

## PRODUCT-DETAILS

# ESB25-04N-01

## ESB25-04N-01 Installation Contactor



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | ESB25-04N-01                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product ID            | 1SAE231111R0104                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| EAN                   | 4013614517617                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Catalog Description   | ESB25-04N-01 Installation Contactor                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Long Description      | <p>The ESB25..N installation contactors are used to control single and three-phase loads up to 25 A and can be operated by AC or DC.</p> <p>These contactors are made for use in household applications as well as in industrial environments.</p> <p>The following benefits are provided:</p> <p>Hum-free operation, low power consumption and integrated overvoltage protection.</p> <p>Various contact combinations and accessories are available.</p> |

### Ordering

|                        |               |
|------------------------|---------------|
| Package Level 1 EAN    | 4013614523915 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85365080      |

### Popular Downloads

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 2CDC103043M6801 |
|--------------------------|-----------------|

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 36 mm    |
| Product Net Height         | 85 mm    |
| Product Net Depth / Length | 65 mm    |
| Product Net Weight         | 0.245 kg |

## Technical

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rated Operational Voltage                     | Main Circuit 220 V DC<br>Main Circuit 400 V AC                                                                                                                                                                                                                                                                                                                                                         |
| Rated Control Circuit Voltage ( $U_c$ )       | 24 V                                                                                                                                                                                                                                                                                                                                                                                                   |
| Rated Frequency (f)                           | Control Circuit 400 Hz<br>Control Circuit 50 Hz<br>Control Circuit 60 Hz<br>Control Circuit DC<br>Main Circuit 50 Hz<br>Main Circuit 60 Hz<br>Main Circuit DC                                                                                                                                                                                                                                          |
| Rated Operational Current AC-1 ( $I_e$ )      | (NC) 25 A                                                                                                                                                                                                                                                                                                                                                                                              |
| Rated Operational Current AC-3 ( $I_e$ )      | (230 V) Single Phase, NC 6 A                                                                                                                                                                                                                                                                                                                                                                           |
| Rated Operational Power AC-1 ( $P_e$ )        | (230 V) Single Phase, NC 5.8 kW<br>(400 V) Three Phase, NC 17.3 kW                                                                                                                                                                                                                                                                                                                                     |
| Rated Operational Power AC-3 ( $P_e$ )        | (230 V) Single Phase, NC 0.9 kW<br>(400 V) Three Phase, NC 2.7 kW                                                                                                                                                                                                                                                                                                                                      |
| Rated Operational Current AC-7a ( $I_e$ )     | (NC) 25 A                                                                                                                                                                                                                                                                                                                                                                                              |
| Rated Operational Power AC-7a ( $P_e$ )       | (230 V) Single Phase, NC 5.8 kW<br>(400 V) Three Phase, NC 17.25 kW                                                                                                                                                                                                                                                                                                                                    |
| Rated Operational Current AC-7b ( $I_e$ )     | (400 V) Three Phase, NC 6 A                                                                                                                                                                                                                                                                                                                                                                            |
| Rated Operational Power AC-7b ( $P_e$ )       | (230 V) Single Phase, NC 2.7 kW<br>(400 V) Three Phase, NC 2.7 kW                                                                                                                                                                                                                                                                                                                                      |
| Recommended Screw Driver                      | Control Circuit Pozidriv 1<br>Main Circuit Pozidriv 1                                                                                                                                                                                                                                                                                                                                                  |
| Rated Impulse Withstand Voltage ( $U_{imp}$ ) | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                   |
| Rated Insulation Voltage ( $U_i$ )            | 500 V                                                                                                                                                                                                                                                                                                                                                                                                  |
| Connecting Capacity Main Circuit              | Flexible with Ferrule 1x 1.5 ... 10 mm <sup>2</sup><br>Flexible with Ferrule 2x 1.5 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 1.5 ... 10 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 1.5 mm <sup>2</sup><br>Flexible 1x 1.5 ... 10 mm <sup>2</sup><br>Flexible 2x 1.5 ... 4 mm <sup>2</sup><br>Rigid 1x 1.5 ... 10 mm <sup>2</sup><br>Rigid 2x 1.5 ... 4 mm <sup>2</sup> |
| Connecting Capacity Control Circuit           | Flexible with Ferrule 1x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Ferrule 2x 0.75 ... 1 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 1 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1 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 1x 1 ... 4 mm <sup>2</sup><br>Rigid 2x 1 ... 2.5 mm <sup>2</sup> |
| Tightening Torque                             | Control Circuit 0.9 N·m<br>Main Circuit 1 N·m                                                                                                                                                                                                                                                                                                                                                          |
| Wire Stripping Length                         | Control Circuit 7 mm<br>Main Circuit 10 mm                                                                                                                                                                                                                                                                                                                                                             |
| Degree of Protection                          | IP20                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mechanical Durability                         | 1000000 cycle                                                                                                                                                                                                                                                                                                                                                                                          |

|                                        |                                                                                  |
|----------------------------------------|----------------------------------------------------------------------------------|
| Number of Poles                        | 4                                                                                |
| Number of Main<br>Contacts NC          | 4                                                                                |
| Number of Main<br>Contacts NO          | 0                                                                                |
| Width in Number of<br>Modular Spacings | 2                                                                                |
| Pollution Degree                       | 3                                                                                |
| Standards                              | IEC/EN 60947-1<br>IEC/EN 60947-4-1<br>IEC/EN 61095<br>UL 60947-1<br>UL 60947-4-1 |

## Technical UL/CSA

|                                               |                                                                                                                                                                              |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Operating<br>Voltage UL/CSA           | Main Circuit 480 V AC                                                                                                                                                        |
| Horsepower Rating<br>UL/CSA                   | (220 ... 240 V AC) Single Phase, NC 1 Hp<br>(220 ... 240 V AC) Three Phase, NC 3 Hp<br>(440 ... 480 V AC) Single Phase, NC 0.5 Hp<br>(440 ... 480 V AC) Three Phase, NC 2 Hp |
| Connecting Capacity<br>Main Circuit UL/CSA    | Solid 16-8 AWG<br>Stranded 16-8 AWG                                                                                                                                          |
| Connecting Capacity<br>Control Circuit UL/CSA | Solid 16-10 AWG<br>Stranded 16-10 AWG                                                                                                                                        |
| Tightening Torque<br>UL/CSA                   | Control Circuit 8 in-lb<br>Main Circuit 9 in-lb                                                                                                                              |

## Environmental

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Ambient Air<br>Temperature                    | Operation -25 ... +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                                    |
| RoHS Status                                   | Following EU Directive 2011/65/EU                  |

## Certificates and Declarations (Document Number)

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| ABS Certificate                     | 1SAA920000-0101                            |
| CB Certificate                      | 1SAA920004-2001                            |
| CQC Certificate                     | CQC2017010304993564<br>CQC2017010304993565 |
| cULus Certificate                   | cUL_E191658                                |
| Declaration of<br>Conformity - CCC  | 2020980304001312<br>2020980304001314       |
| Declaration of<br>Conformity - CE   | 1SAD938506-0302                            |
| Declaration of<br>Conformity - UKCA | 1SAD938500-1302                            |
| DNV Certificate                     | 1SAA920000-0306                            |
| EAC Certificate                     | 1SAA920001-2702                            |
| Environmental<br>Information        | 1SAC200063H0009                            |
| Instructions and<br>Manuals         | 2CDC103043M6801                            |
| RINA Certificate                    | 1SAA920000-0801                            |
| RMRS Certificate                    | 1SAA920000-0705                            |
| RoHS Information                    | 1SAD938506-0302                            |

| Container Information          |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 1 piece       |
| Package Level 1 Width          | 92 mm         |
| Package Level 1 Height         | 69.5 mm       |
| Package Level 1 Depth / Length | 39 mm         |
| Package Level 1 Gross Weight   | 0.245 kg      |
| Package Level 1 EAN            | 4013614523915 |
| Package Level 2 Units          | 60 piece      |
| Package Level 2 Width          | 280 mm        |
| Package Level 2 Height         | 210 mm        |
| Package Level 2 Depth / Length | 395 mm        |
| Package Level 2 Gross Weight   | 15.4 kg       |
| Package Level 2 EAN            | 4013614538315 |

| 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)                 | 3707572                                                  |
| E-Number (Sweden)                  | 3210562                                                  |

| 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 |

