

PRODUCT-DETAILS

# MO132-20

## MO132-20 Manual Motor Starter Magnetic Only



### General Information

Extended Product Type	MO132-20
Product ID	1SAM360000R1013
EAN	4013614400285
Catalog Description	MO132-20 Manual Motor Starter Magnetic Only

#### Long Description

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.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85362010

### Popular Downloads

Data Sheet, Technical Information	2CDC131035D0201
Data Sheet, Technical	1SAM300515F0008

## Information (Part 2)

Instructions and Manuals	2CDC131034M6801
Instructions and Manuals (Part 2)	2CDC131060M0202

## Dimensions

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

## Technical

Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ )	(230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 20 kA (500 V AC) 20 kA (690 V AC) 3 kA
Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ )	(230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 20 kA (500 V AC) 20 kA (690 V AC) 3 kA
Rated Instantaneous Short-Circuit Current Setting ( $I_i$ )	250 A
Setting Range	None
Rated Operational Power AC-3 ( $P_e$ )	(400 V) Three Phase 7.5 kW
Rated Operational Voltage	Main Circuit 690 V AC
Rated Operational Current ( $I_e$ )	20 A
Rated Operational Current AC-3 ( $I_e$ )	20 A
Rated Frequency (f)	Main Circuit 50 Hz Main Circuit 60 Hz
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Main Circuit 6 kV
Rated Insulation Voltage ( $U_i$ )	690 V
Power Loss	at Rated Operating Conditions per Pole 2.1 W
Number of Poles	3
Conventional Free-air Thermal Current ( $I_{th}$ )	Main Circuit 20 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP10
Pollution Degree	3
Electrical Durability	50000 cycle
Mechanical Durability	100000 cycle
Terminal Type	Screw Terminals
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.75 ... 6 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 0.75 ... 6 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 2.5 ... 6 mm <sup>2</sup> Rigid 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 2.5 ... 6 mm <sup>2</sup>
Tightening Torque	Main Circuit 2 N·m
Wire Stripping Length	Main Circuit 10 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 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Minimum Mounting Distance	Electrical Conductive Board, Horizontal - Up to 400 V 0 mm Electrical Conductive Board, Horizontal - Up to 690 V 1.5 mm Electrical Conductive Board, Vertical 75 mm Other Device Same Type, Horizontal 0 mm Other Device Same Type, Vertical 150 mm
Actuator Type	Rotary Handle
Contact Position Indication	ON / OFF / TRIP
Standards	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-1 UL 60947-4-1
Remarks	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
	Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC)	35 kA
	Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC)	30 kA
	Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC)	18 kA
	Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480 V AC)	30 kA
Maximum Operating Voltage UL/CSA	Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600 V AC)	18 kA
	Main Circuit	600 V AC
Ampere Rating UL/CSA		20 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase	5 Hp
	(208 V AC) Three Phase	5 Hp
	(220 ... 240 V AC) Three Phase	5 Hp
	(440 ... 480 V AC) Three Phase	10 Hp
	(550 ... 600 V AC) Three Phase	15 Hp
Full Load Amps Motor Use	(200 V AC) Three Phase	17.5 A
	(208 V AC) Three Phase	16.7 A
	(220 ... 240 V AC) Three Phase	15.2 A
	(440 ... 480 V AC) Three Phase	14 A
	(550 ... 600 V AC) Three Phase	17 A
Locked Rotor Amps	(200 V AC) Three Phase	105.8 A
	(208 V AC) Three Phase	102 A
	(220 ... 240 V AC) Three Phase	92 A
	(440 ... 480 V AC) Three Phase	81 A
	(550 ... 600 V AC) Three Phase	93 A
General Use Rating UL/CSA		(600 V AC) 20 A
Connecting Capacity Main Circuit UL/CSA	Flexible	1/2x 16-8 AWG
	Stranded	1/2x 16-8 AWG
Tightening Torque UL/CSA		Main Circuit 18 in-lb

## Environmental

Ambient Air Temperature	Around the Enclosure	0 ... +40 °C
	Operation	-25 ... +60 °C
	Storage	-50 ... +80 °C
Ambient Air		No

Temperature Compensation	
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 25g
Resistance to Vibrations 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
BV Certificate	1SAA963001-0202
CB Certificate	1SAA963002-2002
CCC Certificate	1SAA963001-3805
cUL Certificate	cUL_E137861 cUL_E345003
cULus Certificate	cUL_E137861
Declaration of Conformity - CE	1SAD938508-0183
DNV GL Certificate	1SAA963001-0304
EAC Certificate	1SAA963000-2701
Environmental Information	1SAC200049H0009
GOST Certificate	1SAA963001-2702
Instructions and Manuals	2CDC131034M6801
Instructions and Manuals (Part 2)	2CDC131060M0202
KC Certificate	1SAA963002-1501
LR Certificate	1SAA963001-0502
RINA Certificate	1SAA963002-0802
RMRS Certificate	1SAA918000-0704
RoHS Information	1SAD938505-0183
UL Certificate	UL_E137861 UL_E345003

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	92 mm
Package Level 1 Depth / Length	102 mm
Package Level 1 Height	50 mm
Package Level 1 Gross Weight	0.325 kg
Package Level 1 EAN	4013614400285
Package Level 2 Units	40 piece
Package Level 2 Width	280 mm
Package Level 2 Depth / Length	395 mm
Package Level 2 Height	210 mm
Package Level 2 Gross Weight	13.386 kg
Package Level 2 EAN	4013614443732

## Classifications

Object Classification Code		F
ETIM 4	EC000074 - Motor protective circuit-breaker	
ETIM 5	EC000074 - Motor protective circuit-breaker	
ETIM 6	EC000074 - Motor protection circuit-breaker	
ETIM 7	EC000074 - Motor protection circuit-breaker	
eClass		7.0 27370401
UNSPSC		39121521
IDEA Granular Category 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
1SAM101924R0013	MSEX-30 Driver Shaft	MSEX-30	1	piece
1SAM101924R0003	MSEX-32 Driver Shaft	MSEX-32	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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## Categories

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

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

