



PRODUCT-DETAILS

ESB20-20N-06

ESB20-20N-06 Installation Contactor (NO) 20 A - 2 NO - 0 NC - 230 V - Control Circuit DC



General Information

Extended Product Type:	ESB20-20N-06
Product ID:	1SBE121111R0620
EAN:	3471523007505
Catalog Description:	ESB20-20N-06 Installation Contactor (NO) 20 A - 2 NO - 0 NC - 230 V - Control Circuit DC
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.</p> <p>These contactors are made for use in household applications as well as in industrial environments.</p> <p>The following benefits are provided:</p> <p>Hum-free operation, low power consumption and integrated overvoltage protection.</p> <p>Various contact combinations and accessories are available.</p>
Display Name:	ESB20-20N-06

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85365080

Popular Downloads

EPLAN Data:	9AAC404715_EPLAN
Data Sheet, Technical Information:	2CDC103051C0201
Instructions and Manuals:	2CDC103043M6801
CAD Dimensional Drawing:	2CDC001079B0201

Dimensions

Product Net Width:	18 mm
Product Net Depth / Length:	65 mm
Product Net Height:	85 mm
Product Net Weight:	0.14 kg
Dimension Diagram:	1SBB505186D3001

Technical

Number of Main Contacts NO:	2
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	0
Number of Auxiliary Contacts NC:	0
Number of Poles:	2P
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
Rated Operational Voltage:	Main Circuit 220 V DC Main Circuit 240 V AC
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 Current AC-7a (I_e):	(NO) 20 A
Rated Operational Current AC-7b (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 Power AC-7a (P_e):	(230 V) Single Phase, NO 4.6 kW
Rated Operational Power AC-7b (P_e):	(230 V) Single Phase, NO 1.3 kW
Rated Breaking Capacity AC-3:	8 x I _e / AC-3

Rated Making Capacity AC-3:	10 x I _e / AC-3
Rated Short-time Withstand Current Low Voltage (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 72 A
Rated Insulation Voltage (U_i):	400 V
Rated Impulse Withstand Voltage (U_{imp}):	6 kV
Electrical Durability:	AC-1 (NO) 150000 cycle AC-3 (NO) 150000 cycle AC-7a (NO) 150000 cycle AC-7b (NO) 150000 cycle
Maximum Electrical Switching Frequency:	(AC-1) 300 cycles per hour (AC-3) 600 cycles per hour (AC-7a) 300 cycles per hour (AC-7b) 600 cycles per hour
Mechanical Durability:	Nr. Operations 1000000 cycle
Coil Operating Limits:	(acc. to IEC 60947-4-1) 0.85 ... 1.1 x U _c (at θ ≤ 55 °C)
Rated Control Circuit Voltage (U_c):	230 V
Coil Consumption:	Average Holding Value 50 / 60 Hz 2.5 V·A Average Holding Value DC 2.5 W Average Pull-in Value 50 Hz 2.5 V·A Average Pull-in Value 60 Hz 2.5 V·A Average Pull-in Value DC 2.5 W
Power Loss:	at Rated Operating Conditions AC-1 per Pole 1.4 W
Mounting on DIN Rail:	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Connecting Capacity Main Circuit:	Flexible with Ferrule 1x 1 ... 6 mm ² Flexible with Ferrule 2x 1 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 1 ... 6 mm ² Flexible with Insulated Ferrule 2x 1 ... 1.5 mm ² Flexible 1x 1 ... 6 mm ² Flexible 2x 1 ... 4 mm ² Rigid 1x 1 ... 10 mm ² Rigid 2x 1 ... 4 mm ²
Connecting Capacity Control Circuit:	Flexible with Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Ferrule 2x 0.75 ... 1.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 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 Rigid 2x 0.75 ... 2.5 mm ²
Wire Stripping Length:	Control Circuit 7 mm Main Circuit 10 mm
Degree of Protection:	IP20
Recommended Screw Driver:	Control Circuit Pozidriv 1 Main Circuit Pozidriv 1
Tightening Torque:	Control Circuit 0.9 N·m Main Circuit 1.2 N·m
Terminal Type:	Screw Terminals
Width in Number of Modular Spacings:	1
Product Name:	Installation Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 240 V AC
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General Use Rating UL/CSA:	(acc. to UL 240 V) 20 A
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
Full Load Amps Motor Use:	(220 ... 240 V AC) Single Phase, NO 8 A

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
Pollution Degree:	3

Material Compliance

Conflict Minerals Reporting Template (CMRT):	9AKK108467A5658
REACH Declaration:	2CMT2021-006202
RoHS Declaration:	2CMT2021-006277
RoHS Information:	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
SCIP:	cb871545-f769-46c0-8d09-61cd7b5ae23d Bulgaria
Simplified SCIP:	0c9cf22f-869a-4c13-b6ac-ce896ba4d3d7 Germany 0d28a6c6-7112-4222-9918-414e5ce2c3db Hungary 29feb08d-c2d0-426d-a7e3-d973e734f760 Sweden 2c9d8d58-41df-44f1-a60d-b6cb96f13bbb Spain 336cb6ea-cb4e-4f90-a434-191a0d32c546 Poland 37bd6088-90fa-406d-b9b5-2b815b487f95 Poland 3a6138ee-acdd-4921-8bfd-a62e8ba730da Croatia 4096d3e5-81d2-4795-b449-b3d1239ad399 Norway 4466e6b2-f26b-476a-bee2-44c9ec2d98c8 Netherlands 5b9d1a46-93a6-4f12-9328-620bcf3c5f16 France 5ffd8553-2280-4091-8ce9-381d9cba949a Belgium 627f64fe-82ef-4dbf-bea8-f60ee646d9cf Germany 64a1844c-26ba-4dd2-8999-8ba4bf247aa6 Greece 79c99109-3181-4dca-9548-ee0076277780 Estonia 79dca0bf-13cc-4cef-8a7c-0626f56c0cdd Finland 8bb6ff21-07aa-4e15-ad75-e790b92637ec Germany 9b0fda5a-e83c-4450-9bc6-f9906a1ccee4 Portugal 9c65aa8f-41d6-44cd-b9a5-44f396d274ea Germany 9f7003cb-b554-4505-9aad-bc382aa14009 Germany a177d171-9628-4d40-9188-a04949a5b6a5 Italy ad7377e8-8776-4c68-986a-06b27e86532d Denmark c9c49e7f-fa34-46f7-9415-be6d8d0669c6 Hungary cc9f611c-4a3e-4bc5-ab53-d9bdd861ab03 Belgium cfc86967-b9a3-4b1a-9f19-39f42aeb6521 Czechia da12bd9f-1411-4198-99f4-167611c1e3de Sweden eaaa42d5-b786-4101-9a45-d8a9870ddad1 France fb37adb0-6e06-48fa-afa6-8796c50a6a2b Poland
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

ABB EcoSolutions:	Yes
ABB Site Meeting Group Waste To Landfill Target:	No non-hazardous waste is sent to a landfill
EcoSolutions Profile:	1SFC100125C0336
End Of Life Disassembling Instructions:	1SBC100156C0268
Environmental Product Declaration - EPD:	1SAC200416H0001
Improved Energy Efficiency for Customers:	Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line
Recyclability Rate of the Product acc. to EN45555:	Design for Closing Resource Loops - Standard EN45555 - 87.4 %

Certificates and Declarations

A2L Certificate – IEC:	1SAA920000-4601
ABS Certificate:	1SAA920000-0101
CB Certificate:	1SAA920007-2001
CCC Certificate:	2024010304659814 2024010304659813
Declaration of Conformity - CE:	1SAD101100-3301
Declaration of Conformity - UKCA:	1SAD201100-3301
DNV Certificate:	1SAA920000-0306
NF Certificate:	1SAA920002-1201
UL Certificate:	E191658-19960301

Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	88 mm
Package Level 1 Depth / Length:	20 mm
Package Level 1 Height:	71 mm
Package Level 1 Gross Weight:	0.14 kg
Package Level 1 EAN:	3471523004641
Package Level 2 EAN:	4013614583902

External Classifications and Standards

Object Classification Code:	Q
ETIM 7:	EC001653 - Installation contactor for distribution board

ETIM 8:	EC001653 - Installation contactor for distribution board
ETIM 9:	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):	3707565
E-Number (Norway):	4190231
E-Number (Sweden):	3210556

Accessories

Identifier	Description	Type	Qty	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

Products > Low Voltage Products and Systems > Control Products > Contactors > Installation Contactors

Products > Low Voltage Products and Systems > Modular DIN Rail Products > Command and Signalling Devices > Installation Contactors

