

PRODUCT-DETAILS

ESB20-11N-06

ESB20-11N-06 Installation Contactor (NC) 20 A - 1 NO - 1 NC - 230 V - Control Circuit DC



| ESB20-11N-06 |
|---|
| 1SBE121111R0611 |
| 3471523007499 |
| ESB20-11N-06 Installation Contactor (NC) 20 A - 1 NO - 1 NC - 230 V - Control Circuit DC |
| The ESB20N installation contactors are used to control single loads up to 20 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 | 3471523005389 |
| 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 |

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| Product Net Depth / | Dimensions | |
|---|--|---|
| Product Net Depth / Length | Product Net Width | 18 mm |
| Product Net Weight | Product Net Height | 85 mm |
| Technical | Product Net Depth / Length | 65 mm |
| Rated Operational Voltage Main Circuit 220 V DC Main Circuit 250 V AC | Product Net Weight | 0.14 kg |
| Main Circuit 250 V AC | Technical | |
| Rated Operational Current | Rated Operational Voltage | Main Circuit 220 V DC Main Circuit 250 V AC |
| Control Circuit 60 H. Main Circuit 50 H. Main Circuit 60 H. Main Circuit 70 H. Main Circ | Rated Control Circuit Voltage (U _c) | 230 V |
| AC-1 (I _e) | Rated Frequency (f) | Control Circuit DC Control Circuit 50 Hz Control Circuit 60 Hz Control Circuit 400 Hz Main Circuit 50 Hz Main Circuit 50 Hz Main Circuit 60 Hz |
| AC-3 (I _e) (230 V) Single Phase, NO 9 / Rated Operational Power AC-1 (P _e) (230 V) Single Phase, NC 4.6 kW Rated Operational Power AC-3 (P _e) (230 V) Single Phase, NC 1.3 kW AC-3 (P _e) (230 V) Single Phase, NC 1.3 kW AC-3 (P _e) (230 V) Single Phase, NC 1.3 kW AC-3 (P _e) (230 V) Single Phase, NC 1.3 kW AC-3 (P _e) (230 V) Single Phase, NC 1.3 kW AC-3 (P _e) (NO) 20 / AC-70 (I _e) (NO) 20 / AC-70 (I _e) (230 V) Single Phase, NC 4.6 kW AC-70 (I _e) (230 V) Single Phase, NC 4.6 kW AC-70 (I _e) (230 V) Single Phase, NC 4.6 kW AC-70 (I _e) (230 V) Single Phase, NC 9 / AC-70 (I _e) (230 V) Single Phase, NC 9 / AC-70 (I _e) (230 V) Single Phase, NC 9 / AC-70 (I _e) (230 V) Single Phase, NC 9 / AC-70 (I _e) (230 V) Single Phase, NC 1.3 kW AC-70 (I | Rated Operational Current AC-1 (I_e) | (NC) 20 A (NO) 20 A |
| AC-1 (Pe) (230 V) Single Phase, NO 4.6 kW Rated Operational Power (230 V) Single Phase, NO 1.3 kW AC-3 (Pe) (230 V) Single Phase, NO 1.3 kW Rated Operational Current (NC) 20 AC-7a (Ie) AC-7a (Pe) (230 V) Single Phase, NO 4.6 kW AC-7a (Pe) (230 V) Single Phase, NO 4.6 kW AC-7b (Pe) (230 V) Single Phase, NO 4.6 kW Rated Operational Current (230 V) Single Phase, NO 4.6 kW AC-7b (Pe) (230 V) Single Phase, NO 9.6 Rated Operational Power (230 V) Single Phase, NO 1.3 kW AC-7b (Pe) (230 V) Single Phase, NO 1.3 kW Recommended Screw Control Circuit Pozidriv Driver Main Circuit Pozidriv Rated Impulse Withstand 6 kW Voltage (U _{imp}) 6 kW Connecting Capacity Main Flexible with Ferrule 1x 1 5 mm Flexible with Insulated Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0 | Rated Operational Current AC-3 (I _e) | (230 V) Single Phase, NC 9 A (230 V) Single Phase, NO 9 A |
| AC-3 (P _e) Rated Operational Current (NC) 20 A C-7a (I _e) Rated Operational Power (230 V) Single Phase, NO 1.3 kN AC-7a (I _e) Rated Operational Power (230 V) Single Phase, NC 4.6 kN AC-7a (P _e) (230 V) Single Phase, NC 4.6 kN AC-7a (P _e) (230 V) Single Phase, NO 9.4 kN AC-7b (I _e) (230 V) Single Phase, NO 9.4 kN Rated Operational Current (230 V) Single Phase, NO 9.4 kN AC-7b (I _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 1.3 kN AC-7b (P _e) (230 V) Single Phase, NO 2.4 kN | Rated Operational Power AC-1 (P_e) | (230 V) Single Phase, NC 4.6 kW (230 V) Single Phase, NO 4.6 kW |
| AC-7a (I _e) (NO) 20 A Rated Operational Power AC-7a (P _e) (230 V) Single Phase, NC 4.6 kM Rated Operational Current AC-7b (I _e) (230 V) Single Phase, NC 4.6 kM Rated Operational Current AC-7b (I _e) (230 V) Single Phase, NO 9 A AC-7b (I _e) (230 V) Single Phase, NO 9 A AC-7b (I _e) (230 V) Single Phase, NO 9 A AC-7b (P _e) (230 V) Single Phase, NO 1.3 kM AC-7b (P _e) (230 V) Single Phase, NO 1.3 kM AC-7b (P _e) (230 V) Single Phase, NO 1.3 kM AC-7b (P _e) (230 V) Single Phase, NO 1.3 kM AC-7b (P _e) (230 V) Single Phase, NO 1.3 kM Corona Corona Circuit Pozidriv Rated Impulse Withstand Voltage (U _{imp}) Rated Insulation Voltage (U ₁) Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 2x 1 4 mm Rigid 1x 1 10 mm Rigid 1x 1 10 mm Flexible with Insulated Ferrule 1x 1 2.5 | Rated Operational Power AC-3 (P _e) | (230 V) Single Phase, NC 1.3 kW (230 V) Single Phase, NO 1.3 kW |
| AC-7a (P̂e) Rated Operational Current AC-7b (P̂e) Rated Operational Power AC-7b (P̂e) Recommended Screw Control Circuit Pozidriv Main Circuit Nation Flexible with Ferrule 1x 1 6 mm Flexible with Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible with Insulated Ferrule 2x 1 4 mm Rigid 1x 1 4 mm Rigid 1x 1 4 mm Flexible with Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 15 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 2.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Rigid 1x 0.5 4 mm R | Rated Operational Current AC-7a (I _e) | (NC) 20 A (NO) 20 A |
| AC-7b (ie) Rated Operational Power AC-7b (Pe) Rated Impulse Withstand Voltage (U _{imp}) Rated Insulation Voltage (U _i) Connecting Capacity Main Circuit Connecting Capacity Control Circuit Control | Rated Operational Power AC-7a (P _e) | (230 V) Single Phase, NC 4.6 kW (230 V) Single Phase, NO 4.6 kW |
| AC-7b (P̂e) (230 V) Single Phase, NO 1.3 kM Recommended Screw Control Circuit Pozidriv To Main Circuit Pozidriv Main Circuit Main Circuit Main Flexible with Serrule 1x 1 6 mm Flexible with Ferrule 1x 1 6 mm Flexible with Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible with Insulated Ferrule 2x 1 4 mm Rigid 1x 1 10 mm Flexible 2x 1 4 mm Rigid 2x 1 4 mm Flexible with Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 2 5 mm Flexible with Insulated Ferrule 2x 0.75 2 5 mm Flexible with Insulated Ferrule 2x 0.75 2 5 mm Flexible 2x 1 | Rated Operational Current AC-7b (I _e) | (230 V) Single Phase, NC 9 A (230 V) Single Phase, NO 9 A |
| Driver Rated Impulse Withstand Voltage (U _{imp}) Rated Insulation Voltage (U _{i)} Connecting Capacity Main Circuit Circuit Circuit Circuit Circuit Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 1x 1 5 mm Flexible with Insulated Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible x 1 4 mm Rigid 1x 1 10 mm Rigid 2x 1 4 mm Rigid 2x 1 4 mm Flexible with Ferrule 1x 1 2.5 mm Flexible with Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Rigid 2x 0.75 2.5 mm Control Circuit 0.9 N·n Main Circuit 1.2 N·n | Rated Operational Power AC-7b (P_e) | (230 V) Single Phase, NC 1.3 kW (230 V) Single Phase, NO 1.3 kW |
| Voltage (U _{imp}) Rated Insulation Voltage (U ₁) Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm Flexible with Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible 2x 1 4 mm Rigid 1x 1 10 mm Rigid 2x 1 4 mm Flexible with Ferrule 1x 1 2.5 mm Flexible with Ferrule 1x 1 2.5 mm Flexible with Insulated Ferrule 1x 1 2.5 mm Flexible with Insulated Ferrule 1x 1 2.5 mm Flexible with Insulated Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible 1x 1 2.5 mm Flexible 2x 1 1.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Flexible 2x 1 1.5 mm Rigid 2x 0.75 2.5 mm Flexible 1x 1 2.5 mm Flexible 2x 1 1.5 mm Rigid 2x 0.75 2.5 mm Rigid 2x 0.75 2.5 mm Control Circuit 0.9 N·m Main Circuit 1.2 N·m Wire Stripping Length Control Circuit 7 mm | Recommended Screw Driver | Control Circuit Pozidriv 1 Main Circuit Pozidriv 1 |
| Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible 2x 1 4 mm Rigid 1x 1 10 mm Rigid 2x 1 4 mm Connecting Capacity Flexible with Ferrule 1x 1 2.5 mm Flexible with Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 2.5 mm Flexible 2x 1 2.5 mm Flexible 2x 1 2.5 mm Rigid 2x 0.75 2.5 mm Rigid 2x 0.75 2.5 mm Rigid 2x 0.75 2.5 mm Control Circuit 0.9 N-m Main Circuit 1.2 N-m Wire Stripping Length Control Circuit 7 mm | Rated Impulse Withstand Voltage (U _{imp}) | 6 kV |
| Circuit Flexible with Ferrule 2x 1 2.5 mm Flexible with Insulated Ferrule 1x 1 6 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible with Insulated Ferrule 2x 1 1.5 mm Flexible 1x 1 6 mm Flexible 2x 1 4 mm Rigid 1x 1 10 mm Rigid 2x 1 4 mm Rigid 2x 1 4 mm Rigid 2x 1 4 mm Flexible with Ferrule 1x 1 2.5 mm Flexible with Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 1x 1 2.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible 2x 1 1.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 2.5 mm Flexible 2x 1 2.5 mm Flexible 2x 1 2.5 mm Flexible 3x 1 | Rated Insulation Voltage (U_i) | 400 V |
| Connecting Capacity Control Circuit Flexible with Ferrule 1x 1 2.5 mm Flexible with Ferrule 2x 0.75 1.5 mm Flexible with Insulated Ferrule 1x 1 2.5 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible with Insulated Ferrule 2x 0.75 1 mm Flexible 2x 1 2.5 mm Flexible 2x 1 2.5 mm Flexible 2x 1 1.5 mm Rigid 1x 0.5 4 mm Rigid 2x 0.75 2.5 mm Tightening Torque Control Circuit 0.9 N·m Main Circuit 1.2 N·m Wire Stripping Length Control Circuit 7 mm | Connecting Capacity Main Circuit | Flexible with Ferrule 1x 1 6 mm² Flexible with Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 1x 1 6 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible 1x 1 6 mm² Flexible 2x 1 4 mm² Rigid 1x 1 10 mm² Rigid 1x 1 10 mm² |
| Tightening Torque Control Circuit 0.9 N·m Main Circuit 1.2 N·m Wire Stripping Length Control Circuit 7 mm | Connecting Capacity Control Circuit | Flexible with Ferrule 1x 1 2.5 mm² Flexible with Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 1x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible 1x 1 2.5 mm² Flexible 2x 1 1.5 mm² Rigid 1x 0.5 4 mm² |
| Wire Stripping Length Control Circuit 7 mm | 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

Electrical Durability

AC-1 (NC) 150000 cycle AC-1 (NO) 150000 cycle AC-3 (NC) 150000 cycle ESB20-11N-06 3

| | AC-3 (NO) 150000 cycle AC-7a (NC) 150000 cycle AC-7a (NO) 150000 cycle AC-7b (NC) 150000 cycle AC-7b (NO) 150000 cycle |
|--|--|
| Mechanical Durability | 1000000 cycle |
| Number of Poles | 2 |
| Number of Auxiliary Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 0 |
| Number of Main Contacts NC | 1 |
| Number of Main Contacts NO | 1 |
| Width in Number of Modular Spacings | 1 |
| Pollution Degree | 3 |
| Standards | IEC/EN 60947-1 IEC/EN 60947-4-1 UL 60947-1 UL 60947-4-1 IEC/EN 61095 |

| Technical UL/CSA | |
|--|---------------------------------------|
| Maximum Operating Voltage UL/CSA | Main Circuit 240 V AC |
| Horsepower Rating | (220 240 V AC) Single Phase, NC 1 Hp |
| UL/CSA | (220 240 V AC) Single Phase, NO 1 Hp |
| Connecting Capacity Main | Solid 14-8 AWG |
| Circuit UL/CSA | Stranded 14-8 AWG |
| Connecting Capacity Control Circuit UL/CSA | Solid 16-10 AWG Stranded 16-10 AWG |
| Tightening Torque | Control Circuit 8 in lb |
| <u>UL/CSA</u> | 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 |

| Certificates and Declarations | |
|----------------------------------|--|
| 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 |
| RMRS Certificate | 1SAA920000-0705 |
| <u>UL Certificate</u> | E191658-19960301 |

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| Container Information | |
|---------------------------------|---------------|
| Package Level 1 Units | 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 |
| Package Level 1 EAN | 3471523005389 |

| 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 |
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4759 >> Installation contactor for distribution board |
| E-Number (Finland) | 3707569 |
| E-Number (Sweden) | 3210558 |
| ETIM 8 | EC001653 - Installation contactor for distribution board |

| Accessories | | | | |
|-----------------|----------------------------|----------|----------|---------------------------|
| Identifier | Description | Туре | Quantity | Unit Of <u>Measure</u> |
| 1SAE901901R1011 | EH04-11N Auxiliary Contact | EH04-11N | 1 | piece |
| 1SAE901901M1011 | EH04-11N Auxiliary Contact | EH04-11N | 1 | piece |
| 1SAE901901R1020 | EH04-20N Auxiliary Contact | EH04-20N | 1 | piece |
| 1SAE901901M1020 | EH04-20N Auxiliary Contact | EH04-20N | 1 | piece |

Categories

 $\begin{tabular}{ll} Low \ Voltage \ Products \ and \ Systems \ \rightarrow Control \ Products \ \rightarrow Contactors \ \rightarrow Installation \ Contactors \ \rightarrow Low \ Voltage \ Products \ and \ Systems \ \rightarrow Modular \ DIN \ Rail \ Products \ \rightarrow Command \ and \ Signalling \ Devices \ \rightarrow Installation \ Contactors \ \rightarrow Command \ And \ Signalling \ Devices \ \rightarrow Installation \ Contactors \ \rightarrow Command \ \rightarrow C$

