PRODUCT-DETAILS

S204-B50

Miniature Circuit Breaker - S200 - 4P - 50 A - B - (AC) 6 kA



General Information

Extended Product Type	S204-B50
Product ID	2CDS254001R0505
EAN	4016779550987
Catalog Description	Miniature Circuit Breaker - S200 - 4P - 50 A - B - (AC) 6 kA
Long Description	System pro M compact S200 miniature circuit breakers are current limiting. They have two different tripping mechanisms, the delayed thermal tripping mechanism for overload protection and the electromechanic tripping mechanism for short circuit protection. They are available in different characteristics (B,C,D,K,Z), configurations (1P,1P+N,2P,3P,3P+N,4P), breaking capacities (up to 6 kA at 230/400 V AC) and rated currents (up to 63A). All MCBs of the product range S200 comply with IEC/EN 60898-1, IEC/EN 60947-2, UL1077 allowing the use for residential, commercial and industrial applications. Bottom-fitting auxiliary contact can be mounted on S200 to save 50% space.

ABB EcoSolutions

ABB EcoSolutions	Yes
EcoSolutions Profile	9AKK108469A3796
Recyclability Rate of the Product acc. to EN45555	Design for Closing Resource Loops - Standard EN45555 - 80.7 %

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ABB Site Meeting Group Waste To Landfill Target	No non-hazardous waste is sent to a landfill
Extended Product Lifetime	Product Durability
Offered with Takeback Services	Take Back for Recycling
End Of Life Disassembling Instructions	9AKK108468A3132
Environmental Product Declaration - EPD	9AKK108467A7832

Technical

Dielectric Test Voltage	50 / 60 Hz - 1 min 2 kV
Rated Ultimate Short-Circuit Breaking Capacity (I_{cu})	(230 V AC) 20 kA (400 V AC) 10 kA (440 V AC) 10 kA (230 V) 20 kA (400 V) 10 kA
Rated Service Short-Circuit Breaking Capacity (I_{cs})	(230 V AC) 15 kA (400 V AC) 7.5 kA (440 V AC) 7.5 kA
Power Supply Connection	Arbitrary
Contact Position Indication	Red ON / Green OFF
Energy Limiting Class	3
Electrical Endurance	10000 AC cycle
Mechanical Endurance	20000 cycle
Number of Protected Poles	4
Number of Poles	4P
Tightening Torque	2.8 N·m
Actuator Type	Toggle
Screw Terminal Type	Failsafe Bi-directional Cylinder-lift Terminal
Actuator Marking	I / O
Actuator Material	Insulation Group II, Black, Sealable
Recommended Screw Driver	Pozidriv 2
Accessories Available	Yes
Connecting Capacity	Busbar 10/10 mm² Flexible with Ferrule 0.75 ... 25 mm² Flexible 0.75 ... 25 mm² Rigid 0.75 ... 35 mm² Rigid 0.75 ... 35 mm² Stranded 0.75 ... 35 mm²
Installation Size	acc. to DIN 43880 1
Wire Stripping Length	12.5 mm
Terminal Type	Screw Terminals

Electrical

Tripping Characteristic	B
Rated Operational Voltage	acc. to IEC 60898-1 400 V AC acc. to IEC 60947-2 440 V AC
Operational Voltage	Maximum (Incl. Tolerance) 440 V AC Minimum 12 V AC Minimum 12 V DC

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Rated Insulation Voltage (U_i)	acc. to IEC/EN 60664-1 440 V
Rated Impulse Withstand Voltage (U_{imp})	4 kV at 2000 m 5 kV at Sea Level 6.2 kV
Input Voltage Type	AC/DC
Rated Current (I_n)	50 A
Rated Short-Circuit Capacity	(AC) 6 kA (DC) 6 kA
Rated Conditional Short-Circuit Current (I_{nc})	(230 V) 20 kA (400 V) 20 kA
Frequency (f)	50 Hz
Rated Frequency (f)	50 / 60 Hz
Power Loss	13 W at Rated Operating Conditions per Pole 3.25 W
Overvoltage Category	III
I^2t Characteristic	9AKK107992A5102

Design

Housing Material	Insulation Group II, RAL 7035

Technical UL/CSA

Maximum Operating Voltage UL/CSA	110 V DC 480Y/277 V AC
Interrupting Rating acc. to UL1077	(277 V AC) 6 kA (480Y / 277 V AC) 6 kA (240 V) 10 kA
Connecting Capacity UL/CSA	Busbar 18-8 AWG Conductor 18-4 AWG
Tightening Torque UL/CSA	18 in·lb

Material Compliance

RoHS Declaration	2CDK403001D0607
RoHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
RoHS Date	20240228
REACH Declaration	9AKK107492A1906
REACH Information	True - contains substances > 0.1 mass percentage
REACH Date	20240821
Conflict Minerals Reporting Template (CMRT)	9AKK108468A3363
SCIP	e6800e55-46b1-49a3-881b-0f66d0e903ad Germany
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)
WEEE B2C / B2B	Business To Business

Environmental

Ambient Air Temperature	Operation -25 ... +55 °C Storage -40 ... +70 °C
Reference Ambient Air Temperature	30 °C

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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 2 shocks 13 ms

Dimensions

Width in Number of Modular Spacings	4.0
Product Net Width	70 mm
Product Net Height	88 mm
Product Net Depth / Length	69 mm
Product Net Weight	0.48 kg
Pole Net Weight	0.125 kg
Built-In Depth (t_2)	69 mm
Dimension Diagram	2CDC022007F0010

Engineering

EPLAN Data	9AAC204436_EPLAN

Ordering

Package Level 1 Units	carton 1 piece
Package Level 1 Gross Weight	0.5 kg
E-Number (Finland)	3211030
E-Number (Norway)	1665669

Certificates and Declarations

Declaration of Conformity - CE	2CDK403001D0607
Declaration of Conformity - UKCA	9AKK108467A5053

Installation

Instructions and Manuals	2CDS207104P0002
Mounting Type	DIN-Rail
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

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Popular Downloads

Data Sheet, Technical Information	9AKK107991A8329
I^2t Characteristic	9AKK107992A5102

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)	4897 >> Miniature circuit breakers
Object Classification Code	F
Standards	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077
Certification Agency	EN IEC UL
Standardization Body	EN IEC UL

Accessories

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Identifier	Description	Type	Quantity	Unit Of Measure
2CDS200922R0001	S2C-S/H6R Universal Auxiliary/Signal Con	S2C-S/H6R	1	piece
2CDS200912R0001	S2C-H6R Auxiliary Contact 1CO	S2C-H6R	1	piece
2CDS200970R0031	S2C-H01 Bottom-fitting auxiliary contact S2C-H01 Bottom-fitting auxiliary contact 1NC	S2C-H01	1	piece
2CDS200970R0032	S2C-H10 Bottom-fitting auxiliary contact 1NO	S2C-H10	1	piece
2CDS200936R0001	S2C-H11L Auxiliary Contact 1NO / 1NC, Left side mounting	S2C-H11L	1	piece
2CDS200936R0002	S2C-H20L Auxiliary Contact 2NO	S2C-H20L	1	piece
2CDS200936R0003	S2C-H02L Auxiliary Contact 2NC, Left side mounting	S2C-H02L	1	piece
2CDS200946R0001	S2C-H6-11R Auxiliary contact 1NO/1NC	S2C-H6-11R	1	piece
2CDS200946R0002	S2C-H6-20R Auxiliary contact 2NO	S2C-H6-20R	1	piece
2CDS200946R0003	S2C-H6-02R Auxiliary contact 2NC	S2C-H6-02R	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
GHS2001901R0003	S2C-DH Rotary operating mechanism	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

Categories

Low Voltage Products and Systems → Modular DIN Rail Products → Miniature Circuit Breakers MCBs → Miniature Circuit Breakers MCBs → S200

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