# MS132-20



## **General Information**

Extended Product Type:	MS132-20
Product ID:	1SAM350000R1013
EAN:	4013614400131
Catalog Description:	MS132-20 Manual Motor Starter
Long Description:	The MS132-20 manual motor starter is a compact 45 mm width devices with a rated operational current of le = 20.0 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 lcs = 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 ~ ~ ....

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85362010
EAN:	4013614400131

## **Container Information**

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:	4013614409035
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 <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 ( $I_i$ ):	300 A
Setting Range:	16 20 A
Rated Operational Power AC-3 (Pe):	(400 V) Three Phase 7.5 kW
Rated Operational Voltage:	Main Circuit 690 V AC Main Circuit 250 V DC
Rated Operational Current (Ie):	20 A
Rated Operational Current AC-3 (Ie):	20 A
Rated Operational Current DC-5 (Ie):	20 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 (Ui):	690 V

Power Loss:	at Rated Operating Conditions per Pole 1.5 2.3 W
Number of Poles:	3
Conventional Free-air Thermal Current (I <sub>th</sub> ):	Main Circuit 20 A
Degree of Protection:	Housing IP20 Main Circuit Terminals IP10
Pollution Degree:	3
Electrical Durability:	50000 cycle
Mechanical Durability:	100000 cycle
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
Actuator Type:	Rotary Handle
Contact Position Indication:	ON / OFF / TRIP
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
Standards:	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-1 UL 60947-4-1
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
Environmental	
Ambient Air Temperature Compensation:	Yes
Maximum Operating Altitude	2000 m
Permissible:	
Resistance to Shock acc. to IEC 60068-2-27:	11 ms Pulse 25g
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6:	11 ms Pulse 25g 5g / 3 150 Hz
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status:	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6:	11 ms Pulse 25g 5g / 3 150 Hz
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status:	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Ambient Air Temperature:	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Ambient Air Temperature: Technical UL/CSA	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C Storage -50 +80 °C (220 240 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 10 Hp
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Ambient Air Temperature: <u>Technical UL/CSA</u> Horsepower Rating UL/CSA:	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C Storage -50 +80 °C (220 240 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 10 Hp (550 600 V AC) Three Phase 15 Hp
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Ambient Air Temperature: <u>Technical UL/CSA</u> Horsepower Rating UL/CSA:	11 ms Pulse 25g   5g / 3 150 Hz   Following EU Directive 2002/95/EC August 18, 2005 and amendment   Around the Enclosure 0 +40 °C   Operation -25 +70 °C   Operation Compensated -25 +60 °C   Storage -50 +80 °C   (220 240 V AC) Three Phase 5 Hp   (440 480 V AC) Three Phase 10 Hp   (550 600 V AC) Three Phase 15 Hp   20 A
Resistance to Shock acc. to IEC   60068-2-27:   Resistance to Vibrations acc. to IEC   60068-2-6:   RoHS Status:   Ambient Air Temperature:   Technical UL/CSA   Horsepower Rating UL/CSA:   Ampere Rating UL/CSA:   General Use Rating UL/CSA:   Connecting Capacity Main Circuit	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C Storage -50 +80 °C (220 240 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 10 Hp (550 600 V AC) Three Phase 15 Hp 20 A (600 V AC) 20 A Flexible 1/2x 16 8 AWG
Resistance to Shock acc. to IEC   60068-2-27:   Resistance to Vibrations acc. to IEC   60068-2-6:   RoHS Status:   Ambient Air Temperature:   Technical UL/CSA   Horsepower Rating UL/CSA:   General Use Rating UL/CSA:   Connecting Capacity Main Circuit   UL/CSA:	11 ms Pulse 25g   5g / 3 150 Hz   Following EU Directive 2002/95/EC August 18, 2005 and amendment   Around the Enclosure 0 +40 °C   Operation -25 +70 °C   Operation Compensated -25 +60 °C   Storage -50 +80 °C   (220 240 V AC) Three Phase 5 Hp   (440 480 V AC) Three Phase 10 Hp   (550 600 V AC) Three Phase 15 Hp   20 A   (600 V AC) 20 A   Flexible 1/2x 16 8 AWG   Stranded 1/2x 16 8 AWG
Resistance to Shock acc. to IEC 60068-2-27: Resistance to Vibrations acc. to IEC 60068-2-6: RoHS Status: Ambient Air Temperature: Technical UL/CSA Horsepower Rating UL/CSA: Ampere Rating UL/CSA: General Use Rating UL/CSA: Connecting Capacity Main Circuit UL/CSA: Tightening Torque UL/CSA: Maximum Operating Voltage UL/CSA:	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C Storage -50 +80 °C (220 240 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 10 Hp (550 600 V AC) Three Phase 15 Hp 20 A (600 V AC) 20 A Flexible 1/2x 16 8 AWG Stranded 1/2x 16 8 AWG Main Circuit 18 in·lb Main Circuit 600 V AC
Resistance to Shock acc. to IEC   60068-2-27:   Resistance to Vibrations acc. to IEC   60068-2-6:   RoHS Status:   Ambient Air Temperature:   Technical UL/CSA   Horsepower Rating UL/CSA:   General Use Rating UL/CSA:   Connecting Capacity Main Circuit   UL/CSA:   Tightening Torque UL/CSA:   Maximum Operating Voltage	11 ms Pulse 25g 5g / 3 150 Hz Following EU Directive 2002/95/EC August 18, 2005 and amendment Around the Enclosure 0 +40 °C Operation -25 +70 °C Operation Compensated -25 +60 °C Storage -50 +80 °C (220 240 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 5 Hp (440 480 V AC) Three Phase 10 Hp (550 600 V AC) Three Phase 15 Hp 20 A (600 V AC) 20 A Flexible 1/2x 16 8 AWG Stranded 1/2x 16 8 AWG Main Circuit 18 in·lb Main Circuit 600 V AC

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

ATEX Certificate:	1SAA963000-3901
BV Certificate:	1SAA963001-0201
CB Certificate:	1SAA963002-2001
CCC Certificate:	1SAA963001-3804
cUL Certificate:	cUL_E137861 cUL_E345003
cULus Certificate:	cUL_E137861
Data Sheet, Technical Information:	2CDC131021D0201
Declaration of Conformity - CE:	1SAD938509-0125
DNV Certificate:	1SAA963001-0303
EAC Certificate:	1SAA963000-2701
GL Certificate:	1SAA963001-0401
GOST Certificate:	1SAA963001-2702
LR Certificate:	1SAA963001-0502
RINA Certificate:	1SAA963000-0802
RMRS Certificate:	1SAA918000-0703
RoHS Information:	1SAA963002-4405
UL Certificate:	UL_E137861 UL_E345003

### Classifications

E-nummer:	3112128
ETIM 4:	EC000074 - Motor protective circuit-breaker
ETIM 5:	EC000074 - Motor protective circuit-breaker
ETIM 6:	EC000074 - Motor protection circuit-breaker
eClass:	7.0 27370401
UNSPSC:	39121521
Object Classification Code:	F

