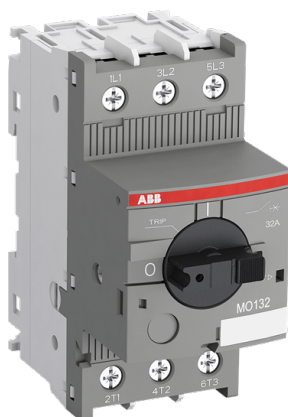


## PRODUCT-DETAILS

# MO132-20

## MO132-20 Manual Motor Starter Magnetic Only



### Ogólne informacje

|                       |                                             |
|-----------------------|---------------------------------------------|
| Extended Product Type | MO132-20                                    |
| ID Produktu           | 1SAM360000R1013                             |
| Numer EAN             | 4013614400285                               |
| Opis katalogowy       | MO132-20 Manual Motor Starter Magnetic Only |

#### Opis

The MO132-20 manual motor starter magnetic only is a compact 45 mm width device with a rated operational current of  $I_e = 20.0$  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  $I_{cs} = 25$  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.

### Charakterystyka zamówienia

|                            |          |
|----------------------------|----------|
| Minimalna ilość zamówienia | 1 sztuka |
| Kod taryfy celnej          | 85362010 |

### Najczęściej Pobierane

|                                      |                 |
|--------------------------------------|-----------------|
| Arkusz danych, informacja techniczna | 2CDC131035D0202 |
|--------------------------------------|-----------------|

|                                      |                 |
|--------------------------------------|-----------------|
| Instrukcje i podręczniki             | 2CDC131034M6801 |
| Instructions and Manuals<br>(Part 2) | 2CDC131060M0202 |
| Time-Current<br>Characteristic Curve | 1SAM300515F0008 |

Wymiary

|                          |          |
|--------------------------|----------|
| Szerokość produktu netto | 45 mm    |
| Wysokość produktu netto  | 97.8 mm  |
| Głębokość produktu netto | 86.55 mm |
| Waga produktu netto      | 0.31 kg  |

Dane techniczne

|                                                             |                                                                                                                        |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ )  | (230 V AC) 100 kA<br>(400 V AC) 100 kA<br>(440 V AC) 20 kA<br>(500 V AC) 20 kA<br>(690 V AC) 3 kA                      |
| Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ ) | (230 V AC) 100 kA<br>(400 V AC) 100 kA<br>(440 V AC) 20 kA<br>(500 V AC) 20 kA<br>(690 V AC) 3 kA                      |
| Rated Instantaneous Short-Circuit Current Setting ( $I_i$ ) | 250 A                                                                                                                  |
| Setting Range                                               | None                                                                                                                   |
| Moc znamionowa AC-3 ( $P_e$ )                               | (400 V) Three Phase 7.5 kW                                                                                             |
| Moc znamionowa AC-3e ( $P_e$ )                              | (400 V) Three Phase 7.5 kW                                                                                             |
| Znamionowe napięcie pracy                                   | Obwód główny 690 V AC                                                                                                  |
| Znamionowy prąd pracy ( $I_e$ )                             | 20 A                                                                                                                   |
| Znamionowy prąd pracy AC-3 ( $I_e$ )                        | 20 A                                                                                                                   |
| Znamionowy prąd pracy AC-3e ( $I_e$ )                       | 20 A                                                                                                                   |
| Częstotliwość znamionowa (f)                                | Obwód główny 50 Hz<br>Obwód główny 60 Hz                                                                               |
| Znamionowa wytrzymałość na impuls napięciowy ( $U_{imp}$ )  | Obwód główny 6 kV                                                                                                      |
| Znamionowe napięcie izolacji ( $U_i$ )                      | 690 V                                                                                                                  |
| Straty mocy                                                 | na biegun 2.1 W                                                                                                        |
| Liczba biegunów                                             | 3                                                                                                                      |
| Prąd przy chłodzeniu konwencjonalnym ( $I_{th}$ )           | Obwód główny 20 A                                                                                                      |
| Stopień ochrony obudowy                                     | Housing IP20<br>Main Circuit Terminals IP10                                                                            |
| Stopień zanieczyszczenia                                    | 3                                                                                                                      |
| Electrical Durability                                       | 50000 cycle                                                                                                            |
| Wytrzymałość mechaniczna                                    | 100000 cycle                                                                                                           |
| Typ terminala                                               | Screw Terminals                                                                                                        |
| Dane montażowe-obwód główny (roboczy)                       | Elastyczny z tulejką 1/2x 0.75 ... 6 mm <sup>2</sup><br>Elastyczny z izolowaną tulejką 1/2x 0.75 ... 6 mm <sup>2</sup> |

|                               |                                                                                                                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | Elastyczny 1/2x 1 ... 2.5 mm²<br>Elastyczny 1/2x 2.5 ... 6 mm²<br>Sztynny 1/2x 1 ... 2.5 mm²<br>Sztynny 1/2x 2.5 ... 6 mm²                                                                                                                                      |
| Momenty dokrecające           | Obwód główny (roboczy) 2 N·m                                                                                                                                                                                                                                    |
| Długość odizolowania przewodu | Obwód główny 10 mm                                                                                                                                                                                                                                              |
| Recommended Screw Driver      | Pozidriv 2                                                                                                                                                                                                                                                      |
| Pozycja montażu               | Position 1 to 6                                                                                                                                                                                                                                                 |
| Montaż na szynie DIN          | TH35-15 (Szyna montażowa 35 x 15 mm) wg IEC 60715<br>TH35-7.5 (Szyna montażowa 35 x 7.5 mm) wg 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 |
| Typ napędu                    | Rotary Handle                                                                                                                                                                                                                                                   |
| Contact Position Indication   | ON / OFF / TRIP                                                                                                                                                                                                                                                 |
| Standardy                     | IEC/EN 60947-1<br>IEC/EN 60947-2<br>IEC/EN 60947-4-1<br>UL 60947-1<br>UL 60947-4-1                                                                                                                                                                              |
| Remarks                       | 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) 35 kA<br>Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 35 kA<br>Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 30 kA<br>Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 18 kA<br>Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) 30 kA<br>Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) 18 kA |
| Maksymalne napięcie robocze UL/CSA           | Obwód główny 600 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Napięcie znamionowe UL/CSA                   | 20 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Moc znamionowa [Hp] UL/CSA                   | 200V AC Trzy fazy 5 Hp<br>208V AC Trzy fazy 5 Hp<br>220 ... 240V AC Trzy fazy 5 Hp<br>440 ... 480V AC Trzy fazy 10 Hp<br>550 ... 600V AC Trzy fazy 15 Hp                                                                                                                                                                                                                                                                                                                                                                                                           |
| Full Load Amps Motor Use                     | 200V AC Trzy fazy 17.5 A<br>208V AC Trzy fazy 16.7 A<br>220 ... 240V AC Trzy fazy 15.2 A<br>440 ... 480V AC Trzy fazy 14 A<br>550 ... 600V AC Trzy fazy 17 A                                                                                                                                                                                                                                                                                                                                                                                                       |
| Locked Rotor Amps                            | 200V AC Trzy fazy 105.8 A<br>208V AC Trzy fazy 102 A<br>220 ... 240V AC Trzy fazy 92 A<br>440 ... 480V AC Trzy fazy 81 A<br>550 ... 600V AC Trzy fazy 93 A                                                                                                                                                                                                                                                                                                                                                                                                         |
| Znamionowe dane montażowe UL/CSA             | (600 V AC) 20 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Dane montażowe-obwód główny (roboczy) UL/CSA | Elastyczny 1/2x 16-8 AWG<br>Skrętka 1/2x 16-8 AWG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Momenty dokrecające UL/CSA                   | Obwód główny (roboczy) 18 in·lb                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Normy środowiskowe

|                                 |                                                           |
|---------------------------------|-----------------------------------------------------------|
| Temperatura powietrza otoczenia | Wokół obudowy 0 ... +40 °C<br>Eksploatacja -25 ... +60 °C |
|---------------------------------|-----------------------------------------------------------|

|                                             |                                   |
|---------------------------------------------|-----------------------------------|
|                                             | Przechowywanie -50 ... +80 °C     |
| Kompensacja temperatury powietrza otoczenia | Nie                               |
| Maksymalna wysokość montażu m.n.p.m         | 2000 m                            |
| Odporność na wstrząsy IEC 60068-2-27        | 11 ms Pulse 25g                   |
| Odporność na wibrację IEC 60068-2-6         | 5g / 3 ... 150 Hz                 |
| Status RoHS                                 | Following EU Directive 2011/65/EU |

## Certyfikaty i deklaracje (Numer dokumentu)

|                                   |                            |
|-----------------------------------|----------------------------|
| Certyfikat ABS                    | 1SAA963001-0101            |
| Certyfikat BV                     | 1SAA963001-0202            |
| Certyfikat CB                     | 1SAA963002-2002            |
| Certyfikat CQC                    | CQC2010010307387700        |
| cUL Certificate                   | cUL_E137861<br>cUL_E345003 |
| cULus Certificate                 | cUL_E137861                |
| Declaration of Conformity - CCC   | 2020980307003526           |
| Deklaracja zgodności - CE         | 1SAD938509-0183            |
| DNV GL Certificate                | 1SAA963001-0304            |
| Certyfikat EAC                    | 1SAA963000-2701            |
| Informacje środowiskowe           | 1SAC200049H0009            |
| Certyfikat GOST                   | 1SAA963001-2702            |
| Instrukcje i podręczniki          | 2CDC131034M6801            |
| Instructions and Manuals (Part 2) | 2CDC131060M0202            |
| KC Certificate                    | 1SAA963002-1501            |
| Certyfikat LR                     | 1SAA963001-0502            |
| Certyfikat RINA                   | 1SAA963002-0802            |
| Certyfikat RMRS                   | 1SAA918000-0704            |
| Dane RoHS                         | 1SAD938505-0183            |
| Time-Current Characteristic Curve | 1SAM300515F0008            |
| UL Certificate                    | UL_E137861<br>UL_E345003   |

## Informacje o pakowaniu

|                                   |               |
|-----------------------------------|---------------|
| Jednostka opakowania (poziom 1)   | 1 sztuka      |
| Szerokość opakowania (poziom 1)   | 92 mm         |
| Długość opakowania (poziom 1)     | 102 mm        |
| Wysokość opakowania (poziom 1)    | 50 mm         |
| Waga opakowania brutto (poziom 1) | 0.325 kg      |
| EAN opakowania (poziom 1)         | 4013614400285 |
| Jednostka opakowania (poziom 2)   | 40 sztuka     |
| Szerokość opakowania (poziom 2)   | 280 mm        |
| Długość opakowania                | 395 mm        |

(poziom 2)

|                                      |               |
|--------------------------------------|---------------|
| Wysokość opakowania<br>(poziom 2)    | 210 mm        |
| Waga opakowania brutto<br>(poziom 2) | 13.386 kg     |
| EAN opakowania (poziom<br>2)         | 4013614443732 |

## Klasyfikacje

|                                       |                                                         |
|---------------------------------------|---------------------------------------------------------|
| Kod klasyfikacji                      | 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)                    | 3705891                                                 |
| E-Number (Sweden)                     | 3110041                                                 |

## 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 |

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## Kategorie

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Produkty niskiego napięcia i systemy → Aparatura sterownicza → Wyłączniki silnikowe → Wyłączniki silnikowe

Produkty niskiego napięcia i systemy → Wyłączniki → Wyłączniki silnikowe

