353 CQC2018010304057344 |
| Declaration of Conformity - CCC | 2020980304001370 2020980304001371 |
| Declaration of Conformity - CE | 1SAD101100-3301 |
| Declaration of Conformity - UKCA | 1SAD201100-3301 |
| DNV Certificate | 1SAA920000-0306 |
| EAC Certificate | 1SAA920003-2701 |
| NF Certificate | 1SAA920002-1201 |
| RMRS Certificate | 1SAA920000-0705 |
| UL Certificate | E191658-19960301 |

| Container Information | |
|--------------------------------|-------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 88 mm |
| Package Level 1 Height | 71 mm |
| Package Level 1 Depth / Length | 20 mm |
| Package Level 1 Gross Weight | 0.14 kg |

| Classifications | |
|----------------------------|--|
| Object Classification Code | Q |
| 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 | V11.0 : 27142308 |

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|------------------------------------|--|
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4759 >> Installation contactor for distribution board |
| ETIM 8 | EC001653 - Installation contactor for distribution board |

Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|-----------------|--|----------|----------|-----------------|
| 1SAE901901R1011 | EH04-11N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz | EH04-11N | 1 | piece |
| 1SAE901901M1011 | EH04-11N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz | EH04-11N | 1 | piece |
| 1SAE901901R1020 | EH04-20N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz | EH04-20N | 1 | piece |
| 1SAE901901M1020 | EH04-20N Auxiliary Contact - 0 NO - 0 NC - Auxiliary Circuit 50 Hz | EH04-20N | 1 | piece |

Categories

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

Low Voltage Products and Systems → Modular DIN Rail Products → Command and Signalling Devices → Installation Contactors

