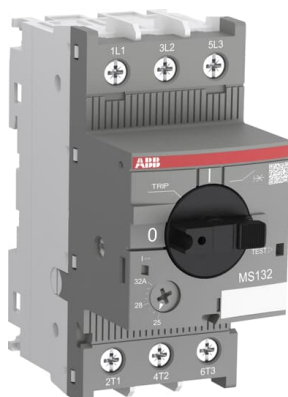


PRODUCT-DETAILS

MS132-12

MS132-12 Manual Motor Starter 8.0 ... 12 A



General Information

| | |
|-----------------------|--|
| Extended Product Type | MS132-12 |
| Product ID | 1SAM350000R1012 |
| EAN | 4013614400124 |
| Catalog Description | MS132-12 Manual Motor Starter 8.0 ... 12 A |

Long Description

The MS132-12 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 $I_e = 12.0$ A. 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 manual motor starter offers a rated service short-circuit breaking capacity $I_{cs} = 100$ 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 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, 3-phase bus bars, power in-feed blocks and terminal spacers are available as accessory.

Ordering

| | |
|------------------------|----------|
| Minimum Order Quantity | 1 piece |
| Customs Tariff Number | 85362010 |

Popular Downloads

| | |
|-----------------------------------|------------------------------------|
| Data Sheet, Technical Information | 2CDC131021D0202 |
| Instructions and Manuals | 2CDC131022M6802 |
| Instructions and Manuals (Part 2) | 2CDC131060M0202 |
| Ex Operating Instructions | 2CDC131063M6801 |
| Time-Current Characteristic Curve | 1SAM300505F0012 |
| I _t Characteristic | 1SAM300507F0001 1SAM300507F0003 |
| Cut-off Current Characteristic | 1SAM300508F0001 1SAM300508F0003 |
| CAD Dimensional Drawing | 2CDC001079B0201 |
| Dimension Diagram | 1SAM300402F0002 |

Dimensions

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|----------------------------|----------|
| Product Net Width | 45 mm |
| Product Net Height | 97.8 mm |
| Product Net Depth / Length | 86.55 mm |
| Product Net Weight | 0.31 kg |

Technical

| | |
|---|---|
| Rated Service Short-Circuit Breaking Capacity (I _{cs}) | (230 V AC) 100 kA (250 V DC) 3 Poles in Series 10 kA (400 V AC) 100 kA (440 V AC) 30 kA (500 V AC) 20 kA (690 V AC) 3 kA |
| Rated Ultimate Short-Circuit Breaking Capacity (I _{cu}) | (230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 30 kA (500 V AC) 20 kA (690 V AC) 3 kA |
| Rated Instantaneous Short-Circuit Current Setting (I _i) | 180 A |
| Setting Range | 8.0 ... 12 A |
| Rated Operational Power AC-3 (P _e) | (400 V) Three Phase 5.5 kW |
| Rated Operational Power AC-3e (P _e) | (400 V) Three Phase 5.5 kW |
| Rated Operational Voltage | Main Circuit 690 V AC Main Circuit 250 V DC |
| Rated Operational Current (I _e) | 12 A |
| Rated Operational Current AC-3 (I _e) | 12 A |
| Rated Operational Current AC-3e (I _e) | 12 A |
| Rated Operational Current DC-5 (I _e) | 12 A |
| Rated Frequency (f) | Main Circuit 50 Hz Main Circuit 60 Hz |
| Operating Frequency (f _{sw}) | 0 ... 400 Hz |

| | |
|--|---|
| Rated Impulse Withstand Voltage (U _{imp}) | Main Circuit 6 kV |
| Rated Insulation Voltage (U _i) | 690 V |
| Power Loss | at Rated Operating Conditions per Pole 1.0 ... 2.3 W |
| Number of Poles | 3 |
| Conventional Free-air Thermal Current (I _{th}) | Main Circuit 12 A |
| Degree of Protection | Housing IP20 Main Circuit Terminals IP10 |
| Pollution Degree | 3 |
| Electrical Durability | 50000 cycle |
| Mechanical Durability | 100000 cycle |
| Terminal Type | Screw Terminals |
| Connecting Capacity Main Circuit | Flexible with Ferrule 1/2x 0.75 ... 6 mm² Flexible with Insulated Ferrule 1/2x 0.75 ... 6 mm² Flexible 1/2x 1 ... 2.5 mm² Flexible 1/2x 2.5 ... 6 mm² Rigid 1/2x 1 ... 2.5 mm² Rigid 1/2x 2.5 ... 6 mm² |
| Tightening Torque | Main Circuit 2 N·m |
| Wire Stripping Length | Main Circuit 10 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 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 Electrical Conductive Board, Horizontal - Up to 690 V 1.5 mm Electrical Conductive Board, Vertical 75 mm Other Device Same Type, Horizontal 0 mm Other Device Same Type, Vertical 150 mm |
| Actuator Type | Rotary Handle |
| Contact Position Indication | ON / OFF / TRIP |
| Standards | IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-1 UL 60947-4-1 |
| Remarks | UL508 Self-Protected Combination Motor Controller (Type E) in combination with feeder block S1-M3-xx |

Technical UL/CSA

| | |
|-------------------------------------|---|
| Short-Circuit Current Rating (SCCR) | Manual Self-Protected Combination Controllers (Type E), (480Y / 277 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 35 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 35 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 18 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) 18 kA |
| Maximum Operating Voltage UL/CSA | Main Circuit 600 V AC |
| Horsepower Rating UL/CSA | (200 V AC) Three Phase 3 Hp (208 V AC) Three Phase 3 Hp (220 ... 240 V AC) Three Phase 3 Hp (440 ... 480 V AC) Three Phase 7.5 Hp (550 ... 600 V AC) Three Phase 10 Hp |

| | |
|--|---|
| Full Load Amps Motor Use | (200 V AC) Three Phase 11 A (208 V AC) Three Phase 10.6 A (220 ... 240 V AC) Three Phase 9.6 A (440 ... 480 V AC) Three Phase 11 A (550 ... 600 V AC) Three Phase 11 A |
| Locked Rotor Amps | (200 V AC) Three Phase 73.6 A (208 V AC) Three Phase 71 A (220 ... 240 V AC) Three Phase 64 A (440 ... 480 V AC) Three Phase 63.5 A (550 ... 600 V AC) Three Phase 64.8 A |
| General Use Rating UL/CSA | (600 V AC) 12 A |
| Connecting Capacity Main Circuit UL/CSA | Flexible 1/2x 16-8 AWG Stranded 1/2x 16-8 AWG |
| Tightening Torque UL/CSA | Main Circuit 18 in-lb |

Environmental

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|---|---|
| Ambient Air Temperature | Around the Enclosure 0 ... +40 °C Operation -25 ... +70 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C |
| Ambient Air Temperature Compensation | Yes |
| Maximum Operating Altitude Permissible | 2000 m |
| REACH Declaration | No declaration needed |
| Resistance to Shock acc. to IEC 60068-2-27 | 11 ms Pulse 25g |
| Resistance to Vibrations | 5g 3 ... 150 Hz |
| RoHS Information | 1SAA963006-4502 |
| RoHS Status | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

Material Compliance

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

Certificates and Declarations

| | |
|------------------------------------|--|
| ABS Certificate | 1SAA963001-0101 |
| ATEX Certificate | 1SAA963000-3902 |
| BV Certificate | 1SAA963001-0202 |
| CB Certificate | 1SAA963002-2002 |
| CQC Certificate | CQC2010010307387700 CQC2019010307243864 |
| Cut-off Current Characteristic | 1SAM300508F0001 1SAM300508F0003 |
| Declaration of Conformity - CCC | 2020980307003526 2020980307003041 |

| | |
|-------------------------------------|--------------------------------------|
| Declaration of Conformity - CE | 1SAD101100-3402 |
| Declaration of Conformity - UKCA | 1SAD201100-3402 |
| DNV GL Certificate | 1SAA963001-0304 |
| EAC Certificate | 1SAA963000-2701 |
| I ^{pt} Characteristic | 1SAM300507F0001 1SAM300507F0003 |
| IECEX Certificate | 1SAA963000-4001 |
| KC Certificate | 1SAA963002-1502 |
| LR Certificate | 1SAA963001-0502 |
| RINA Certificate | 1SAA963002-0802 |
| RMRS Certificate | 1SAA918000-0704 |
| UL Certificate | E137861-20090225 E345003-20090225 |

Container Information

| | |
|-----------------------------------|-----------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 92 mm |
| Package Level 1 Depth / Length | 102 mm |
| Package Level 1 Height | 50 mm |
| Package Level 1 Gross Weight | 0.325 kg |
| Package Level 1 EAN | 4013614400124 |
| Package Level 2 Units | carton 40 piece |
| Package Level 2 Width | 280 mm |
| Package Level 2 Depth / Length | 395 mm |
| Package Level 2 Height | 210 mm |
| Package Level 2 Gross Weight | 13.386 kg |
| Package Level 2 EAN | 4013614409028 |

Classifications

| | |
|---------------------------------------|---|
| Object Classification Code | F |
| ETIM 4 | EC000074 - Motor protective circuit-breaker |
| 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) | 3705996 |
| E-Number (Sweden) | 3112131 |

Accessories

| Identifier | Description | Type | Quantity | Unit Of Measure |
|-----------------|--|-------------|----------|-----------------|
| 1SAM201901R1001 | HKF1-11 Auxiliary Contact | HKF1-11 | 1 | piece |
| 1SAM201901R1201 | HKF1-11K Auxiliary Contact | HKF1-11K | 1 | piece |
| 1SAM201901R1002 | HKF1-20 Auxiliary Contact | HKF1-20 | 1 | piece |
| 1SAM201901R1202 | HKF1-20K Auxiliary Contact | HKF1-20K | 1 | piece |
| 1SAM201901R1004 | HKF1-01 Auxiliary Contact | HKF1-01 | 1 | piece |
| 1SAM201901R1003 | HKF1-10 Auxiliary Contact | HKF1-10 | 1 | piece |
| 1SAM201902R1002 | HK1-20 Auxiliary Contact | HK1-20 | 1 | piece |
| 1SAM201902R1202 | HK1-20K Auxiliary Contact | HK1-20K | 1 | piece |
| 1SAM201902R1001 | HK1-11 Auxiliary Contact | HK1-11 | 1 | piece |
| 1SAM201902R1201 | HK1-11K Auxiliary Contact | HK1-11K | 1 | piece |
| 1SAM201902R1003 | HK1-02 Auxiliary Contact | HK1-02 | 1 | piece |
| 1SAM201902R1203 | HK1-02K Auxiliary Contact | HK1-02K | 1 | piece |
| 1SAM201902R1004 | HK1-20L Auxiliary Contact | HK1-20L | 1 | piece |
| 1SAM201902R1204 | HK1-20LK Auxiliary Contact | HK1-20LK | 1 | piece |
| 1SAM201903R1002 | SK1-20 Signaling Contact | SK1-20 | 1 | piece |
| 1SAM201903R1202 | SK1-20K Signaling Contact | SK1-20K | 1 | piece |
| 1SAM201903R1005 | SK1-20AR Signaling Contact | SK1-20AR | 1 | piece |
| 1SAM201903R1205 | SK1-20ARK Signaling Contact | SK1-20ARK | 1 | piece |
| 1SAM201903R1001 | SK1-11 Signaling Contact | SK1-11 | 1 | piece |
| 1SAM201903R1201 | SK1-11K Signaling Contact | SK1-11K | 1 | piece |
| 1SAM201903R1004 | SK1-11AR Signaling Contact | SK1-11AR | 1 | piece |
| 1SAM201903R1204 | SK1-11ARK Signaling Contact | SK1-11ARK | 1 | piece |
| 1SAM201903R1003 | SK1-02 Signaling Contact | SK1-02 | 1 | piece |
| 1SAM201903R1203 | SK1-02K Signaling Contact | SK1-02K | 1 | piece |
| 1SAM201903R1006 | SK1-02AR Signaling Contact | SK1-02AR | 1 | piece |
| 1SAM201903R1206 | SK1-02ARK Signaling Contact | SK1-02ARK | 1 | piece |
| 1SAM301901R1002 | CK1-20 Short Circuit Signaling Contact | CK1-20 | 1 | piece |
| 1SAM301901R1001 | CK1-11 Short Circuit Signaling Contact | CK1-11 | 1 | piece |
| 1SAM301901R1003 | CK1-02 Short Circuit Signaling Contact | CK1-02 | 1 | piece |
| 1SAM201910R1001 | AA1-24 Shunt Trip | AA1-24 | 1 | piece |
| 1SAM201910R1002 | AA1-110 Shunt Trip | AA1-110 | 1 | piece |
| 1SAM201910R1003 | AA1-230 Shunt Trip | AA1-230 | 1 | piece |
| 1SAM201910R1004 | AA1-400 Shunt Trip | AA1-400 | 1 | piece |
| 1SAM201904R1010 | UA1-20 Undervoltage Release | UA1-20 | 1 | piece |
| 1SAM201904R1001 | UA1-24 Undervoltage Release | UA1-24 | 1 | piece |
| 1SAM201904R1002 | UA1-48 Undervoltage Release | UA1-48 | 1 | piece |
| 1SAM201904R1003 | UA1-60 Undervoltage Release | UA1-60 | 1 | piece |
| 1SAM201904R1004 | UA1-110 Undervoltage Release | UA1-110 | 1 | piece |
| 1SAM201904R1008 | UA1-208 Undervoltage Release | UA1-208 | 1 | piece |
| 1SAM201904R1005 | UA1-230 Undervoltage Release | UA1-230 | 1 | piece |
| 1SAM201904R1006 | UA1-400 Undervoltage Release | UA1-400 | 1 | piece |
| 1SAM201904R1007 | UA1-415 Undervoltage Release | UA1-415 | 1 | piece |
| 1SAM201904R1009 | UA1-575 Undervoltage Release | UA1-575 | 1 | piece |
| 1SAM201906R1102 | PS1-2-0-65 Busbar | PS1-2-0-65 | 1 | piece |
| 1SAM201906R1112 | PS1-2-1-65 Busbar | PS1-2-1-65 | 1 | piece |
| 1SAM201906R1122 | PS1-2-2-65 Busbar | PS1-2-2-65 | 1 | piece |
| 1SAM201916R1103 | PS1-3-0-100 Busbar | PS1-3-0-100 | 1 | piece |
| 1SAM201906R1103 | PS1-3-0-65 Busbar | PS1-3-0-65 | 1 | piece |

| | | | | |
|-----------------|---|-------------|---|-------|
| 1SAM201916R1113 | PS1-3-1-100 Busbar | PS1-3-1-100 | 1 | piece |
| 1SAM201906R1113 | PS1-3-1-65 Busbar | PS1-3-1-65 | 1 | piece |
| 1SAM201916R1123 | PS1-3-2-100 Busbar | PS1-3-2-100 | 1 | piece |
| 1SAM201906R1123 | PS1-3-2-65 Busbar | PS1-3-2-65 | 1 | piece |
| 1SAM201916R1104 | PS1-4-0-100 Busbar | PS1-4-0-100 | 1 | piece |
| 1SAM201906R1104 | PS1-4-0-65 Busbar | PS1-4-0-65 | 1 | piece |
| 1SAM201916R1114 | PS1-4-1-100 Busbar | PS1-4-1-100 | 1 | piece |
| 1SAM201906R1114 | PS1-4-1-65 Busbar | PS1-4-1-65 | 1 | piece |
| 1SAM201906R1124 | PS1-4-2-65 Busbar | PS1-4-2-65 | 1 | piece |
| 1SAM201916R1105 | PS1-5-0-100 Busbar | PS1-5-0-100 | 1 | piece |
| 1SAM201906R1105 | PS1-5-0-65 Busbar | PS1-5-0-65 | 1 | piece |
| 1SAM201916R1115 | PS1-5-1-100 Busbar | PS1-5-1-100 | 1 | piece |
| 1SAM201906R1115 | PS1-5-1-65 Busbar | PS1-5-1-65 | 1 | piece |
| 1SAM201906R1125 | PS1-5-2-65 Busbar | PS1-5-2-65 | 1 | piece |
| 1SAM201907R1101 | S1-M1-25 Power Infeed Block | S1-M1-25 | 1 | piece |
| 1SAM201907R1102 | S1-M2-25 Power Infeed Block | S1-M2-25 | 1 | piece |
| 1SAM201907R1103 | S1-M3-25 Power Infeed Block | S1-M3-25 | 1 | piece |
| 1SAM201913R1103 | S1-M3-35 Power Infeed Block | S1-M3-35 | 1 | piece |
| 1SAM201914R1002 | S1-PB1-25 Power Infeed Block | S1-PB1-25 | 1 | piece |
| 1SAM301911R1001 | TS1-M3-S1 Terminal Spacer | TS1-M3-S1 | 1 | piece |
| 1SAM301912R1001 | TS1-M3-S2 Terminal Spacer | S1-M3-S2 | 1 | piece |
| 1SAM201908R1001 | BS1-3 Protection Cover | BS1-3 | 1 | piece |
| 1SAM201909R1001 | FS116 Screw Fixing Kit | FS116 | 1 | piece |
| 1SAM201914R1001 | PB1-1-32 Connecting Link | PB1-1-32 | 1 | piece |
| GJF1101903R0002 | SA2 Terminals and Installation Material | SA2 | 1 | piece |
| 1SAM201911R1012 | IB132-F Enclosure | IB132-F | 1 | piece |
| 1SAM201911R1010 | IB132-G Enclosure | IB132-G | 1 | piece |
| 1SAM201911R1011 | IB132-Y Enclosure | IB132-Y | 1 | piece |
| 1SAM201912R1010 | DMS132-G Door Mounting Kit | DMS132-G | 1 | piece |
| 1SAM201912R1011 | DMS132-Y Door Mounting Kit | DMS132-Y | 1 | piece |
| 1SAM201909R1021 | MSAH1 Shaft Supporter | MSAH1 | 1 | piece |
| 1SAM201920R1011 | MSHD-LTB Handles | MSHD-LTB | 1 | piece |
| 1SAM201920R1012 | MSHD-LTY Handles | MSHD-LTY | 1 | piece |
| 1SAM101923R0002 | MSMN Driver | MSMN | 1 | piece |
| 1SAM101923R0012 | MSMNO Driver | MSMNO | 1 | piece |
| 1SCA101647R1001 | OXS6X85 SHAFT | OXS6X85 | 1 | piece |
| 1SCA108043R1001 | OXS6X105 SHAFT | OXS6X105 | 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

