




---

 PRODUCT-DETAILS

## MS132-4.0K

### MS132-4.0K Manual Motor Starter 2.5 ... 4.0 A




---

#### General Information

|                       |   |
|-----------------------|---|
| Extended Product Type | MS132-4.0K                                    |
| Product ID            | 1SAM350010R1008                               |
| EAN                   | 4013614400384                                 |
| Catalog Description   | MS132-4.0K Manual Motor Starter 2.5 ... 4.0 A |

|                  |  |
|------------------|--|
| Long Description | <p>The MS132-4.0K manual motor starter (also known as motor protection circuit breaker or manual motor protector) is a compact 45 mm width device with a rated operational current of <math>I_e = 4.00</math> A with Push-in spring terminals. This device is used to manually switch on and off motors and to protect them reliably and without the need for a fuse from short-circuits, overload and phase failures. The MS132-K manual motor starter offers a rated service short-circuit breaking capacity <math>I_{cs} = 100</math> kA at 400 VAC and trip class 10. Further features are the build-in disconnect function, temperature compensation, trip-free mechanism and a rotary handle with a clear switch position indication. The MS132-K manual motor starter is suitable for three- and single-phase applications. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signaling contacts, undervoltage releases, shunt trips and terminal spacers are available as accessory.</p> |
|------------------|--|

---

#### Ordering

|                        |         |
|------------------------|---------|
| Minimum Order Quantity | 1 piece |
|------------------------|---------|

Customs Tariff Number

85362010

## Popular Downloads

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Data Sheet, Technical Information | 1SBC100212C0203                    |
| Instructions and Manuals          | 2CDC131120M6801                    |
| Instructions and Manuals (Part 2) | 2CDC131060M0202                    |
| Ex Operating Instructions         | 2CDC131063M6801                    |
| Time-Current Characteristic Curve | 1SAM300505F0108                    |
| I <sup>2</sup> t Characteristic   | 1SAM300507F0001<br>1SAM300507F0003 |
| Cut-off Current Characteristic    | 1SAM300508F0001<br>1SAM300508F0003 |
| CAD Dimensional Drawing           | 2CDC001079B0201                    |
| Installation Video                | 9AKK108466A6074<br>9AKK108466A6068 |
| Marketing Video                   | 9AKK107991A4712<br>2CDC131153V0201 |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 45 mm    |
| Product Net Height         | 112 mm   |
| Product Net Depth / Length | 87 mm    |
| Product Net Weight         | 0.286 kg |

## Technical

|   |   |
|---|---|
| Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )    | (230 V AC) 100 kA<br>(250 V DC) 3 Poles in Series 10 kA<br>(400 V AC) 100 kA<br>(440 V AC) 30 kA<br>(500 V AC) 20 kA<br>(690 V AC) 3 kA |
| Rated Ultimate Short-Circuit Breaking Capacity (I <sub>cu</sub> )   | (230 V AC) 100 kA<br>(400 V AC) 100 kA<br>(440 V AC) 30 kA<br>(500 V AC) 20 kA<br>(690 V AC) 3 kA                                       |
| Rated Instantaneous Short-Circuit Current Setting (I <sub>i</sub> ) | 50 A  |
| Setting Range   | 2.5 ... 4.0 A   |
| Rated Operational Power AC-3 (P <sub>e</sub> )                      | (400 V) Three Phase 1.5 kW  |
| Rated Operational Power AC-3e (P <sub>e</sub> )                     | (400 V) Three Phase 1.5 kW  |
| Rated Operational Voltage   | Main Circuit 690 V AC<br>Main Circuit 250 V DC  |
| Rated Operational Current (I <sub>e</sub> )                         | 4 A   |
| Rated Operational   | 4 A   |

|  |   |
|--|---|
| Current AC-3 (I <sub>e</sub> )                           |   |
| Rated Operational Current AC-3e (I <sub>e</sub> )        | 4 A   |
| Rated Operational Current DC-5 (I <sub>e</sub> )         | 4 A   |
| Rated Frequency (f)                                      | Main Circuit 50 Hz<br>Main Circuit 60 Hz  |
| Operating Frequency (f <sub>sw</sub> )                   | 0 ... 400 Hz  |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )      | Main Circuit 6 kV   |
| Rated Insulation Voltage (U <sub>i</sub> )               | 690 V   |
| Power Loss   | at Rated Operating Conditions per Pole 0.7 ... 1.8 W  |
| Number of Poles  | 3P  |
| Conventional Free-air Thermal Current (I <sub>th</sub> ) | Main Circuit 4 A  |
| Degree of Protection                                     | Housing IP20<br>Main Circuit Terminals IP20   |
| Pollution Degree   | 3   |
| Electrical Durability                                    | 50000 cycle   |
| Mechanical Durability                                    | 100000 cycle  |
| Terminal Type  | Push-in Spring Terminals  |
| Connecting Capacity Main Circuit                         | Flexible with Ferrule 1/2x 0.5 ... 4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.5 ... 4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 0.75 ... 4 mm <sup>2</sup><br>Solid 1/2x 1 ... 2.5 mm <sup>2</sup><br>Stranded 1/2x 1 ... 6 mm <sup>2</sup> |
| Wire Stripping Length                                    | Main Circuit 12 mm  |
| Recommended Screw Driver                                 | Pozidriv 2  |
| Mounting Position  | 1 ... 6   |
| Mounting on DIN Rail                                     | 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  |
| Minimum Mounting Distance                                | Electrical Conductive Board, Horizontal - Up to 400 V 0 mm<br>Electrical Conductive Board, Horizontal - Up to 690 V 1.5 mm<br>Electrical Conductive Board, Vertical 75 mm<br>Other Device Same Type, Horizontal 0 mm<br>Other Device Same Type, Vertical 150 mm   |
| Actuator Type  | Rotary Handle   |
| Contact Position Indication                              | ON / OFF / TRIP   |
| Standards  | IEC/EN 60947-1<br>IEC/EN 60947-2<br>IEC/EN 60947-4-1<br>UL 60947-1<br>UL 60947-4-1<br>IEC 60335-2-40 A2L  |
| Remarks  | UL508 Self-Protected Combination Motor Controller (Type E) in combination with terminal spacer TS1-M3-K   |

## Technical UL/CSA

|                                     |   |
|-------------------------------------|---|
| Short-Circuit Current Rating (SCCR) | Manual Self-Protected Combination Controllers (Type E), (480Y / 277 V AC)     |
|                                     | 65 kA   |
|                                     | Manual Self-Protected Combination Controllers (Type E), (600Y / 347 V AC)     |
|                                     | 47 kA   |
|                                     | Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 65 kA |
|                                     | Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 47    |

|  |   |
|--|---|
|  | kA  |
| Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC)                                       | 65 kA   |
| Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC)                                       | 47 kA   |
| Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) | 65 kA   |
| Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) | 47 kA   |
| Maximum Operating Voltage UL/CSA   | Main Circuit 600 V AC   |
| Horsepower Rating UL/CSA   | (200 V AC) Three Phase 0.75 Hp<br>(208 V AC) Three Phase 0.75 Hp<br>(220 ... 240 V AC) Three Phase 1 Hp<br>(440 ... 480 V AC) Three Phase 2 Hp<br>(550 ... 600 V AC) Three Phase 3 Hp |
| Full Load Amps Motor Use   | (200 V AC) Three Phase 4 A<br>(208 V AC) Three Phase 4 A<br>(220 ... 240 V AC) Three Phase 4 A<br>(440 ... 480 V AC) Three Phase 4 A<br>(550 ... 600 V AC) Three Phase 3.9 A          |
| Locked Rotor Amps  | (200 V AC) Three Phase 24 A<br>(208 V AC) Three Phase 24 A<br>(220 ... 240 V AC) Three Phase 24 A<br>(440 ... 480 V AC) Three Phase 24 A<br>(550 ... 600 V AC) Three Phase 25.6 A     |
| General Use Rating UL/CSA  | (600 V AC) 4 A  |
| Connecting Capacity Main Circuit UL/CSA  | Stranded 1/2x 18-10 AWG<br>Stranded 1x 8 AWG  |

## Environmental

|  |   |
|--|---|
| Ambient Air Temperature                    | Around the Enclosure 0 ... +40 °C<br>Operation -25 ... +70 °C<br>Operation Compensated -25 ... +60 °C<br>Storage -50 ... +80 °C |
| Ambient Air Temperature Compensation       | Yes   |
| Maximum Operating Altitude Permissible     | 2000 m  |
| Resistance to Shock acc. to IEC 60068-2-27 | 11 ms Pulse 25g   |
| Resistance to Vibrations                   | 5g 3 ... 150 Hz   |

## Material Compliance

|   |  |
|---|--|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658  |
| REACH Declaration                           | 1SAA963005-4502  |
| RoHS Information                            | 1SAA963006-4502  |
| RoHS Status                                 | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Toxic Substances Control Act - TSCA         | 2CMT2023-006539  |
| WEEE B2C / B2B                              | Business To Business   |
| WEEE Category                               | 5. Small Equipment (No External Dimension More Than 50 cm)             |

## ABB EcoSolutions

|  |                                    |
|--|------------------------------------|
| End Of Life<br>Disassembling<br>Instructions | 1SAC200333H0001                    |
| Environmental Product<br>Declaration - EPD   | 1SAC200360H0001<br>1SAC200385H0001 |

## Certificates and Declarations

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| A2L Certificate – IEC               | 1SAA963000-4601                      |
| ABS Certificate                     | 1SAA963001-0101                      |
| ATEX Certificate                    | 1SAA963000-3902                      |
| CB Certificate                      | 1SAA963002-2002                      |
| CCC Certificate                     | 2024010307658958                     |
| CQC Certificate                     | CQC2017010307034621                  |
| Cut-off Current<br>Characteristic   | 1SAM300508F0001<br>1SAM300508F0003   |
| Declaration of<br>Conformity - CCC  | 2020980307004600                     |
| Declaration of<br>Conformity - CE   | 1SAD101100-3402                      |
| Declaration of<br>Conformity - UKCA | 1SAD201100-3402                      |
| DNV GL Certificate                  | 1SAA963001-0304                      |
| EAC Certificate                     | 1SAA963004-2701                      |
| I <sup>2</sup> t Characteristic     | 1SAM300507F0001<br>1SAM300507F0003   |
| IECEX Certificate                   | 1SAA963000-4001                      |
| KC Certificate                      | 1SAA963002-1502                      |
| RINA Certificate                    | 1SAA963002-0802                      |
| UL Certificate                      | E137861-20090225<br>E345003-20090225 |

## Container Information

|                                   |                 |
|-----------------------------------|-----------------|
| Package Level 1 Units             | box 1 piece     |
| Package Level 1 Width             | 50 mm           |
| Package Level 1 Depth /<br>Length | 117 mm          |
| Package Level 1 Height            | 82 mm           |
| Package Level 1 Gross<br>Weight   | 0.312 kg        |
| Package Level 1 EAN               | 4013614400384   |
| Package Level 2 Units             | carton 28 piece |
| Package Level 2 Width             | 280 mm          |
| Package Level 2 Depth /<br>Length | 395 mm          |
| Package Level 2 Height            | 210 mm          |
| Package Level 2 Gross<br>Weight   | 14.026 kg       |
| Package Level 2 EAN               | 4013614522703   |

## External Classifications and Standards

|                               |   |
|-------------------------------|---|
| Object Classification<br>Code | F   |
| ETIM 5                        | EC000074 - Motor protective circuit-breaker |

|                                    |   |
|------------------------------------|---|
| ETIM 6                             | EC000074 - Motor protection circuit-breaker |
| ETIM 7                             | EC000074 - Motor protection circuit-breaker |
| ETIM 8                             | EC000074 - Motor protection circuit-breaker |
| eClass                             | V11.0 : 27370401                            |
| UNSPSC                             | 39121521                                    |
| IDEA Granular Category Code (IGCC) | 4731 >> Manual Starters                     |
| E-Number (Finland)                 | 3707838                                     |
| E-Number (Sweden)                  | 3110457                                     |

## Accessories

| Identifier      | Description  | Type      | Quantity | Unit Of Measure |
|-----------------|--|-----------|----------|-----------------|
| 1SAM201901R1001 | HKF1-11 Aux.-contact for front mounting                                | HKF1-11   | 1        | piece           |
| 1SAM201901R1201 | HKF1-11K Aux.-contact for frontmounting with Push-In terminals         | HKF1-11K  | 1        | piece           |
| 1SAM201901R1002 | HKF1-20 Aux.-contact 2NO, front mounting                               | HKF1-20   | 1        | piece           |
| 1SAM201901R1202 | HKF1-20K Aux.-contact for frontmounting with Push-In terminals         | HKF1-20K  | 1        | piece           |
| 1SAM201901R1004 | HKF1-01 Aux.-contact for front mounting                                | HKF1-01   | 1        | piece           |
| 1SAM201901R1003 | HKF1-10 Aux.-contact for front mounting                                | HKF1-10   | 1        | piece           |
| 1SAM201902R1002 | HK1-20 Aux.-contact 2 NO   | HK1-20    | 1        | piece           |
| 1SAM201902R1202 | HK1-20K Aux.-contact 2 NO with Push-In terminals                       | HK1-20K   | 1        | piece           |
| 1SAM201902R1001 | HK1-11 Aux.-contact 1 NO + 1 NC  | HK1-11    | 1        | piece           |
| 1SAM201902R1201 | HK1-11K Aux.-contact 1 NO + 1 NC with Push-In terminals                | HK1-11K   | 1        | piece           |
| 1SAM201902R1003 | HK1-02 Aux.-contact 2 NC   | HK1-02    | 1        | piece           |
| 1SAM201902R1203 | HK1-02K Aux.-contact 2 NC with Push-In terminals                       | HK1-02K   | 1        | piece           |
| 1SAM201902R1004 | HK1-20L Aux.-cont. w. 2 lead contacts 2 NO                             | HK1-20L   | 1        | piece           |
| 1SAM201902R1204 | HK1-20LK Aux.-cont. w. 2 leading contacts 2 NO, with Push-In terminals | HK1-20LK  | 1        | piece           |
| 1SAM201903R1002 | SK1-20 Signaling Contact 2 NO  | SK1-20    | 1        | piece           |
| 1SAM201903R1202 | SK1-20K Signaling Contact 2 NO with Push-In terminals                  | SK1-20K   | 1        | piece           |
| 1SAM201903R1005 | SK1-20AR Signaling Contact, 2NO with screw terminals                   | SK1-20AR  | 1        | piece           |
| 1SAM201903R1205 | SK1-20ARK Signaling Contact, 2NO with Push-in Spring terminals         | SK1-20ARK | 1        | piece           |
| 1SAM201903R1001 | SK1-11 Signaling Contact 1 NO + 1 NC                                   | SK1-11    | 1        | piece           |
| 1SAM201903R1201 | SK1-11K Signaling Contact 1 NO + 1 NC with Push-In terminals           | SK1-11K   | 1        | piece           |
| 1SAM201903R1004 | SK1-11AR Signaling Contact, 1NO+1NC with screw terminals               | SK1-11AR  | 1        | piece           |
| 1SAM201903R1204 | SK1-11ARK Signaling Contact, 1NO+1NC with Push-in Spring terminals     | SK1-11ARK | 1        | piece           |
| 1SAM201903R1003 | SK1-02 Signaling Contact 2 NC  | SK1-02    | 1        | piece           |
| 1SAM201903R1203 | SK1-02K Signaling Contact 2 NC with Push-In terminals                  | SK1-02K   | 1        | piece           |
| 1SAM201903R1006 | SK1-02AR Signaling Contact, 2NC with screw terminals                   | SK1-02AR  | 1        | piece           |
| 1SAM201903R1206 | SK1-02ARK Signaling Contact, 2NC with Push-in Spring terminals         | SK1-02ARK | 1        | piece           |
| 1SAM301901R1002 | CK1-20 Short-Circuit Signaling Contact 2 NO                            | CK1-20    | 1        | piece           |
| 1SAM301901R1001 | CK1-11 Short-Circuit Signaling Contact 1 NO + 1 NC                     | CK1-11    | 1        | piece           |

|                 |   |             |   |       |
|-----------------|---|-------------|---|-------|
| 1SAM301901R1003 | CK1-02 Short-Circuit Signaling Contact 2 NC                                   | CK1-02      | 1 | piece |
| 1SAM201910R1001 | AA1-24 Shunt Trip 20-24V  | AA1-24      | 1 | piece |
| 1SAM201910R1002 | AA1-110 Shunt Trip 110V   | AA1-110     | 1 | piece |
| 1SAM201910R1003 | AA1-230 Shunt Trip 200-240V   | AA1-230     | 1 | piece |
| 1SAM201910R1004 | AA1-400 Shunt Trip 350-415V   | AA1-400     | 1 | piece |
| 1SAM201904R1010 | UA1-20 Undervoltage release 20V 50Hz / 24V<br>60 Hz                           | UA1-20      | 1 | piece |
| 1SAM201904R1001 | UA1-24 Undervoltage release 24 V  | UA1-24      | 1 | piece |
| 1SAM201904R1002 | UA1-48 Undervoltage release 48V   | UA1-48      | 1 | piece |
| 1SAM201904R1003 | UA1-60 Undervoltage release 60V   | UA1-60      | 1 | piece |
| 1SAM201904R1004 | UA1-110 Undervoltage release 110V 110V<br>50Hz/120V 60Hz                      | UA1-110     | 1 | piece |
| 1SAM201904R1008 | UA1-208 Undervoltage release 208V 60Hz  | UA1-208     | 1 | piece |
| 1SAM201904R1005 | UA1-230 Undervoltage release 230 V 50 Hz /<br>240 V 60 Hz                     | UA1-230     | 1 | piece |
| 1SAM201904R1006 | UA1-400 Undervoltage release 400V   | UA1-400     | 1 | piece |
| 1SAM201904R1007 | UA1-415 Undervoltage release 415V 415V<br>50Hz/480V 60Hz                      | UA1-415     | 1 | piece |
| 1SAM201904R1009 | UA1-575 Undervoltage release 575V 60Hz  | UA1-575     | 1 | piece |
| 1SAM301903R1002 | PS1-2-0-65K 3-phase busbar 2x MS132-K, 65A                                    | PS1-2-0-65K | 1 | piece |
| 1SAM301903R1003 | PS1-3-0-65K 3-phase busbar 3x MS132-K, 65A                                    | PS1-3-0-65K | 1 | piece |
| 1SAM301903R1004 | PS1-4-0-65K 3-phase busbar 4x MS132-K, 65A                                    | PS1-4-0-65K | 1 | piece |
| 1SAM301903R1005 | PS1-5-0-65K 3-phase busbar 5x MS132-K, 65A                                    | PS1-5-0-65K | 1 | piece |
| 1SAM301903R1012 | PS1-2-1-65K 3-phase busbar 2x MS132-K + 1<br>lateral aux.contact, 65A         | PS1-2-1-65K | 1 | piece |
| 1SAM301903R1013 | PS1-3-1-65K 3-phase busbar 3x MS132-K + 1<br>lateral aux.contact, 65A         | PS1-3-1-65K | 1 | piece |
| 1SAM301903R1014 | PS1-4-1-65K 3-phase busbar 4x MS132-K + 1<br>lateral aux.contact, 65A         | PS1-4-1-65K | 1 | piece |
| 1SAM301903R1015 | PS1-5-1-65K 3-phase busbar 5x MS132-K + 1<br>lateral aux.contact, 65A         | PS1-5-1-65K | 1 | piece |
| 1SAM201909R1001 | FS116 Screw fixing kit for MS116, MS/MO132 10<br>pieces packed                | FS116       | 1 | piece |
| 1SAM301913R1001 | TS1-M3-K Terminal Spacer MS132-K For MS132-<br>0.16K - MS132-32K Type E       | TS1-M3-K    | 1 | piece |
| GJF1101903R0002 | Terminals and Installation Material   | SA2         | 1 | piece |
| 1SAM201911R1012 | IB132-F Enclosure, GY/RD, IP65 3 times lockable                               | IB132-F     | 1 | piece |
| 1SAM201911R1010 | IB132-G Enclosure, GY/BK, IP65 Standard<br>version, 3 times lockable          | IB132-G     | 1 | piece |
| 1SAM201911R1011 | IB132-Y Enclosure, RD/YE, IP65 Emergency-<br>STOP, 3 times lockable           | IB132-Y     | 1 | piece |
| 1SAM201912R1010 | DMS132-G Door Mounting Kit, GY/BK, IP65<br>Standard version, 3 times lockable | DMS132-G    | 1 | piece |
| 1SAM201912R1011 | DMS132-Y Door Mounting Kit, RD/YE, IP65<br>Emergency-STOP, 3 times lockable   | DMS132-Y    | 1 | piece |
| 1SAM201909R1021 | MSAH1 Shaft Supporter suitable for MS116,<br>MS132/MO132                      | MSAH1       | 1 | piece |
| 1SAM201920R1011 | MSHD-LTB Handle, IP64, black, 3 times<br>lockable, defeatable, 0-TRIP-I       | MSHD-LTB    | 1 | piece |
| 1SAM201920R1012 | MSHD-LTY Handle, IP64, red/yellow, 3 times<br>lockable, defeatable, 0-TRIP-I  | MSHD-LTY    | 1 | piece |
| 1SAM201920R1000 | MSH-AR Shaft alignment ring suitable for<br>MSHD and MSH handles              | MSH-AR      | 1 | piece |
| 1SAM101923R0002 | MSMN Driver w. screw for manual motor<br>stators, 6x6                         | MSMN        | 1 | piece |
| 1SAM101923R0012 | MSMNO Driver w/o coding w. screw for manual<br>motor stators, 6x6             | MSMNO       | 1 | piece |
| 1SCA101647R1001 | OX56X85 SHAFT   | OX56X85     | 1 | piece |
| 1SCA108043R1001 | OX56X105 SHAFT  | OX56X105    | 1 | piece |

|                 |                |          |   |       |
|-----------------|----------------|----------|---|-------|
| 1SCA101655R1001 | OXS6X130 SHAFT | OXS6X130 | 1 | piece |
| 1SCA101659R1001 | OXS6X180 SHAFT | OXS6X180 | 1 | piece |

---

## Categories

---

Low Voltage Products and Systems → Circuit Breakers → Manual Motor Starters

Low Voltage Products and Systems → Control Products → Manual Motor Starters → Manual Motor Starters

