ESB100-20N-01 1/5



## PRODUCT-DETAILS

## ESB100-20N-01 ESB100-20N-01 Installation Contactors (NO) 100 A - 2 NO - 0 NC - 24 V - Control Circuit 400 Hz



General Information	
Extended Product Type	ESB100-20N-01
Product ID	1SAE361111R0120
EAN	4013614533020
Catalog Description	ESB100-20N-01 Installation Contactors (NO) 100 A - 2 NO - 0 NC - 24 V - Control Circuit 400 Hz
Long Description	The ESB100N installation contactors are used to control single and three-phase loads up to 100 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	4013614533013
Minimum Order Quantity	1 piece
Customs Tariff Number	<u>85365080</u>

## Popular Downloads

ESB100-20N-01 2/5

2CDC103051C0201

mormation		
Instructions and Manuals		2CDC103043M6801
CAD Dimensional		2CDC001079B0201
Drawing		
Dimensions		
Product Net Width		54 mm
Product Net Height		85 mm
Product Net Depth / Length		65 mm
Product Net Weight		0.405 kg
Technical		
Rated Operational Voltage		Main Circuit 220 V DC Main Circuit 400 V AC
Rated Control Circuit Voltage (U <sub>c</sub> )		24 V
Rated Frequency (f)		Control Circuit 400 Hz
,		Control Circuit 50 Hz Control Circuit 60 Hz
		Control Circuit DC
		Main Circuit 50 Hz Main Circuit 60 Hz
		Main Circuit DC
Rated Operational Current AC-1 (I <sub>e</sub> )		(NO) 100 A
Rated Operational Power AC-1 (P <sub>e</sub> )		(230 V) Single Phase, NO 23 kW
Rated Operational Current AC-7a (I <sub>e</sub> )		(NO) 100 A
Rated Operational Power AC-7a (P <sub>e</sub> )		(230 V) Single Phase, NO 23 kW
Recommended Screw Driver		Control Circuit Pozidriv 1 Main Circuit Pozidriv 2
Rated Impulse Withstand Voltage (U <sub>imp</sub> )		6 kV
Rated Insulation Voltage $(U_i)$		500 V
Connecting Capacity Main Circuit	Flexible	Flexible with Ferrule 1x 10 35 mm <sup>2</sup> with Insulated Ferrule 1x 10 35 mm <sup>2</sup> Flexible 1x 10 35 mm <sup>2</sup> Rigid 1x 10 50 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible	Flexible with Ferrule 1x 1 2.5 mm² Flexible with Ferrule 2x 0.75 1.5 mm² e with Insulated Ferrule 1x 1 2.5 mm² with Insulated Ferrule 2x 0.75 1 mm² Flexible 1x 1 2.5 mm² Flexible 2x 1 1.5 mm² Rigid 1x 1 4 mm² Rigid 2x 1 2.5 mm²
Tightening Torque		Control Circuit 0.9 N·m Main Circuit 3 N·m
Wire Stripping Length		Control Circuit 7 mm Main Circuit 15 mm
Degree of Protection		IP20
Electrical Durability		AC-1 (NO) 50000 cycle AC-7a (NO) 50000 cycle
Mechanical Durability		1000000 cycle
Number of Poles  Number of Auxiliary		
Contacts NC		0
Number of Auxiliary		
© 2024 ABB. All rights reserved.	2024/04/12	Subject to change

Data Sheet, Technical Information

ESB100-20N-01 3/5

Contacts NO	
umber of Main Contacts C	0
umber of Main Contacts O	2
Vidth in Number of	3
Modular Spacings	
Pollution Degree	3
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 61095
	UL 60947-1 UL 60947-4-1
Technical UL/CSA	
Maximum Operating /oltage UL/CSA	Main Circuit 480 V AC
Connecting Capacity Main Circuit UL/CSA	Solid 8-0 AWG Stranded 8-0 AWG
Connecting Capacity Control Circuit UL/CSA	Solid 16-10 AWG Stranded 16-10 AWG
Fightening Torque	Control Circuit 8 in·lb
JL/CSA	Main Circuit 27 in lb
Environmental	
Ambient Air Temperature	Operation -25 +55 °C
Maximum Operating	Storage -40 +80 °C 2000 m
Altitude Permissible Resistance to Shock acc.	11 ms Pulse 15g
DIEC 60068-2-27	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
DIEC 60068-2-27	
D IEC 60068-2-27 RoHS Status	
Material Compliance Conflict Minerals Reporting Template	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Material Compliance onflict Minerals eporting Template CMRT)	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658
Aterial Compliance onflict Minerals eporting Template MRT)  EACH Declaration	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202
Material Compliance  onflict Minerals eporting Template  EMRT)  EACH Declaration oHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status  Toxic Substances Control	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status  Toxic Substances Control Act - TSCA	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status  Toxic Substances Control Act - TSCA WEEE B2C / B2B	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525 Business To Consumer
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Status  Foxic Substances Control Act - TSCA WEEE B2C / B2B WEEE Category	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525 Business To Consumer
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status  Toxic Substances Control Act - TSCA WEEE B2C / B2B	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status  Toxic Substances Control Ict - TSCA WEEE B2C / B2B WEEE Category  Certificates and Declarations	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer 5. Small Equipment (No External Dimension More Than 50 cm)
Material Compliance  Inflict Minerals In	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525 Business To Consumer
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status  Toxic Substances Control Act - TSCA WEEE B2C / B2B WEEE Category  Certificates and Declarations ABS Certificate CB Certificate	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer 5. Small Equipment (No External Dimension More Than 50 cm)  1SAA920000-0101 1SAA920008-2001 CQC2018010304057354
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status Toxic Substances Control Act - TSCA WEEE B2C / B2B WEEE Category  Certificates and Declarations ABS Certificate CBC Certificate CQC Certificate Declaration of Conformity	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer 5. Small Equipment (No External Dimension More Than 50 cm)  1SAA920000-0101 1SAA920008-2001 CQC2018010304057354 CQC2018010304057345
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status Toxic Substances Control Act - TSCA WEEE B2C / B2B WEEE Category  Certificates and Declarations ABS Certificate CB Certificate CQC Certificate	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer 5. Small Equipment (No External Dimension More Than 50 cm)  1SAA920000-0101 1SAA920008-2001 CQC2018010304057354
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status Toxic Substances Control Act - TSCA WEEE B2C / B2B WEEE Category  Certificates and Declarations ABS Certificate CB Certificate CQC Certificate Declaration of Conformity CCC Declaration of Conformity	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277 Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer 5. Small Equipment (No External Dimension More Than 50 cm)  1SAA920000-0101 1SAA920008-2001 CQC2018010304057354 CQC2018010304057345 2020980304001315 2020980304001316
Material Compliance Conflict Minerals Reporting Template CMRT) REACH Declaration ROHS Information ROHS Status Oxic Substances Control RCT + TSCA WEEE B2C / B2B WEEE Category  Certificates and Declarations RBS Certificate RB Certificate	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019  9AKK108467A5658  2CMT2021-006202 2CMT2021-006277  Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 2CMT2023-006525  Business To Consumer 5. Small Equipment (No External Dimension More Than 50 cm)  1SAA920000-0101 1SAA920008-2001 CQC2018010304057354 CQC2018010304057354 2020980304001315 2020980304001316

© 2024 ABB. All rights reserved.

ESB100-20N-01 4/5

RINA Certificate	1SAA920000-0801
RMRS Certificate	1SAA920000-0705
UL Certificate	E191658-19960301

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	57 mm
Package Level 1 Gross Weight	0.405 kg
Package Level 1 EAN	4013614533013

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)	3707599
E-Number (Sweden)	3210574
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

## Categories

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

ESB100-20N-01 5/5

