ESB16-20N-03 1/5



PRODUCT-DETAILS

ESB16-20N-03

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



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 ESB16N 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

Popular Downloads

ESB16-20N-03 2/5

Institutions and Manuals 2.CD.C130343M5601 2.CD.C130343M5601 2.CD.C0107980201 2	Data Sheet, Technical Information	2CDC103051C0201	
AD Dimensional		2CDC103043M6801	
Dimension Dimensions Dimensions Product Net Width 18 mm Product Net Height 8 mm Product Net Deph / 65 mm Product Net Deph / 65 mm Product Net Weight 9 mm Product Net Product Net Net Net Net Net Net Net Net Net Ne	CAD Dimensional	2CDC001079B0201	
Dimensions	Drawing		
Product Net Width 18 mm	Dimension Diagram	1SBB505186D3001	
Product Net Height	Dimensions		
Product Net Depth /	Product Net Width		
Product Net Weight	Product Net Height	85 mm	
Rated Operational Voltage	Product Net Depth / Length	65 mm	
Rated Operational Voltage Rated Control Circuit Rated Control Circuit Rated Frequency (f) Rated Operational Current Rated Operational Power Rated Inpulse Withstand Rated Inpulse Rate Rated Inpulse Rat	Product Net Weight	0.14 kg	
Main Circuit 250 V.A.C.	Technical		
Rated Operational Current AC-10 (Leg.)	Rated Operational Voltage	Main Circuit 220 V DC Main Circuit 250 V AC	
Control Circuit 50 Hz Control Circuit 50 Hz Control Circuit 50 Hz Control Circuit 400 Hz Main Circuit 50 Hz Control Circuit Control Circuit 50 Hz Control Circuit Control Circuit 50 Hz Control Circuit 50 Hz Control Circuit 50 Hz Flexible with Insulated Ferrule 2x 1 5 mm Flexible with Insulated Ferrule 2x	Rated Control Circuit Voltage (U _c)	48 V	
Rated Operational Current AC-7 (I _e) Rated Operational Current AC-3 (I _e) Rated Operational Power AC-1 (P _e) Rated Operational Power AC-1 (P _e) Rated Operational Power AC-3 (I _e) Rated Operational Power AC-3 (I _e) Rated Operational Power AC-3 (I _e) Rated Operational Current AC-7a (I _e) Rated Operational Power AC-7b (I _e) Rated Operational Current AC-7b (I _e) Rated Operational Current AC-7b (I _e) Rated Operational Current AC-7b (I _e) Rated Institute Power AC-7b (I _e) Recommended Screw Control Circuit Pozidin's Main Circuit Pozidin's Pilexible Withstand Voltage (U _{imp}) Connecting Capacity Main Circuit Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm' Flexible with Insulated Ferrule 2x 1 1.5 mm' Flexible with Ferrule 2x 1 1.5 mm' Flexible with Ferrule 2x 1 2.5 mm' Flexible with Ferrule 2x 1 2.5 mm' Flexible with Ferrule 2x 0.75 1. 5 mm' Flexible with Insulated Ferrule 2x 1 2.5 mm' Flexible with Insulated Ferrule 2x 1 3.5 mm' Flexible wit	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	
Rated Operational Current AC-3 (l _e) Rated Operational Power AC-1 (P _e) Rated Operational Power AC-2 (P _e) Rated Operational Power AC-3 (P _e) Rated Operational Power AC-3 (P _e) Rated Operational Current AC-7a (l _e) Rated Operational Current AC-7a (l _e) Rated Operational Power AC-7a (P _e) Rated Operational Power AC-7a (P _e) Rated Operational Current AC-7b (P _e) Rated Operational Power AC-7a (P _e) Rated Operational Power AC-7b (P _e) Rated Operational Power AC-7b (P _e	Rated Operational Current	Main Circuit 60 Hz (NO) 16 A	
Rated Operational Power AC-1 (P _e) Rated Operational Power AC-3 (P _e) Rated Operational Power AC-3 (P _e) Rated Operational Current AC-7a (L _e) Rated Operational Current AC-7a (L _e) Rated Operational Power AC-7a (P _e) Rated Operational Power AC-7a (P _e) Rated Operational Power AC-7a (P _e) Rated Operational Current AC-7b (L _e) Rated Operational Current AC-7b (L _e) Rated Operational Power AC-7b (L _e) Rated Operational Power AC-7b (L _e) Rated Operational Power AC-7b (L _e) Recommended Screw Control Circuit Pozidriv 1 Main Circuit Pozidriv 1 Rated Impulse Withstand Voltage (U _{Imp}) Rated Insulation Voltage U1) Connecting Capacity Main Circuit Flexible with Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Ferrule 1x 1 6 mm² Flexible with Ferrule 2x 1 1.5 mm² Flexible with Ferrule 2x 1 1.5 mm² Flexible with Ferrule 1x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible x 1 2.5 mm²	Rated Operational Current	(230 V) Single Phase, NO 6 A	
AC-3 (P _e) Rated Operational Current AC-7a (P _e) Rated Operational Power AC-7a (P _e) Rated Operational Current AC-7a (P _e) Rated Operational Current AC-7b (P _e) Rated Operational Power AC-7b (P _e) Rated Insulational Power AC-7b (P _e) Rated Operational Power AC-7b (P _e) Rated Insulation Power	Rated Operational Power AC-1 (P _e)	(230 V) Single Phase, NO 3.7 kW	
AC-7a (i_e) Rated Operational Power AC-7b (l_e) Recommended Screw Control Circuit Pozidriv 1 Rated Insulation Voltage (U _{imp}) Rated Insulation Voltage (U _i) Connecting Capacity Main Circuit Connecting Capacity Main Connecting Capacity Flexible with Insulated Ferrule 1x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm²	Rated Operational Power AC-3 (P _e)	(230 V) Single Phase, NO 0.9 kW	
AC-7a (P̂e) Rated Operational Current AC-7b (le) Rated Operational Power AC-7b (le) Recommended Screw Driver Recommended Screw Driver Rated Inpulse Withstand Voltage (U _{imp}) Rated Insulation Voltage (Uj) Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm² Flexible with Insulated Ferrule 2x 1 2.5 mm² Flexible 1x 1 6 mm² Flexible 2x 1 4 mm² Rigid 2x 1 4 mm² Rigid 2x 1 4 mm² Rigid 2x 1 4 mm² Flexible with Ferrule 1x 1 2.5 mm² Flexible with Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 1 2.5 mm² Flexible with Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible with Insulated Ferrule 2x 0.75 1 s mm² Flexible x 1 2.5 mm²	Rated Operational Current AC-7a (I_e)	(NO) 16 A	
AC-7b (I _e) Rated Operational Power (230 V) Single Phase, NO 0.9 kW AC-7b (P _e) Recommended Screw Control Circuit Pozidriv 1 Rated Impulse Withstand Main Circuit Pozidriv 1 Rated Impulse Withstand 6 kV Voltage (U _{imp}) Rated Insulation Voltage 400 V (U ₁) Connecting Capacity Main Ferrule 2x 1 2.5 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 with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 1x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible with Insu	Rated Operational Power AC-7a (P _e)	(230 V) Single Phase, NO 3.7 kW	
AC-7b (Pe) Recommended Screw Control Circuit Pozidriv 1 Driver Main Circuit Pozidriv 1 Rated Impulse Withstand Voltage (U _{imp}) Rated Insulation Voltage (U _i) Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm² Flexible with Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 4 mm² Rigid 1x 1 10 mm² Rigid 2x 1 4 mm² Rigid 2x 1 4 mm² Flexible with Ferrule 2x 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 1.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible 2x 1 1.5 mm²	Rated Operational Current AC-7b (I _e)	(230 V) Single Phase, NO 6 A	
Driver Rated Impulse Withstand	Rated Operational Power AC-7b (P_e)	(230 V) Single Phase, NO 0.9 kW	
Voltage (U _{imp}) Rated Insulation Voltage (U _i) Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm² Flexible with Insulated Ferrule 2x 1 2.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 4 mm² Flexible 2x 1 4 mm² Rigid 1x 1 10 mm² Rigid 2x 1 4 mm² Connecting Capacity Control Circuit Flexible with Ferrule 1x 1 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible 2x 1 1.5 mm²	Recommended Screw Driver	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1	
Connecting Capacity Main Circuit Flexible with Ferrule 1x 1 6 mm² Flexible with Insulated Ferrule 1x 1 6 mm² Flexible with Insulated Ferrule 1x 1 6 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible with Insulated Ferrule 2x 1 1.5 mm² Flexible 2x 1 4 mm² Flexible 2x 1 4 mm² Rigid 1x 1 10 mm² Rigid 2x 1 4 mm² Rigid 2x 1 4 mm² Flexible with Ferrule 1x 1 2.5 mm² Flexible with Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 2x 0.75 1.5 mm² Flexible with Insulated Ferrule 2x 0.75 1 mm² Flexible 2x 1 1.5 mm² Flexible 2x 1 1.5 mm² Flexible 2x 1 1.5 mm²	Voltage (Ü _{imp})		
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 with Insulated Ferrule 2x 1 1.5 mm² Flexible 2x 1 4 mm² Flexible 2x 1 4 mm² Rigid 1x 1 10 mm² Rigid 2x 1 4 mm² Connecting Capacity 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 with Insulated Ferrule 2x 0.75 1 mm² Flexible 2x 1 1.5 mm² Flexible 2x 1 1.5 mm² Flexible 2x 1 1.5 mm²	(U_i)	400 V	
Flexible with Insulated Ferrule 1x 1 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 1 mm ² Flexible 1x 1 2.5 mm ² Flexible 2x 1 1.5 mm ²	Connecting Capacity Main Circuit Connecting Capacity Control 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 with Insulated Ferrule 2x 1 1.5 mm² Flexible 1x 1 6 mm² Flexible 2x 1 4 mm² Rigid 1x 1 10 mm² Rigid 2x 1 4 mm² Flexible with Ferrule 1x 1 2.5 mm²	
	Control Circuit	Flexible with Ferrule 2x 0.75 1.5 mm ² Flexible with Insulated Ferrule 1x 1 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 1 mm ² Flexible 1x 1 2.5 mm ² Flexible 2x 1 1.5 mm ² Rigid 1x 0.5 4 mm ²	

ESB16-20N-03 3/5

	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	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
Pollution Degree Standards	
Standards	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 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
Maximum Operating Altitude Permissible	Storage -40 +80 °C 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

Package Level 1 EAN

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
NF Certificate	1SAA920002-1201
RMRS Certificate	1SAA920000-0705
UL Certificate	E191658-19960301
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

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	Туре	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

3471523004399

ESB16-20N-03 5/5

Categories

 $Low\ Voltage\ Products\ and\ Systems\ \rightarrow\ Control\ Products\ \rightarrow\ Contactors\ \rightarrow\ Installation\ Contactors$ $Low\ Voltage\ Products\ and\ Systems\ \rightarrow\ Modular\ DIN\ Rail\ Products\ \rightarrow\ Command\ and\ Signalling\ Devices\ \rightarrow\ Installation\ Contactors$

