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 PRODUCT-DETAILS

## S803N-B20

### S803N-B20 High Performance MCB




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**General Information**

Extended Product Type	S803N-B20
Product ID	2CCS893001R0205
EAN	7612271204075
Catalog Description	S803N-B20 High Performance MCB

Long Description	<p>The S803N-B20 is a 3-pole High Performance Circuit breaker with B-characteristic, with cage terminal and a rated current of 20 A. It is a current limiting device with a maximum breaking capacity of 36kA at 240/415V. It can be used for voltages up to 400/690V and in DC as well. It has two different tripping mechanisms, the thermal tripping mechanism for overload protection and the electromechanic tripping mechanism for short circuit protection. The S803N-B20 complies with IEC/EN 60898-1 and IEC/EN 60947-2 and allows the use for residential, commercial and industrial applications. It has numerous of approvals, therefore it can be used worldwide. The extensive range of accessory makes the use of S803N-B20 more comfortable. Due to the fast arc extinction of S803N-B20 your application will be secured.</p>
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**ABB EcoSolutions**

ABB EcoSolutions	Yes
EcoSolutions Profile	9AKK108471A1082
Recyclability Rate of the	Design for Closing Resource Loops - Standard EN45555 - 86.29 %

Product acc. to EN45555

ABB Site Meeting Group Waste To Landfill Target	No non-hazardous waste is sent to a landfill
End Of Life Disassembling Instructions	9AKK108470A2575
Environmental Product Declaration - EPD	9AKK108470A1695,9AKK108470A1696

## Technical

Type of Residual Current	Standard Version
Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ )	(415 V AC) 36 kA (440 V AC) 20 kA (500 V AC) 10 kA (690 V AC) 4,5 kA (375 V DC) 20 kA
Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ )	(415 V AC) 30 kA (440 V AC) 15 kA (500 V AC) 8 kA (690 V AC) 3 kA (375 V DC) 20 kA
Contact Position Indication	ON / OFF / TRIP
Energy Limiting Class	3
Electrical Endurance	10000 cycle
Mechanical Endurance	10000 cycle
Number of Protected Poles	3
Number of Poles	3P
Tightening Torque	3.5 N·m 31 in·lb
Release Type	B
Actuator Marking	I / O
Recommended Screw Driver	Pozidriv 2
Accessories Available	Yes
Remarks	Connection from top and bottom Connecting with CU only IP40 in enclosure with cover Cage terminal with captive screw
Connecting Capacity	Flexible 0 ... 50 mm <sup>2</sup> Rigid 0 ... 70 mm <sup>2</sup>
Terminal Type	Screw Terminals

## Electrical

Tripping Characteristic	B
Rated Operational Voltage	acc. to IEC 60898-1 400 V AC acc. to IEC 60947-2 690 V AC
Operational Voltage	Maximum 230/400 V AC Minimum 12 V AC
Rated Insulation Voltage ( $U_i$ )	acc. to IEC/EN 60664-1 690 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	8 kV
Input Voltage Type	AC/DC
Rated Current ( $I_n$ )	20 A
Rated Short-Circuit Capacity	(400 V AC) 20 kA

Frequency (f)	50 ... 60 Hz
Rated Frequency (f)	50/60 Hz
Power Loss	Total 10.5 W at Rated Operating Conditions per Pole 3.5 W
Overvoltage Category	IV

## Design

Housing Material	Insulation group I, RAL 7035
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## Material Compliance

RoHS Declaration	2CCC005083D0202
RoHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
RoHS Date	20211214
REACH Declaration	9AKK108470A9089
REACH Information	False - does not contain substances > 0.1 mass percentage
REACH Date	20250313
Conflict Minerals Reporting Template (CMRT)	9AKK108468A3363
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)
WEEE B2C / B2B	Business To Business

## Environmental

Ambient Air Temperature	Operation -40 ... 70 °C Storage -40 ... 70 °C
Reference Ambient Air Temperature	acc. to IEC60947-2 30 °C acc. to EN60898-1 30 °C
Degree of Protection	IP20
Pollution Degree	3
Resistance to Vibrations	1 mm 2 - 13.2 Hz 0.7g with Load 100% x le 13.2 - 100 Hz
Resistance to Shock acc. to IEC 60068-2-27	5 g 30 ms
Environmental Information	2CCY413207D0203

## Dimensions

Width in Number of Modular Spacings	4.5
Product Net Width	81 mm
Product Net Height	95 mm
Product Net Depth / Length	82.5 mm
Product Net Weight	735 g
Built-In Depth (t <sub>2</sub> )	82.5 mm
Dimension Diagram	2CCC413003C0201

## Engineering

EPLAN Data

9AAC172532\_EPLAN

## Ordering

Package Level 1 Units	box 1 piece
Package Level 1 Gross Weight	770 g
E-Number (Norway)	1665827

## Certificates and Declarations

CB Certificate	2CCC413027D0201
CCC Certificate	CQC2007010307228826
Declaration of Conformity - CE	2CCC005083D0202
ESTI Certificate	9AKK107680A0846
KC Certificate	9AKK107680A0932
VDE Certificate	2CCC413039D0601

## Installation

Instructions and Manuals	2CCC413016M0008
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

## Popular Downloads

Data Sheet, Technical Information	9AKK108468A9560 9AKK108468A9561 9AKK108468A9562
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## External Classifications and Standards

ETIM 9	EC000042 - Miniature circuit breaker (MCB)
ETIM 10	EC000042 - Miniature circuit breaker (MCB)
UNSPSC	39121603
eClass	V11.0 : 27141901
IDEA Granular Category Code (IGCC)	4899 >> Miniature circuit breaker (MCB) screw-in model
Object Classification Code	F
Standards	IEC/EN 60947-2 IEC/EN 60898-1

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## Categories

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Low Voltage Products and Systems → Modular DIN Rail Products → High Performance Circuit Breakers HPCBs → High Performance Circuit Breakers HPCBs - S800



360°

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