

## 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 is a compact 45 mm width devices with a rated operational current of $I_e = 12.0$ A. 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 $I_{cs} = 100$ kA at 400 VAC and the 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, signalling contacts, undervoltage releases, shunt trips, 3-phase bus bars, power in-feed blocks are available as accessory.

## Categories

Products » Low Voltage Products and Systems » Circuit Breakers » Manual Motor Starters
Products » Low Voltage Products and Systems » Control Products » Manual Motor Starters » Manual Motor Starters

## Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85362010
EAN:	4013614400124

## Container Information

Package Level 1 Width:	92 mm
Package Level 1 Length:	102 mm
Package Level 1 Height:	50 mm
Package Level 1 Gross Weight:	0.325 kg
Package Level 2 Units:	40 piece
Package Level 2 Width:	280 mm
Package Level 2 Length:	395 mm
Package Level 2 Height:	210 mm
Package Level 2 Gross Weight:	13.386 kg
Package Level 2 EAN:	4013614409028
Package Level 1 Units:	1 piece

## Dimensions

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

## Technical

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 ( $I_i$ ):	180 A
Setting Range:	8 ... 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 ( $I_e$ ):	12 A
Rated Operational Current AC-3 ( $I_e$ ):	12 A
Rated Operational Current DC-5 ( $I_e$ ):	12 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

<b>Power Loss:</b>	at Rated Operating Conditions per Pole 1.0 ... 2.3 W
<b>Number of Poles:</b>	3
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	Main Circuit 12 A
<b>Degree of Protection:</b>	Housing IP20 Main Circuit Terminals IP10
<b>Pollution Degree:</b>	3
<b>Electrical Durability:</b>	50000 cycle
<b>Mechanical Durability:</b>	100000 cycle
<b>Connecting Capacity Main Circuit:</b>	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>
<b>Tightening Torque:</b>	Main Circuit 2 N·m
<b>Wire Stripping Length:</b>	Main Circuit 10 mm
<b>Recommended Screw Driver:</b>	Pozidriv 2
<b>Mounting Position:</b>	Position 1 to 6
<b>Actuator Type:</b>	Rotary Handle
<b>Contact Position Indication:</b>	ON / OFF / TRIP
<b>Mounting on DIN Rail:</b>	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
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-1 UL 60947-4-1
<b>Rated Service Short-Circuit Breaking Capacity (I<sub>cs</sub>):</b>	(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

## Environmental

<b>Ambient Air Temperature Compensation:</b>	Yes
<b>Maximum Operating Altitude Permissible:</b>	2000 m
<b>Resistance to Shock acc. to IEC 60068-2-27:</b>	11 ms Pulse 25g
<b>Resistance to Vibrations acc. to IEC 60068-2-6:</b>	5g / 3 ... 150 Hz
<b>RoHS Status:</b>	Following EU Directive 2002/95/EC August 18, 2005 and amendment
<b>Ambient Air Temperature:</b>	Around the Enclosure 0 ... +40 °C Operation -25 ... +70 °C Operation Compensated -25 ... +60 °C Storage -50 ... +80 °C

## Technical UL/CSA

<b>Horsepower Rating UL/CSA:</b>	(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
<b>Ampere Rating UL/CSA:</b>	12 A
<b>General Use Rating UL/CSA:</b>	(600 V AC) 12 A
<b>Connecting Capacity Main Circuit UL/CSA:</b>	Flexible 1/2x 16-8 AWG Stranded 1/2x 16-8 AWG
<b>Tightening Torque UL/CSA:</b>	Main Circuit 18 in·lb
<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V AC

## Certificates and Declarations (Document Number)

<b>Data Sheet, Technical Information (Part 2):</b>	1SAM300505F0012
<b>Data Sheet, Technical Information (Part 3):</b>	1SAM300507F0001 1SAM300507F0003 1SAM300508F0001 1SAM300508F0003
<b>Instructions and Manuals:</b>	2CDC131022M6802
<b>ABS Certificate:</b>	1SAA963001-0101

<b>ATEX Certificate:</b>	1SAA963000-3901
<b>BV Certificate:</b>	1SAA963001-0201
<b>CB Certificate:</b>	1SAA963002-2001
<b>CCC Certificate:</b>	1SAA963001-3804
<b>cUL Certificate:</b>	cUL_E137861 cUL_E345003
<b>cULus Certificate:</b>	cUL_E137861
<b>Data Sheet, Technical Information:</b>	2CDC131021D0201
<b>Declaration of Conformity - CE:</b>	1SAD938510-0125
<b>DNV Certificate:</b>	1SAA963001-0303
<b>EAC Certificate:</b>	1SAA963000-2701
<b>GL Certificate:</b>	1SAA963001-0401
<b>GOST Certificate:</b>	1SAA963001-2702
<b>LR Certificate:</b>	1SAA963001-0502
<b>RINA Certificate:</b>	1SAA963000-0802
<b>RMRS Certificate:</b>	1SAA918000-0703
<b>RoHS Information:</b>	1SAA963002-4405
<b>UL Certificate:</b>	UL_E137861 UL_E345003

### Classifications

<b>E-nummer:</b>	3112131
<b>ETIM 4:</b>	EC000074 - Motor protective circuit-breaker
<b>ETIM 5:</b>	EC000074 - Motor protective circuit-breaker
<b>ETIM 6:</b>	EC000074 - Motor protection circuit-breaker
<b>eClass:</b>	7.0 27370401
<b>UNSPSC:</b>	39121521
<b>Object Classification Code:</b>	F

