

## PRODUCT-DETAILS

# MS132-0.4-HKF1-11

## MS132-0.4-HKF1-11 Manual Motor Starter



### General Information

|                       |                                        |
|-----------------------|----------------------------------------|
| Extended Product Type | MS132-0.4-HKF1-11                      |
| Product ID            | 1SAM350005R1003                        |
| EAN                   | 4013614404436                          |
| Catalog Description   | MS132-0.4-HKF1-11 Manual Motor Starter |

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Long Description | <p>The MS132-0.4-HKF1-11 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 = 0.40</math> A and a pre-assembled front mounted auxiliary contact HKF1-11. 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 <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 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.</p> |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Ordering

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

### Popular Downloads

|                       |                 |
|-----------------------|-----------------|
| Data Sheet, Technical | 2CDC131021D0202 |
|-----------------------|-----------------|

## Information

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Instructions and Manuals          | 2CDC131022M6802                    |
| Instructions and Manuals (Part 2) | 2CDC131060M0202                    |
| Time-Current Characteristic Curve | 1SAM300505F0103                    |
| I <sup>2</sup> t Characteristic   | 1SAM300507F0001<br>1SAM300507F0003 |
| Cut-off Current Characteristic    | 1SAM300508F0001<br>1SAM300508F0003 |
| Dimension Diagram                 | 1SAM300402F0001                    |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 45 mm    |
| Product Net Height         | 90 mm    |
| Product Net Depth / Length | 86.75 mm |
| Product Net Weight         | 0.231 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) 100 kA<br>(500 V AC) 100 kA<br>(690 V AC) 100 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) 100 kA<br>(500 V AC) 100 kA<br>(690 V AC) 100 kA                                       |
| Rated Instantaneous Short-Circuit Current Setting (I <sub>i</sub> ) | 5 A                                                                                                                                         |
| Setting Range                                                       | 0.25 ... 0.40 A                                                                                                                             |
| Rated Operational Power AC-3 (P <sub>e</sub> )                      | (400 V) Three Phase 0.09 kW                                                                                                                 |
| Rated Operational Power AC-3e (P <sub>e</sub> )                     | (400 V) Three Phase 0.09 kW                                                                                                                 |
| Rated Operational Voltage                                           | Main Circuit 690 V AC<br>Main Circuit 250 V DC                                                                                              |
| Rated Operational Current (I <sub>e</sub> )                         | 0.4 A                                                                                                                                       |
| Rated Operational Current AC-3 (I <sub>e</sub> )                    | 0.4 A                                                                                                                                       |
| Rated Operational Current AC-3e (I <sub>e</sub> )                   | 0.4 A                                                                                                                                       |
| Rated Operational Current DC-5 (I <sub>e</sub> )                    | 0.4 A                                                                                                                                       |
| Rated Frequency (f)                                                 | Main Circuit 50 Hz<br>Main Circuit 60 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 0.6 W                                                                                                |
| Number of Poles                                                     | 3                                                                                                                                           |
| Mounted Auxiliary Contacts                                          | 1 NO, 1 NC                                                                                                                                  |

|                                                    |                                                                                                                                                                                                                                                                 |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conventional Free-air Thermal Current ( $I_{th}$ ) | Main Circuit 0.4 A                                                                                                                                                                                                                                              |
| Degree of Protection                               | Housing IP20<br>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 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 4 mm <sup>2</sup>                                                |
| Connecting Capacity Auxiliary Circuit              | Flexible with Ferrule 1/2x 0.75 ... 1.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1/2x 0.75 ... 1.5 mm <sup>2</sup><br>Flexible 1/2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 1.5 mm <sup>2</sup>                                              |
| Tightening Torque                                  | Main Circuit 0.8 ... 1.2 N·m                                                                                                                                                                                                                                    |
| Wire Stripping Length                              | Auxiliary Circuit 8 mm<br>Main Circuit 9 mm                                                                                                                                                                                                                     |
| Recommended Screw Driver                           | Pozidriv 2                                                                                                                                                                                                                                                      |
| Mounting Position                                  | Position 1 to 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>IEC/EN 60947-5-1<br>UL 60947-1<br>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) 65 kA<br>Manual Self-Protected Combination Controllers (Type E), (600Y / 347 V AC) 47 kA<br>Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 65 kA<br>Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 47 kA<br>Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 65 kA<br>Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 47 kA<br>Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) 65 kA<br>Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) 47 kA |
| Maximum Operating Voltage UL/CSA    | Auxiliary Circuit 250 V AC/DC<br>Main Circuit 600 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Ampere Rating UL/CSA                | 0.4 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Full Load Amps Motor Use            | (200 V AC) Three Phase 0.4 A<br>(208 V AC) Three Phase 0.4 A<br>(220 ... 240 V AC) Three Phase 0.4 A<br>(440 ... 480 V AC) Three Phase 0.4 A<br>(550 ... 600 V AC) Three Phase 0.4 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Locked Rotor Amps

(200 V AC) Three Phase 2.4 A  
 (208 V AC) Three Phase 2.4 A  
 (220 ... 240 V AC) Three Phase 2.4 A  
 (440 ... 480 V AC) Three Phase 2.4 A  
 (550 ... 600 V AC) Three Phase 2.4 A

|                                                 |                                                           |
|-------------------------------------------------|-----------------------------------------------------------|
| General Use Rating<br>UL/CSA                    | (600 V AC) 0.4 A                                          |
| Connecting Capacity<br>Main Circuit UL/CSA      | Flexible 1/2x 16-12 AWG<br>Stranded 1/2x 16-12 AWG        |
| Connecting Capacity<br>Auxiliary Circuit UL/CSA | Flexible 1/2x 16-14 AWG<br>Stranded 1/2x 16-14 AWG        |
| Tightening Torque<br>UL/CSA                     | Auxiliary Circuit 7 in-lb<br>Main Circuit 10 ... 12 in-lb |
| Contact Rating UL/CSA                           | B300<br>R300                                              |

## Environmental

|                                                   |                                                                                            |
|---------------------------------------------------|--------------------------------------------------------------------------------------------|
| Ambient Air<br>Temperature                        | Operation -25 ... +70 °C<br>Operation Compensated -25 ... +60 °C<br>Storage -50 ... +80 °C |
| Ambient Air<br>Temperature<br>Compensation        | Yes                                                                                        |
| Maximum Operating<br>Altitude Permissible         | 2000 m                                                                                     |
| Resistance to Shock acc.<br>to IEC 60068-2-27     | 11 ms Pulse 25g                                                                            |
| Resistance to Vibrations<br>acc. to IEC 60068-2-6 | 5g / 3 ... 150 Hz                                                                          |
| RoHS Status                                       | Following EU Directive 2011/65/EU                                                          |

## Certificates and Declarations (Document Number)

|                                      |                                    |
|--------------------------------------|------------------------------------|
| ABS Certificate                      | 1SAA963001-0101                    |
| ATEX Certificate                     | 1SAA963000-3901                    |
| BV Certificate                       | 1SAA963001-0201                    |
| CB Certificate                       | 1SAA963002-2002                    |
| CQC Certificate                      | CQC2017010307034621                |
| cUL Certificate                      | UL_E137861<br>UL_E345003           |
| cULus Certificate                    | cUL_E137861                        |
| Cut-off Current<br>Characteristic    | 1SAM300508F0001<br>1SAM300508F0003 |
| Declaration of<br>Conformity - CCC   | 2020980307004600                   |
| Declaration of<br>Conformity - CE    | 1SAD938516-0125                    |
| DNV Certificate                      | 1SAA963001-0303                    |
| EAC Certificate                      | 1SAA963000-2701                    |
| GL Certificate                       | 1SAA963001-0401                    |
| GOST Certificate                     | 1SAA963001-2702                    |
| I <sup>2</sup> t Characteristic      | 1SAM300507F0001<br>1SAM300507F0003 |
| Instructions and<br>Manuals          | 2CDC131022M6802                    |
| Instructions and<br>Manuals (Part 2) | 2CDC131060M0202                    |
| KC Certificate                       | 1SAA963002-1502                    |
| LR Certificate                       | 1SAA963001-0502                    |
| RINA Certificate                     | 1SAA963002-0802                    |
| RMRS Certificate                     | 1SAA918000-0704                    |

|                                      |                          |
|--------------------------------------|--------------------------|
| RoHS Information                     | 1SAD938511-0125          |
| Time-Current<br>Characteristic Curve | 1SAM300505F0103          |
| UL Certificate                       | UL_E137861<br>UL_E345003 |

## Container Information

|                                   |                 |
|-----------------------------------|-----------------|
| Package Level 1 Units             | box 1 piece     |
| Package Level 1 Width             | 92 mm           |
| Package Level 1 Depth /<br>Length | 95 mm           |
| Package Level 1 Height            | 50 mm           |
| Package Level 1 Gross<br>Weight   | 0.246 kg        |
| Package Level 1 EAN               | 4013614404436   |
| Package Level 2 Units             | carton 40 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   | 10.226 kg       |
| Package Level 2 EAN               | 4013614409080   |

## Classifications

|                                       |                                                         |
|---------------------------------------|---------------------------------------------------------|
| Object Classification<br>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             |
| eClass                                | V11.0 : 27370401                                        |
| UNSPSC                                | 39121521                                                |
| IDEA Granular Category<br>Code (IGCC) | 4845 >> 3 Pole Motor Circuit Protector Circuit Breakers |
| E-Number (Finland)                    | 3705902                                                 |

## Accessories

| Identifier      | Description                         | Type     | Quantity | Unit Of<br>Measure |
|-----------------|-------------------------------------|----------|----------|--------------------|
| 1SAM201901R1001 | HKF1-11 Salvamotori e relè termici  | HKF1-11  | 1        | piece              |
| 1SAM201901R1201 | HKF1-11K Salvamotori e relè termici | HKF1-11K | 1        | piece              |
| 1SAM201901R1002 | HKF1-20 Salvamotori e relè termici  | HKF1-20  | 1        | piece              |
| 1SAM201901R1202 | HKF1-20K Salvamotori e relè termici | HKF1-20K | 1        | piece              |
| 1SAM201901R1004 | HKF1-01 Salvamotori e relè termici  | HKF1-01  | 1        | piece              |
| 1SAM201901R1003 | HKF1-10 Salvamotori e relè termici  | HKF1-10  | 1        | piece              |
| 1SAM201902R1002 | HK1-20 Salvamotori e relè termici   | HK1-20   | 1        | piece              |
| 1SAM201902R1202 | HK1-20K Salvamotori e relè termici  | HK1-20K  | 1        | piece              |
| 1SAM201902R1001 | HK1-11 Salvamotori e relè termici   | HK1-11   | 1        | piece              |
| 1SAM201902R1201 | HK1-11K Salvamotori e relè termici  | HK1-11K  | 1        | piece              |
| 1SAM201902R1003 | HK1-02 Salvamotori e relè termici   | HK1-02   | 1        | piece              |
| 1SAM201902R1203 | HK1-02K Salvamotori e relè termici  | HK1-02K  | 1        | piece              |
| 1SAM201902R1004 | HK1-20L Salvamotori e relè termici  | HK1-20L  | 1        | piece              |
| 1SAM201902R1204 | HK1-20LK Salvamotori e relè termici | HK1-20LK | 1        | piece              |
| 1SAM201903R1002 | SK1-20 Salvamotori e relè termici   | SK1-20   | 1        | piece              |

|                 |                                           |             |   |       |
|-----------------|-------------------------------------------|-------------|---|-------|
| 1SAM201903R1202 | SK1-20K Salvamotori e relè termici        | SK1-20K     | 1 | piece |
| 1SAM201903R1001 | SK1-11 Salvamotori e relè termici         | SK1-11      | 1 | piece |
| 1SAM201903R1201 | SK1-11K Salvamotori e relè termici        | SK1-11K     | 1 | piece |
| 1SAM201903R1003 | SK1-02 Salvamotori e relè termici         | SK1-02      | 1 | piece |
| 1SAM201903R1203 | SK1-02K Salvamotori e relè termici        | SK1-02K     | 1 | piece |
| 1SAM301901R1002 | CK1-20 Salvamotori e relè termici         | CK1-20      | 1 | piece |
| 1SAM301901R1001 | CK1-11 Salvamotori e relè termici         | CK1-11      | 1 | piece |
| 1SAM301901R1003 | CK1-02 Salvamotori e relè termici         | CK1-02      | 1 | piece |
| 1SAM201910R1001 | AA1-24 Salvamotori e relè termici         | AA1-24      | 1 | piece |
| 1SAM201910R1002 | AA1-110 Salvamotori e relè termici        | AA1-110     | 1 | piece |
| 1SAM201910R1003 | AA1-230 Salvamotori e relè termici        | AA1-230     | 1 | piece |
| 1SAM201910R1004 | AA1-400 Salvamotori e relè termici        | AA1-400     | 1 | piece |
| 1SAM201904R1010 | UA1-20 Undervoltage Release               | UA1-20      | 1 | piece |
| 1SAM201904R1001 | UA1-24 Salvamotori e relè termici         | UA1-24      | 1 | piece |
| 1SAM201904R1002 | UA1-48 Salvamotori e relè termici         | UA1-48      | 1 | piece |
| 1SAM201904R1003 | UA1-60 Salvamotori e relè termici         | UA1-60      | 1 | piece |
| 1SAM201904R1004 | UA1-110 Salvamotori e relè termici        | UA1-110     | 1 | piece |
| 1SAM201904R1008 | UA1-208 Salvamotori e relè termici        | UA1-208     | 1 | piece |
| 1SAM201904R1005 | UA1-230 Salvamotori e relè termici        | UA1-230     | 1 | piece |
| 1SAM201904R1006 | UA1-400 Salvamotori e relè termici        | UA1-400     | 1 | piece |
| 1SAM201904R1007 | UA1-415 Salvamotori e relè termici        | UA1-415     | 1 | piece |
| 1SAM201904R1009 | UA1-575 Salvamotori e relè termici        | UA1-575     | 1 | piece |
| 1SAM201906R1102 | PS1-2-0-65 Salvamotori e relè termici     | PS1-2-0-65  | 1 | piece |
| 1SAM201906R1112 | PS1-2-1-65 Salvamotori e relè termici     | PS1-2-1-65  | 1 | piece |
| 1SAM201906R1122 | PS1-2-2-65 Salvamotori e relè termici     | PS1-2-2-65  | 1 | piece |
| 1SAM201916R1103 | PS1-3-0-100 Salvamotori e relè termici    | PS1-3-0-100 | 1 | piece |
| 1SAM201906R1103 | PS1-3-0-65 Salvamotori e relè termici     | PS1-3-0-65  | 1 | piece |
| 1SAM201916R1113 | PS1-3-1-100 Salvamotori e relè termici    | PS1-3-1-100 | 1 | piece |
| 1SAM201906R1113 | PS1-3-1-65 Salvamotori e relè termici     | PS1-3-1-65  | 1 | piece |
| 1SAM201916R1123 | PS1-3-2-100 Salvamotori e relè termici    | PS1-3-2-100 | 1 | piece |
| 1SAM201906R1123 | PS1-3-2-65 Salvamotori e relè termici     | PS1-3-2-65  | 1 | piece |
| 1SAM201916R1104 | PS1-4-0-100 Salvamotori e relè termici    | PS1-4-0-100 | 1 | piece |
| 1SAM201906R1104 | PS1-4-0-65 Salvamotori e relè termici     | PS1-4-0-65  | 1 | piece |
| 1SAM201916R1114 | PS1-4-1-100 Salvamotori e relè termici    | PS1-4-1-100 | 1 | piece |
| 1SAM201906R1114 | PS1-4-1-65 Salvamotori e relè termici     | PS1-4-1-65  | 1 | piece |
| 1SAM201906R1124 | PS1-4-2-65 Salvamotori e relè termici     | PS1-4-2-65  | 1 | piece |
| 1SAM201916R1105 | PS1-5-0-100 Salvamotori e relè termici    | PS1-5-0-100 | 1 | piece |
| 1SAM201906R1105 | PS1-5-0-65 Salvamotori e relè termici     | PS1-5-0-65  | 1 | piece |
| 1SAM201916R1115 | PS1-5-1-100 Salvamotori e relè termici    | PS1-5-1-100 | 1 | piece |
| 1SAM201906R1115 | PS1-5-1-65 Salvamotori e relè termici     | PS1-5-1-65  | 1 | piece |
| 1SAM201906R1125 | PS1-5-2-65 Salvamotori e relè termici     | PS1-5-2-65  | 1 | piece |
| 1SAM201907R1101 | S1-M1-25 Salvamotori e relè termici       | S1-M1-25    | 1 | piece |
| 1SAM201907R1102 | S1-M2-25 Salvamotori e relè termici       | S1-M2-25    | 1 | piece |
| 1SAM201907R1103 | S1-M3-25 Salvamotori e relè termici       | S1-M3-25    | 1 | piece |
| 1SAM201913R1103 | S1-M3-35 Salvamotori e relè termici       | S1-M3-35    | 1 | piece |
| 1SAM201914R1002 | S1-PB1-25 Salvamotori e relè termici      | 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 Salvamotori e relè termici          | BS1-3       | 1 | piece |
| 1SAM201909R1001 | FS116 Salvamotori e relè termici          | FS116       | 1 | piece |
| 1SAM201914R1001 | PB1-1-32 Salvamotori e relè termici       | PB1-1-32    | 1 | piece |
| GJF1101903R0002 | SA2 - Terminals and Installation Material | SA2         | 1 | piece |
| 1SAM201911R1012 | IB132-F Salvamotori e relè termici        | IB132-F     | 1 | piece |
| 1SAM201911R1010 | IB132-G Salvamotori e relè termici        | IB132-G     | 1 | piece |
| 1SAM201911R1011 | IB132-Y Salvamotori e relè termici        | IB132-Y     | 1 | piece |
| 1SAM201912R1010 | DMS132-G Salvamotori e relè termici       | DMS132-G    | 1 | piece |
| 1SAM201912R1011 | DMS132-Y Salvamotori e relè termici       | DMS132-Y    | 1 | piece |

|                 |                                                      |          |   |       |
|-----------------|------------------------------------------------------|----------|---|-------|
| 1SAM201909R1021 | MSAH1 Salvamotori e relè termici                     | MSAH1    | 1 | piece |
| 1SAM201920R1011 | MSHD-LTB Salvamotori e relè termici                  | MSHD-LTB | 1 | piece |
| 1SAM201920R1012 | MSHD-LTY Salvamotori e relè termici                  | MSHD-LTY | 1 | piece |
| 1SAM101923R0002 | MSMN Salvamotori e relè termici                      | MSMN     | 1 | piece |
| 1SAM101923R0012 | MSMNO Salvamotori e relè termici                     | MSMNO    | 1 | piece |
| 1SCA101647R1001 | OXS6X85 Albero 6 mm per manovra rotativa,<br>85 mm   | OXS6X85  | 1 | piece |
| 1SCA108043R1001 | OXS6X105 Albero 6 mm per manovra rotativa,<br>105 mm | OXS6X105 | 1 | piece |
| 1SCA101655R1001 | OXS6X130 Albero 6 mm per manovra rotativa,<br>130 mm | OXS6X130 | 1 | piece |
| 1SCA101659R1001 | OXS6X180 Albero 6 mm per manovra rotativa,<br>180 mm | 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

