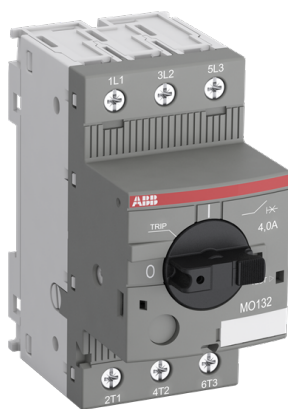


## PRODUCT-DETAILS

# MO132-2.5

## MO132-2.5 Manual Motor Starter Magnetic Only



### Общая информация

|                                 |                                              |
|---------------------------------|----------------------------------------------|
| Тип расширенного изделия        | MO132-2.5                                    |
| Идентификационный номер изделия | 1SAM360000R1007                              |
| Европейский товарный код (EAN)  | 4013614400223                                |
| Описание в каталоге             | MO132-2.5 Manual Motor Starter Magnetic Only |

#### Длинное описание

The MO132-2.5 manual motor starter magnetic only is a compact 45 mm width device with a rated operational current of  $I_e = 2.50$  A. This device is used to manually switch on and off loads/motors and to protect them reliably and without the need for a fuse from short-circuits. The manual motor starter offers a rated service short-circuit breaking capacity  $I_{cs} = 50$  kA at 400 V AC. A combination together with overload relays or motor controllers allows the protection of motors. Further features are the built-in disconnect function, trip-free mechanism and a rotary handle with a clear switch position indication. The manual motor starter magnetic only is suitable for three- and single-phase applications. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signalling contacts, undervoltage releases, shunt trips, 3-phase bus bars, power in-feed blocks are available as accessory.

### Ordering

|                          |          |
|--------------------------|----------|
| Минимальный объем заказа | 1 штука  |
| Номер таможенного тарифа | 85362010 |

| Popular Downloads                  |                 |
|------------------------------------|-----------------|
| Технические данные                 | 2CDC131035D0202 |
| Инструкции и руководства           | 2CDC131034M6801 |
| Инструкции и руководства (часть 2) | 2CDC131060M0202 |
| Time-Current Characteristic Curve  | 1SAM300515F0005 |

| Dimensions             |          |
|------------------------|----------|
| Чистая ширина изделия  | 45 mm    |
| Чистая высота изделия  | 90 mm    |
| Чистая толщина изделия | 86.75 mm |
| Чистый вес изделия     | 0.265 kg |

| Technical                                                                          |                                                                                                       |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Номинальная рабочая отключающая способность при коротком замыкании ( $I_{cs}$ )    | (230 В AC) 100 kA<br>(400 В AC) 100 kA<br>(440 В AC) 100 kA<br>(500 В AC) 100 kA<br>(690 В AC) 100 kA |
| Номинальная предельная отключающая способность при коротком замыкании ( $I_{cu}$ ) | (230 В AC) 100 kA<br>(400 В AC) 100 kA<br>(440 В AC) 100 kA<br>(500 В AC) 100 kA<br>(690 В AC) 100 kA |
| Уставка номинального мгновенного тока короткого замыкания ( $I_i$ )                | 31.3 A                                                                                                |
| Диапазон настройки                                                                 | None                                                                                                  |
| Номинальная рабочая мощность, АС-3 ( $P_e$ )                                       | (400 V) Three Phase 0.75 kW                                                                           |
| Номинальная рабочая мощность, АС-3е ( $P_e$ )                                      | (400 V) Three Phase 0.75 kW                                                                           |
| Номинальное рабочее напряжение                                                     | Главная цепь 690 V AC                                                                                 |
| Номинальный рабочий ток ( $I_e$ )                                                  | 2.5 A                                                                                                 |
| Номинальный рабочий ток, АС-3 ( $I_e$ )                                            | 2.5 A                                                                                                 |
| Номинальный рабочий ток, АС-3е ( $I_e$ )                                           | 2.5 A                                                                                                 |
| Номинальная частота (f)                                                            | Главная цепь 50 Hz<br>Главная цепь 60 Hz                                                              |
| Номинальное выдерживаемое импульсное напряжение ( $U_{imp}$ )                      | Главная цепь 6 kV                                                                                     |
| Номинальное напряжение изоляции ( $U_i$ )                                          | 690 V                                                                                                 |
| Потери мощности                                                                    |                                                                                                       |
| at Rated Operating Conditions per Pole 1.7 W                                       |                                                                                                       |

|                                                        |                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Количество полюсов                                     | 3                                                                                                                                                                                                                                                               |
| Условный тепловой ток на открытом воздухе ( $I_{th}$ ) | Main Circuit 2.5 A                                                                                                                                                                                                                                              |
| Степень защиты                                         | Housing IP20<br>Main Circuit Terminals IP10                                                                                                                                                                                                                     |
| Степень загрязнения                                    | степень загрязнения 3                                                                                                                                                                                                                                           |
| Коммутационная износостойкость                         | 50000 цикл                                                                                                                                                                                                                                                      |
| Механическая износостойкость                           | 100000 цикл                                                                                                                                                                                                                                                     |
| Тип клемм                                              | Клеммы с винтовым зажимом                                                                                                                                                                                                                                       |
| Сечение подключаемого кабеля-главная цепь              | Гибкий с зажимом 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Гибкий с изолированным зажимом 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Гибкий 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Жесткий 1/2x 1 ... 4 mm <sup>2</sup>                                                      |
| Крутящие моменты затяжки                               | Главная цепь 0.8 ... 1.2 N·m                                                                                                                                                                                                                                    |
| Длина зачистки провода                                 | Главная цепь 9 mm                                                                                                                                                                                                                                               |
| Рекомендуемый инструмент (отвертка)                    | Pozidriv 2                                                                                                                                                                                                                                                      |
| Монтажное положение                                    | Position 1 to 6                                                                                                                                                                                                                                                 |
| Монтаж на DIN-рейке                                    | Монтажная рейка 35 x 15 mm<br>Монтажная рейка 35 x 7,5 mm                                                                                                                                                                                                       |
| 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 |
| Тип исполнительного элемента (рабочая головка)         | Rotary Handle                                                                                                                                                                                                                                                   |
| Contact Position Indication                            | ON / OFF / TRIP                                                                                                                                                                                                                                                 |
| Стандарты                                              | IEC/EN 60947-1<br>IEC/EN 60947-2<br>IEC/EN 60947-4-1<br>UL 60947-1<br>UL 60947-4-1                                                                                                                                                                              |
| Замечания                                              | For overload protection of the motors, an appropriate thermal or electronic overload relays must be used                                                                                                                                                        |

## Technical UL/CSA

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short-Circuit Current Rating (SCCR) | 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    | Главная цепь 600 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Номинальный ток UL                  | 2.5 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Номинальная мощность в л.с.         | (200 V AC) Three Phase 0.5 Hp<br>(208 V AC) Three Phase 0.5 Hp<br>(220 ... 240 V AC) Three Phase 0.5 Hp<br>(440 ... 480 V AC) Three Phase 1 Hp                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                                            |                                                                                                                                                                                      |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            | (550 ... 600 V AC) Three Phase 1.5 Hp                                                                                                                                                |
| Full Load Amps Motor Use                   | (200 V AC) Three Phase 2.5 A<br>(208 V AC) Three Phase 2.5 A<br>(220 ... 240 V AC) Three Phase 2.5 A<br>(440 ... 480 V AC) Three Phase 2.5 A<br>(550 ... 600 V AC) Three Phase 2.5 A |
| Locked Rotor Amps                          | (200 V AC) Three Phase 15 A<br>(208 V AC) Three Phase 15 A<br>(220 ... 240 V AC) Three Phase 15 A<br>(440 ... 480 V AC) Three Phase 15 A<br>(550 ... 600 V AC) Three Phase 15 A      |
| General Use Rating<br>UL/CSA               | (600 V AC) 2.5 A                                                                                                                                                                     |
| Connecting Capacity Main<br>Circuit UL/CSA | Гибкий 1/2x 16-12 AWG<br>Многожильный 1/2x 16-12 AWG                                                                                                                                 |
| Tightening Torque<br>UL/CSA                | Главная цепь 10 in-lb                                                                                                                                                                |

## Environmental

|                                                                   |                                                                                                 |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Температура<br>окружающей среды                                   | Снаружи корпуса 0 ... +40 °C<br>Работа с компенсацией -25 ... +60 °C<br>Хранение -50 ... +80 °C |
| Компенсация<br>температуры<br>окружающей среды                    | Нет                                                                                             |
| Максимально<br>допустимая рабочая<br>высота                       | 2000 m                                                                                          |
| Ударопрочность<br>согласно МЭК 60068-2-<br>27                     | Импульс 11 мс 25g                                                                               |
| Вибропрочность<br>согласно МЭК 60068-2-6                          | 5g / 3 ... 150 Hz                                                                               |
| Правила ограничения<br>содержания вредных<br>веществ. RoHS статус | Following EU Directive 2011/65/EU                                                               |

## Certificates and Declarations (Document Number)

|                                    |                            |
|------------------------------------|----------------------------|
| Сертификат ABS                     | 1SAA963001-0101            |
| Сертификат BV                      | 1SAA963001-0202            |
| Сертификат CB                      | 1SAA963002-2002            |
| CQC Certificate                    | CQC2010010307387700        |
| Сертификат cUL                     | cUL_E137861<br>cUL_E345003 |
| cULus Certificate                  | cUL_E137861                |
| Declaration of Conformity<br>- CCC | 2020980307003526           |
| Декларация о<br>соответствии - CE  | 1SAD938509-0183            |
| DNV GL Certificate                 | 1SAA963001-0304            |
| EAC Certificate                    | 1SAA963000-2701            |
| Экологическая<br>информация        | 1SAC200049H0009            |
| Сертификат ГОСТ                    | 1SAA963001-2702            |

|                                                                |                          |
|----------------------------------------------------------------|--------------------------|
| Инструкции и руководства                                       | 2CDC131034M6801          |
| Инструкции и руководства (часть 2)                             | 2CDC131060M0202          |
| KC Certificate                                                 | 1SAA963002-1501          |
| Сертификат LR                                                  | 1SAA963001-0502          |
| Сертификат RINA                                                | 1SAA963002-0802          |
| Сертификат RMRS                                                | 1SAA918000-0704          |
| Правила ограничения содержания вредных веществ.RoHS информация | 1SAD938505-0183          |
| Time-Current Characteristic Curve                              | 1SAM300515F0005          |
| Сертификат UL                                                  | UL_E137861<br>UL_E345003 |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | 1 штука       |
| Package Level 1 Width          | 92 mm         |
| Package Level 1 Depth / Length | 95 mm         |
| Package Level 1 Height         | 50 mm         |
| Package Level 1 Gross Weight   | 0.28 kg       |
| Package Level 1 EAN            | 4013614400223 |
| Package Level 2 Units          | 40 штука      |
| Package Level 2 Width          | 280 mm        |
| Package Level 2 Depth / Length | 395 mm        |
| Package Level 2 Height         | 210 mm        |
| Package Level 2 Gross Weight   | 11.586 kg     |
| Package Level 2 EAN            | 4013614443671 |

## Classifications

|                                                                  |                                                         |
|------------------------------------------------------------------|---------------------------------------------------------|
| Код классификации объекта                                        | 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             |
| е-класс                                                          | V11.0 : 27370401                                        |
| Универсальная стандартная классификация товаров и услуг (UNSPSC) | 39121521                                                |
| IDEA Granular Category Code (IGCC)                               | 4845 >> 3 Pole Motor Circuit Protector Circuit Breakers |
| E-Number (Finland)                                               | 3705885                                                 |

E-Number (Sweden)

3110035

## 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 Signal Contact        | SK1-20      | 1        | piece           |
| 1SAM201903R1202 | SK1-20K Signal Contact       | SK1-20K     | 1        | piece           |
| 1SAM201903R1001 | SK1-11 Signal Contact        | SK1-11      | 1        | piece           |
| 1SAM201903R1201 | SK1-11K Signal Contact       | SK1-11K     | 1        | piece           |
| 1SAM201903R1003 | SK1-02 Signal Contact        | SK1-02      | 1        | piece           |
| 1SAM201903R1203 | SK1-02K Signal Contact       | SK1-02K     | 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                 | TS1-M3-S2   | 1 | piece |
| 1SAM201914R1001 | PB1-1-32 Connecting Link                  | PB1-1-32    | 1 | piece |
| 1SAM201908R1001 | BS1-3 Protection Cover                    | BS1-3       | 1 | piece |
| 1SAM201909R1001 | FS116 Screw Fixing Kit                    | FS116       | 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 |
| 1SAM201920R1000 | MSH-AR Shaft Alignment Ring               | MSH-AR      | 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 |

## Категории

Низковольтное оборудование → Пускорегулирующая аппаратура → Мотор-автоматы → Мотор-автоматы

Низковольтное оборудование → Силовые автоматические выключатели → Мотор-автоматы

