PRODUCT-DETAILS

ESB16-20N-03

ESB16-20N-03 Installation Contactor (NO) 16 A - 2 NO - 0 NC - 48 V - Control Circuit DC



General Information

Extended Product Type	ESB16-20N-03
Product ID	1SBE111111R0320
EAN	3471523007048
Catalog Description	ESB16-20N-03 Installation Contactor (NO) 16 A - 2 NO - 0 NC - 48 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	3471523004399
Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

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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)	48 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 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

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	Rigid 2x 1 ... 4 mm²
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 Rigid 2x 0.75 ... 2.5 mm²
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

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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
End of Life Instructions	1SBC100156C0268

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

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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



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