



PRODUCT-DETAILS

# ESB20-20N-01

## ESB20-20N-01 Installation Contactor (NO) 20 A - 2 NO - 0 NC - 24 V - Control Circuit DC



General Information	
Extended Product Type	ESB20-20N-01
Product ID	1SBE121111M0120
Catalog Description	ESB20-20N-01 Installation Contactor (NO) 20 A - 2 NO - 0 NC - 24 V - Control Circuit DC
Long Description	The ESB20..N 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	3471523004962
Minimum Order Quantity	12 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 <sub>c</sub> )	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 <sub>e</sub> )	(NO) 20 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(230 V) Single Phase, NO 9 A
Rated Operational Power AC-1 (P <sub>e</sub> )	(230 V) Single Phase, NO 4.6 kW
Rated Operational Power AC-3 (P <sub>e</sub> )	(230 V) Single Phase, NO 1.3 kW
Rated Operational Current AC-7a (I <sub>e</sub> )	(NO) 20 A
Rated Operational Power AC-7a (P <sub>e</sub> )	(230 V) Single Phase, NO 4.6 kW
Rated Operational Current AC-7b (I <sub>e</sub> )	(230 V) Single Phase, NO 9 A
Rated Operational Power AC-7b (P <sub>e</sub> )	(230 V) Single Phase, NO 1.3 kW
Recommended Screw Driver	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	6 kV
Rated Insulation Voltage (U <sub>i</sub> )	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	Flexible with Ferrule 1x 1 ... 2.5 mm <sup>2</sup>

Control Circuit	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 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 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 and Amendment 2015/863 July 22, 2019

Material Compliance		
Conflict Minerals Reporting Template (CMRT)		9AKK108467A5658
REACH Declaration		2CMT2021-006202
RoHS Information		2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019	
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)	

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 12 piece
Package Level 1 Width		88 mm
Package Level 1 Height		69.5 mm
Package Level 1 Depth / Length		222 mm
Package Level 1 Gross Weight		1.68 kg
Package Level 1 EAN		3471523004962

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	
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

