# MS132-12





#### MS132-12 Manual Motor Starter

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#### **General Information**

Extended Product Type	MS132-12
Product ID	1SAM350000R1012
EAN	4013614400124
Catalog Description	MS132-12 Manual Motor Starter
Long Description	The MS132-12 manual motor starter (also known as motor protection circuit breaker or manual motor protector) is a compact 45 mm width device with a rated operational current of le = 12.0 Å. 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 lcs = 100 kA at 400 VAC and trip class 10. Further features are the build-in disconnect function, temperature compensation, trip-free mechanism and a rotary handle with a clear switch position indication. The manual motor starter is suitable for three- and single-phase applications. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signaling contacts, undervoltage releases, shunt trips, 3-phase bus bars, power in-feed blocks are available as accessory.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85362010

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## Popular Downloads

Data Sheet, Technical Information	2CDC131021D0201
Data Sheet, Technical Information (Part 3)	1SAM300507F0001 1SAM300507F0003 1SAM300508F0001 1SAM300508F0003
Instructions and Manuals	2CDC131022M6802
Instructions and Manuals (Part 2)	2CDC131085M0201
Time-Current Characteristic Curve	1SAM300505F0012
Dimension Diagram	1SAM300402F0002

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#### 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

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## Technical

Rated Service Short-Circuit Breaking Capacity (I <sub>cs</sub> )	(230 V AC) 100 kA (250 V DC) 3 Poles in Series 10 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 <sub>cu</sub> )	(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 $(I_i)$	180 A
Setting Range	8.0 12 A
Rated Operational Power AC-3 ( $P_e$ )	(400 V) Three Phase 5.5 kW
Rated Operational Voltage	Main Circuit 690 V AC Main Circuit 250 V DC
Rated Operational Current (I <sub>e</sub> )	12 A
Rated Operational Current AC-3 (I <sub>e</sub> )	12 A
Rated Operational Current DC-5 (I <sub>e</sub> )	12 A
Rated Frequency (f)	Main Circuit 50 Hz 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 1.0 2.3 W
Number of Poles	3
Conventional Free-air Thermal Current (I <sub>th</sub> )	Main Circuit 12 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP10
Pollution Degree	3
Electrical Durability	50000 cycle
Mechanical Durability	100000 cycle
Terminal Type	Screw Terminals
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.75 6 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	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 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

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UL 60947-4-1

Remarks	UL508 Self-Protected Combination Motor Controller (Type E) in combination with feeder block S1-M3-xx
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## Technical UL/CSA

Short-Circuit Current Rating (SCCR)	Manual Self-Protected Combination Controllers (Type E), (480Y / 277 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 35 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 35 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 18 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480 V AC) 30 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600 V AC) 18 kA
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Ampere Rating UL/CSA	12 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 3 Hp (208 V AC) Three Phase 3 Hp (220 240 V AC) Three Phase 3 Hp (440 480 V AC) Three Phase 7.5 Hp (550 600 V AC) Three Phase 10 Hp
Full Load Amps Motor Use	(200 V AC) Three Phase 11 A (208 V AC) Three Phase 10.6 A (220 240 V AC) Three Phase 9.6 A (440 480 V AC) Three Phase 11 A (550 600 V AC) Three Phase 11 A
Locked Rotor Amps	(200 V AC) Three Phase 73.6 A (208 V AC) Three Phase 71 A (220 240 V AC) Three Phase 64 A (440 480 V AC) Three Phase 63.5 A (550 600 V AC) Three Phase 64.8 A
General Use Rating UL/CSA	(600 V AC) 12 A
Connecting Capacity Main Circuit UL/CSA	Flexible 1/2x 16-8 AWG Stranded 1/2x 16-8 AWG
Tightening Torque UL/CSA	Main Circuit 18 in·lb

## Environmental

Ambient Air Temperature	Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C Storage -50 +80 °C
Ambient Air Temperature Compensation	Yes
Maximum Operating Altitude Permissible	2000 m
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

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## Certificates and Declarations (Document Number)

ABS Certificate	1SAA963001-0101
ATEX Certificate	1SAA963000-3902
BV Certificate	1SAA963001-0202
CB Certificate	1SAA963002-2001
CCC Certificate	1SAA963001-3805
cUL Certificate	cUL_E137861 cUL_E345003
cULus Certificate	cUL_E137861
Declaration of Conformity - CE	1SAD938511-0125