

PRODUCT-DETAILS

# S203M-Z20

## S203M-Z20 Miniature Circuit Breaker - 3P - Z - 20 A



### Informations générales

|                              |   |
|------------------------------|---|
| Extension du type de produit | S203M-Z20   |
| Code de produit              | 2CDS273001R0488                                     |
| EAN                          | 4016779601276                                       |
| Description courte           | S203M-Z20 Miniature Circuit Breaker - 3P - Z - 20 A |

|                    |  |
|--------------------|--|
| Description longue | <p>System pro M compact S200M 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 10 kA at 230/400 V AC) and rated currents (up to 63A). All MCBs of the product range S200M comply with IEC/EN 60898-1 and IEC/EN 609 47-2, allowing the use for residential, commercial and industrial applications. Bottom-fitting auxiliary contact can be mounted on S200M to save 50% space.</p> |
|--------------------|--|

### ABB EcoSolutions

|                  |     |
|------------------|-----|
| ABB EcoSolutions | Oui |
|------------------|-----|

### Circular Value

|  |  |
|--|--|
| Principes du Design Circulaire - Taux de | Conçu pour utiliser des ressources recyclables et réutilisables - Norme EN45555 - 90 % |
|--|--|

## Recyclabilité

|  |                           |
|--|---------------------------|
| Matériau Durable<br>Constitutif            | 0 %                       |
| Proposé avec une durée<br>de vie prolongée | Durabilité du produit -   |
| Proposition de reprise                     | Reprendre pour recycler - |

## Eco Transparency

|  |                 |
|--|-----------------|
| Environmental Product<br>Declaration - EPD | 9AKK108467A7833 |
|--|-----------------|

## Technique

|   |  |
|---|--|
| Normes et standards   | CSA 22.2 No. 235<br>IEC/EN 60947-2<br>UL 1077                            |
| Tripping Characteristic   | Z  |
| Tension   | acc. to IEC 60898-1 400 V AC<br>acc. to IEC 60947-2 440 V AC             |
| Operational Voltage   | Maximum (Incl. Tolerance) 440 V AC<br>Minimum 12 V AC<br>Minimum 12 V DC |
| Tension assignée d'<br>isolement ( $U_i$ )                                | acc. to IEC/EN 60664-1 440 V   |
| Tension assignée de<br>tenue aux chocs ( $U_{imp}$ )                      | 4 kV<br>at 2000 m 5 kV<br>at Sea Level 6.2 kV                            |
| Dielectric Test Voltage   | 50/60 Hz, 1 min: 2 kV  |
| Type de tension   | AC/DC  |
| Courant nominal ( $I_n$ )   | 20 A   |
| Rated Short-Circuit<br>Capacity   | (AC) 10 kA<br>(DC) 10 kA<br>(230 V AC) 10 kA<br>(400 V AC) 10 kA         |
| Pouvoir assigné de<br>coupure ultime en court-<br>circuit ( $I_{cu}$ )    | (230 V AC) 25 kA<br>(400 V AC) 15 kA<br>(440 V AC) 15 kA                 |
| Rated Conditional Short-<br>Circuit Current ( $I_{nc}$ )                  | (230 V) 15 kA<br>(400 V) 25 kA   |
| Pouvoir assigné de<br>coupure de service en<br>court-circuit ( $I_{cs}$ ) | (230 V AC) 7.5 kA  |
| Fréquence assignée (f)  | 50 / 60 Hz   |
| Power Loss  | 7.2 W<br>at Rated Operating Conditions per Pole 2.4 W                    |
| Power Supply Connection   | Arbitrary  |
| Contact Position<br>Indication  | Red ON / Green OFF   |
| Classe de limitation<br>d'énergie   | 3  |
| Mechanical Endurance  | 20000 cycle  |
| Nombre de pôles   | 3  |

|                           |  |
|---------------------------|--|
| Number of Protected Poles | 3  |
| Catégorie de Surtension   | III  |
| Couple de serrage         | 2.8 N·m  |
| Screw Terminal Type       | Failsafe Bi-directional Cylinder-lift Terminal   |
| Actuator Marking          | I / O  |
| Actuator Material         | Insulation Group II, Black, Sealable   |
| Qualité du matériau       | Insulation Group II, RAL 7035  |
| Montage sur rail DIN      | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715   |
| Type d'encastrement       | any  |
| Recommended Screw Driver  | Pozidriv 2   |
| Accessories Available     | Oui  |
| Connecting Capacity       | Busbar 10 / 10 mm <sup>2</sup><br>Flexible with Ferrule 0.75 ... 25 mm <sup>2</sup><br>Flexible 0.75 ... 25 mm <sup>2</sup><br>Rigid 0.75 ... 35 mm <sup>2</sup><br>Stranded 0.75 ... 35 mm <sup>2</sup> |
| Installation Size         | acc. to DIN 43880 1  |
| Type de borne             | Screw Terminals  |

## Environnement

|  |  |
|--|--|
| Température de l'air ambiant                   | Operation -25 ... +55 °C<br>Storage -40 ... +70 °C                     |
| Reference Ambient Air Temperature              | 30 °C  |
| Indice de protection                           | IP20<br>Enclosure with Cover IP40                                      |
| Degré de pollution                             | 3  |
| Environmental Conditions                       | 28 cycles<br>with 55 °C / 90-96 %<br>and 25 °C / 95-100 %              |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 5g, 20 cycles at 5 ... 150 ... 5 Hz with load 0.8 In                   |
| Résistance aux chocs selon CEI 60068-2-27      | 25g 2 shocks 13 ms   |
| Statut RoHS                                    | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Informations RoHS                              | 2CDK400003K0203  |
| REACH Declaration                              | 9AKK107492A1906  |

## Technique UL/CSA

|                                    |   |
|------------------------------------|---|
| Maximum Operating Voltage UL/CSA   | 125 V DC<br>480Y / 277 V AC                                   |
| Interrupting Rating acc. to UL1077 | (125 V DC) 10 kA<br>(277 V AC) 6 kA<br>(480Y / 277 V AC) 6 kA |
| Connecting Capacity UL/CSA         | Busbar 14-8 AWG<br>Conductor 14-4 AWG                         |
| Tightening Torque                  | 18 in·lb  |

UL/CSA

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## Dimensions

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|   |                 |
|---|-----------------|
| Width in Number of Modular Spacings         | 3               |
| Produit Largeur Net                         | 52.5 mm         |
| Produit Hauteur Net                         | 88 mm           |
| Produit Longueur Net                        | 69 mm           |
| Poids net                                   | 0.375 kg        |
| Pole Net Weight                             | 0.125 kg        |
| Profondeur d'encastrement (t <sub>2</sub> ) | 69 mm           |
| Schéma dimensionnel                         | 2CDC022007F0010 |

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## Commande

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|                           |                |
|---------------------------|----------------|
| Quantité minimum          | 1 pièce        |
| Emballage Niveau 1 Unités | carton 1 pièce |
| Emballage Niveau 1 Poids  | 0.4 kg         |

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## Certificats et Déclarations (Numéro de document)

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|                                  |                        |
|----------------------------------|------------------------|
| Agence de certification          | CSA<br>EN<br>IEC<br>UL |
| Déclaration de Conformité - CE   | 2CDK403001D0607        |
| Declaration of Conformity - UKCA | 9AKK108467A5053        |
| I <sup>pt</sup> Characteristic   | 9AKK107992A5104        |

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## Installation

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|                         |                 |
|-------------------------|-----------------|
| Instructions et manuels | 2CDS207104P0002 |
|-------------------------|-----------------|

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## Popular Downloads

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|--|-----------------|
| Fiche produit, informations techniques | 9AKK107046A0423 |
| I <sup>pt</sup> Characteristic         | 9AKK107992A5104 |
| EPLAN Graphical Macro                  | 9AKK106713A8196 |
| EPLAN Macro                            | 9AKK106713A8194 |

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## Classifications

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|   |   |
|---|---|
| ETIM 8                                      | EC000042 - Miniature circuit breaker (MCB)                                    |
| ETIM 9                                      | EC000042 - Miniature circuit breaker (MCB)                                    |
| EPLAN Function<br>Definition                | Circuit breaker / Triple circuit breaker / Triple circuit breaker 1_2_3_4_5_6 |
| Catégorie DEEE                              | 5. Small Equipment (No External Dimension More Than 50 cm)                    |
| DEEE B2C / B2B                              | Business To Business  |
| CN8   | 8536 20 10  |
| UNSPSC                                      | 39121603  |
| eClass                                      | V11.0 : 27141901  |
| Code de catégorie<br>granulaire IDEA (IGCC) | 4897 >> Miniature circuit breakers  |
| Code de classification<br>d'objet           | F   |

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## 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           |
| 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           |

## Catégories

Produits basse tension → Appareillage modulaire et parafoudres → Miniature Circuit Breakers MCBs → Disjoncteurs ≤63A SN201/S200

