

PRODUCT-DETAILS

# ESB20-20N-01

## ESB20-20N-01 Installation Contactor



### General Information

Extended Product Type	ESB20-20N-01
Product ID	1SBE121111R0120
EAN	3471523007352
Catalog Description	ESB20-20N-01 Installation Contactor
Long Description	<p>The ESB20..N installation contactors are used to control single loads up to 20 A and can be operated by AC or DC voltages.</p> <p>These contactors are made for use in household applications as well as in industrial environments.</p> <p>The following benefits are provided: 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	3471523004566
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

### Popular Downloads

Instructions and Manuals	2CDC103043M6801
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 ( $U_c$ )	24 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) 20 A
Rated Operational Current AC-3 ( $I_e$ )	(230 V) Single Phase, NO 9 A
Rated Operational Power AC-1 ( $P_e$ )	(230 V) Single Phase, NO 4.6 kW
Rated Operational Power AC-3 ( $P_e$ )	(230 V) Single Phase, NO 1.3 kW
Rated Operational Current AC-7a ( $I_e$ )	(NO) 20 A
Rated Operational Power AC-7a ( $P_e$ )	(230 V) Single Phase, NO 4.6 kW
Rated Operational Current AC-7b ( $I_e$ )	(230 V) Single Phase, NO 9 A
Rated Operational Power AC-7b ( $P_e$ )	(230 V) Single Phase, NO 1.3 kW
Recommended Screw Driver	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1
Rated Impulse Withstand Voltage ( $U_{imp}$ )	6 kV
Rated Insulation Voltage ( $U_i$ )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 400 V
Connecting Capacity Main Circuit	Flexible with Ferrule 1x 1 ... 6 mm <sup>2</sup> Flexible with Ferrule 2x 1 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 1 ... 6 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 1 ... 1.5 mm <sup>2</sup> Flexible 1x 1 ... 6 mm <sup>2</sup> Flexible 2x 1 ... 4 mm <sup>2</sup> Rigid 1x 1 ... 10 mm <sup>2</sup> Rigid 2x 1 ... 4 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1x 1 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 1 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1 mm <sup>2</sup> Flexible 1x 1 ... 2.5 mm <sup>2</sup> Flexible 2x 1 ... 1.5 mm <sup>2</sup> Rigid 1x 0.5 ... 4 mm <sup>2</sup> Rigid 2x 0.75 ... 2.5 mm <sup>2</sup>
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	2
Number of Main Contacts NC	0
Number of Main Contacts NO	2
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 UL/CSA	(220 ... 240 V AC) Single Phase, NO 1 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

### Certificates and Declarations (Document Number)

ABS Certificate	1SAA920000-0101
CB Certificate	1SAA920007-2001
CCC Certificate	1SAA920005-3801
cULus Certificate	cUL_E191658
Declaration of Conformity - CE	1SAD938504-0302
DNV Certificate	1SAA920000-0306
EAC Certificate	1SAA920003-2701
Instructions and Manuals	2CDC103043M6801
NF Certificate	1SAA920002-1201
RMRS Certificate	1SAA920000-0705
RoHS Information	1SAD938503-0302

### Container Information

Package Level 1 Units	1 piece
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Package Level 1 Width	20 mm
Package Level 1 Height	89 mm
Package Level 1 Depth / Length	73 mm
Package Level 1 Gross Weight	0.14 kg
Package Level 1 EAN	3471523004566

### 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	7.0 27142308
UNSPSC	39121529
E-Number (Sweden)	3210555

### Categories

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

