PRODUCT-DETAILS

S301P-B20

S301P-B20 Miniature Circuit Breaker - 1P - B - 20 A



General Information

Extended Product Type	S301P-B20
Product ID	2CDS381001R0205
EAN	4016779080392
Catalog Description	S301P-B20 Miniature Circuit Breaker - 1P - B - 20 A
Long Description	The MCBs S300P series assures protection in industrial installations against overload and short circuits. This product is manufactured according to international IEC and UL standards, for the markets where it is required.

ABB EcoSolutions

ABB EcoSolutions	Yes

Circular Value

Circular Design Principles Recyclability Rate	Design for Closing Resource Loops - Standard EN45555 - 63.8 %
End of Life Instructions	9AKK108467A9801

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Eco Transparency

Environmental Product Declaration - EPD	9AKK108467A7130

Technical

Standards	CSA 22.2 No. 235 IEC/EN 60898-1 IEC/EN 60947-2 UL 1077
Tripping Characteristic	B
Rated Operational Voltage	acc. to IEC 60898-1 240 V AC acc. to IEC 60898-1 240 V acc. to IEC 60947-2 240 V AC
Operational Voltage	Maximum (Incl. Tolerance) 254 V AC Maximum 254 V AC Minimum 12 V AC Minimum 12 V DC
Rated Insulation Voltage (U_i)	acc. to IEC/EN 60664-1 500 V
Rated Impulse Withstand Voltage (U_{imp})	6 kV
Dielectric Test Voltage	50/60 Hz, 1 min: 2 kV
Input Voltage Type	AC/DC
Rated Current (I_n)	20 A
Rated Short-Circuit Capacity	(AC) 25 kA (240 / 415 V AC) 25 kA
Rated Ultimate Short-Circuit Breaking Capacity (I_{cu})	(240 V AC) 25 kA (72 V DC) 25 kA (230 V) 25 kA
Rated Service Short-Circuit Breaking Capacity (I_{cs})	(240 V AC) 12.5 kA
Rated Frequency (f)	50 / 60 Hz
Power Loss	2.3 W at Rated Operating Conditions per Pole 2.3 W
Power Supply Connection	Arbitrary
Contact Position Indication	Red ON / Green OFF
Electrical Endurance	20000 AC cycle
Mechanical Endurance	20000 cycle
Number of Protected Poles	1
Number of Poles	1
Overvoltage Category	IV
Tightening Torque	2.8 N·m
Screw Terminal Type	Failsafe Bi-directional Cylinder-lift Terminal
Actuator Marking	I / O
Actuator Material	Insulation Group II, Black, Sealable
Housing Material	Insulation Group I, RAL 7035
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
Mounting Position	any
Recommended Screw	Pozidriv 2

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Driver	
Accessories Available	Yes
Connecting Capacity	Busbar 10 / 10 mm² Flexible with Ferrule 0.75 ... 25 mm² Flexible 0.75 ... 25 mm² Flexible 0.75 ... 25 mm² Rigid 0.75 ... 35 mm² Stranded 0.75 ... 35 mm²
Installation Size	acc. to DIN 43880 1
Wire Stripping Length	14 mm
Terminal Type	Screw Terminals

Material Compliance

RoHS Information	9AKK107991A3220
RoHS Status	Following EU Directive 2011/65/EU
RoHS Date	20220317
REACH Declaration	9AKK108468A9644
REACH Information	False - does not contains substances > 0.1 mass percentage
Conflict Minerals Reporting Template (CMRT)	9AKK108468A3363

Environmental

Ambient Air Temperature	Operation -40 ... +70 °C Storage -55 ... +70 °C
Degree of Protection	IP20 IP40 Enclosure with Cover IP40
Pollution Degree	3
Environmental Conditions	28 cycles with 55 °C / 90-96 % and 25 °C / 95-100 %
Resistance to Vibrations	20 Cycles with Load 0.8 In: 5g 5 ... 150 ... 5 Hz
Resistance to Shock acc. to IEC 60068-2-27	25g 3 shocks 18 ms

Technical UL/CSA

Maximum Operating Voltage UL/CSA	480Y / 277 V AC 480Y/277 V AC
Interrupting Rating acc. to UL1077	(277 V AC) 10 kA (60 V DC) 10 kA
Connecting Capacity UL/CSA	Busbar 18-8 AWG Conductor 18-4 AWG
Tightening Torque UL/CSA	18 in·lb

Dimensions

Width in Number of Modular Spacings	1
Product Net Width	17.5 mm
Product Net Height	88 mm
Product Net Depth / Length	67.6 mm

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Product Net Weight	0.124 kg
Pole Net Weight	0.124 kg
Built-In Depth (t_2)	69 mm

Ordering

Package Level 1 Units	box 10 piece
Package Level 1 Gross Weight	1.29 kg
E-Number (Finland)	3212147

Certificates and Declarations

CB Certificate	2CDZ405000A1089 2CDZ405000A1093
CCA Certificate	2CDZ405000A1090 2CDZ405000A1094
CCC Certificate	2CDZ405000A1097 2CDZ405000A1098
Certification Agency	CSA IEC EN UL
CQC Certificate	2CDZ405000A1097 2CDZ405000A1098
CSA Certificate	2CDZ405000A1102
Declaration of Conformity - CE	9AKK107991A3220
Declaration of Conformity - UKCA	9AKK107992A8877
DNV GL Certificate	2CDZ405000A1155
EAC Certificate	2CDZ405000A1092 2CDZ405000A1096
NF Certificate	2CDZ405000A1144
RINA Certificate	2CDZ405000A1194
UL Certificate	2CDZ405000A1101
VDE Certificate	2CDZ405000A1191 2CDZ405000A1195

Installation

Instructions and Manuals	2CDS207104P0002

Popular Downloads

Data Sheet, Technical Information	9AKK107992A4964

Classifications

ETIM 8	EC000042 - Miniature circuit breaker (MCB)
ETIM 9	EC000042 - Miniature circuit breaker (MCB)
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

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WEEE B2C / B2B	Business To Business
CN8	8536 20 10
UNSPSC	39121603
eClass	V11.0 : 27141901
IDEA Granular Category Code (IGCC)	4897 >> Miniature circuit breakers
Object Classification Code	F

Accessories

Identifier	Description	Type	Quantity	Unit Of Measure
2CDS200922R0001	S2C-S/H6R Signal / Auxiliary Contact	S2C-S/H6R	1	piece
2CDS200912R0001	S2C-H6R Auxiliary Contact	S2C-H6R	1	piece
2CDS200970R0001	S2C-H01 Auxiliary Contact	S2C-H01	1	piece
2CDS200970R0002	S2C-H10 Auxiliary Contact	S2C-H10	1	piece
2CDS200936R0001	S2C-H11L Auxiliary Contact	S2C-H11L	1	piece
2CDS200936R0002	S2C-H20L Auxiliary Contact	S2C-H20L	1	piece
2CDS200936R0003	S2C-H02L Auxiliary Contact	S2C-H02L	1	piece
2CDS200946R0001	S2C-H6-11R Auxiliary Contact	S2C-H6-11R	1	piece
2CDS200946R0002	S2C-H6-20R Auxiliary Contact	S2C-H6-20R	1	piece
2CDS200946R0003	S2C-H6-02R Auxiliary Contact	S2C-H6-02R	1	piece
2CDS200909R0001	S2C-A1 Shunt Trip	S2C-A1	1	piece
2CDS200909R0002	S2C-A2 Shunt Trip	S2C-A2	1	piece
2CSS200911R0001	S2C-UA 12 DC Undervoltage Release	S2C-UA 12 DC	1	piece
2CSS200911R0002	S2C-UA 24 AC Undervoltage Release	S2C-UA 24 AC	1	piece
2CSS200911R0003	S2C-UA 48 AC Undervoltage Release	S2C-UA 48 AC	1	piece
2CSS200911R0004	S2C-UA 110 AC Undervoltage Release	S2C-UA 110 AC	1	piece
2CSS200911R0005	S2C-UA 230 AC Undervoltage Release	S2C-UA 230 AC	1	piece
2CSS200911R0006	S2C-UA 400 AC Undervoltage Release	S2C-UA 400 AC	1	piece
2CSS200911R0007	S2C-UA 24 DC Undervoltage Release	S2C-UA 24 DC	1	piece
2CSS200911R0008	S2C-UA 48 DC Undervoltage Release	S2C-UA 48 DC	1	piece
2CSS200911R0009	S2C-UA 110 DC Undervoltage Release	S2C-UA 110 DC	1	piece
2CSS200911R0010	S2C-UA 230 DC Undervoltage Release	S2C-UA 230 DC	1	piece
2CSS201997R0013	S2C-CM1 Motor Operating Device	S2C-CM1	1	piece
2CSS203997R0013	S2C-CM2/3 Motor Operating Device	S2C-CM2/3	1	piece
2CSS204997R0013	S2C-CM4 Motor Operating Device	S2C-CM4	1	piece
GHS2001901R0003	S2C-DH Mechanical Accessories	S2C-DH	1	piece
2CSS200998R0001	S2C-BP Mechanical tripping device	S2C-BP	1	piece
2CSS200999R0001	S2C-EST Plug-in base	S2C-EST	1	piece
2CDS200918R0001	S2C-NT Hand Operated Neutral	S2C-NT	1	piece
2CCA880100R0001	CMS-100PS Sensor	CMS-100PS	1	piece
2CCA880101R0001	CMS-101PS Sensor	CMS-101PS	1	piece
2CCA880102R0001	CMS-102PS Sensor	CMS-102PS	1	piece

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Categories

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