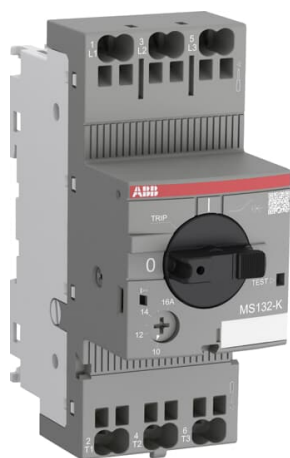


PRODUCT-DETAILS

MS132-1.6K

MS132-1.6K Manual Motor Starter



General Information

Extended Product Type	MS132-1.6K
Product ID	1SAM350010R1006
EAN	4013614400360
Catalog Description	MS132-1.6K Manual Motor Starter

Long Description

The MS132-1.6K 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 $I_e = 1.60$ A with Push-in spring terminals. 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 MS132-K manual motor starter offers a rated service short-circuit breaking capacity $I_{cs} = 100$ 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 MS132-K 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 and terminal spacers are available as accessory.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85362010

Popular Downloads

Data Sheet, Technical Information	1SBC100212C0203
Instructions and Manuals	2CDC131120M6801
Instructions and Manuals (Part 2)	2CDC131060M0202

Ex Operating Instructions	2CDC131063M6801
Time-Current Characteristic Curve	1SAM300505F0106
I ^t Characteristic	1SAM300507F0001 1SAM300507F0003
Cut-off Current Characteristic	1SAM300508F0001 1SAM300508F0003
CAD Dimensional Drawing	2CDC001079B0201
Installation Video	9AKK108466A6074 9AKK108466A6068
Marketing Video	9AKK107991A4712 2CDC131153V0201

Dimensions

Product Net Width	45 mm
Product Net Height	112 mm
Product Net Depth / Length	87 mm
Product Net Weight	0.298 kg

Technical

Rated Service Short-Circuit Breaking Capacity (I _{cs})	(230 V AC) 100 kA (250 V DC) 3 Poles in Series 10 kA (400 V AC) 100 kA (440 V AC) 100 kA (500 V AC) 100 kA (690 V AC) 100 kA
Rated Ultimate Short-Circuit Breaking Capacity (I _{cu})	(230 V AC) 100 kA (400 V AC) 100 kA (440 V AC) 100 kA (500 V AC) 100 kA (690 V AC) 100 kA
Rated Instantaneous Short-Circuit Current Setting (I _i)	20 A
Setting Range	1.0 ... 1.6 A
Rated Operational Power AC-3 (P _e)	(400 V) Three Phase 0.55 kW
Rated Operational Power AC-3e (P _e)	(400 V) Three Phase 0.55 kW
Rated Operational Voltage	Main Circuit 690 V AC Main Circuit 250 V DC
Rated Operational Current (I _e)	1.6 A
Rated Operational Current AC-3 (I _e)	1.6 A
Rated Operational Current AC-3e (I _e)	1.6 A
Rated Operational Current DC-5 (I _e)	1.6 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 0.6 ... 1.7 W
Number of Poles	3
Conventional Free-air Thermal Current (I _{th})	Main Circuit 1.6 A
Degree of Protection	Housing IP20 Main Circuit Terminals IP20
Pollution Degree	3
Electrical Durability	50000 cycle

Mechanical Durability	100000 cycle
Terminal Type	Push-in Spring Terminals
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 0.5 ... 4 mm ² Flexible with Insulated Ferrule 1x 0.5 ... 4 mm ² Flexible with Insulated Ferrule 2x 0.5 ... 2.5 mm ² Flexible 1/2x 0.75 ... 4 mm ² Solid 1/2x 1 ... 2.5 mm ² Stranded 1/2x 1 ... 6 mm ²
Wire Stripping Length	Main Circuit 12 mm
Recommended Screw Driver	Pozidriv 2
Mounting Position	1 ... 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	UL508 Self-Protected Combination Motor Controller (Type E) in combination with terminal spacer TS1-M3-K

Technical UL/CSA

Short-Circuit Current Rating (SCCR)	Manual Self-Protected Combination Controllers (Type E), (480Y / 277 V AC) 65 kA Manual Self-Protected Combination Controllers (Type E), (600Y / 347 V AC) 47 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (480 V AC) 65 kA Any UL Listed Fuses or Circuit-Breakers, Group Installations (600 V AC) 47 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (480 V AC) 65 kA Any UL Listed Fuses or Circuit-Breakers, Motor Disconnect (600 V AC) 47 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (480Y / 277 V AC) 65 kA Any UL Listed Fuses or Circuit-Breakers, Tap Conductor Protection in Group Installations (600Y / 347 V AC) 47 kA
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Horsepower Rating UL/CSA	(440 ... 480 V AC) Three Phase 0.75 Hp (550 ... 600 V AC) Three Phase 0.75 Hp
Full Load Amps Motor Use	(200 V AC) Three Phase 1.6 A (208 V AC) Three Phase 1.6 A (220 ... 240 V AC) Three Phase 1.6 A (440 ... 480 V AC) Three Phase 1.6 A
Locked Rotor Amps	(200 V AC) Three Phase 9.6 A (208 V AC) Three Phase 9.6 A (220 ... 240 V AC) Three Phase 9.6 A (440 ... 480 V AC) Three Phase 9.6 A (550 ... 600 V AC) Three Phase 9.6 A
General Use Rating UL/CSA	(600 V AC) 1.6 A
Connecting Capacity Main Circuit UL/CSA	Stranded 1/2x 18-10 AWG Stranded 1x 8 AWG

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.	11 ms Pulse 25g

to IEC 60068-2-27

Resistance to Vibrations
acc. to IEC 60068-2-6

5g / 3 ... 150 Hz

RoHS Status

Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Certificates and Declarations (Document Number)

ABS Certificate	1SAA963001-0101
ATEX Certificate	1SAA963000-3902
CB Certificate	1SAA963002-2002
CQC Certificate	CQC2017010307034621
Cut-off Current Characteristic	1SAM300508F0001 1SAM300508F0003
Declaration of Conformity - CCC	2020980307004600
Declaration of Conformity - CE	1SAD101100-3402
Declaration of Conformity - UKCA	1SAD201100-3402
EAC Certificate	1SAA963004-2701
Environmental Information	1SAC200049H0009
I _{pt} Characteristic	1SAM300507F0001 1SAM300507F0003
IECEX Certificate	1SAA963000-4001
Instructions and Manuals	2CDC131120M6801
Instructions and Manuals (Part 2)	2CDC131060M0202
KC Certificate	1SAA963002-1502
RINA Certificate	1SAA963002-0802
RoHS Information	1SAD101100-3402
Time-Current Characteristic Curve	1SAM300505F0106
UL Certificate	E137861-20090225

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	50 mm
Package Level 1 Depth / Length	117 mm
Package Level 1 Height	82 mm
Package Level 1 Gross Weight	0.324 kg
Package Level 1 EAN	4013614400360
Package Level 2 Units	carton 28 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	14.026 kg
Package Level 2 EAN	4013614522680

Classifications

Object Classification Code	F
ETIM 5	EC000074 - Motor protective circuit-breaker
ETIM 6	EC000074 - Motor protection circuit-breaker
ETIM 7	EC000074 - Motor protection circuit-breaker
ETIM 8	EC000074 - Motor protection circuit-breaker
eClass	V11.0 : 27370401
UNSPSC	39121521
IDEA Granular Category Code (IGCC)	4845 >> 3 Pole Motor Circuit Protector Circuit Breakers

E-Number (Finland)	3707836
E-Number (Sweden)	3110455

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 Signaling Contact	SK1-20	1	piece
1SAM201903R1202	SK1-20K Signaling Contact	SK1-20K	1	piece
1SAM201903R1005	SK1-20AR Signaling Contact	SK1-20AR	1	piece
1SAM201903R1205	SK1-20ARK Signaling Contact	SK1-20ARK	1	piece
1SAM201903R1001	SK1-11 Signaling Contact	SK1-11	1	piece
1SAM201903R1201	SK1-11K Signaling Contact	SK1-11K	1	piece
1SAM201903R1004	SK1-11AR Signaling Contact	SK1-11AR	1	piece
1SAM201903R1204	SK1-11ARK Signaling Contact	SK1-11ARK	1	piece
1SAM201903R1003	SK1-02 Signaling Contact	SK1-02	1	piece
1SAM201903R1203	SK1-02K Signaling Contact	SK1-02K	1	piece
1SAM201903R1006	SK1-02AR Signaling Contact	SK1-02AR	1	piece
1SAM201903R1206	SK1-02ARK Signaling Contact	SK1-02ARK	1	piece
1SAM301901R1002	CK1-20 Short Circuit Signaling Contact	CK1-20	1	piece
1SAM301901R1001	CK1-11 Short Circuit Signaling Contact	CK1-11	1	piece
1SAM301901R1003	CK1-02 Short Circuit Signaling Contact	CK1-02	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
1SAM301903R1002	PS1-2-0-65K Busbar	PS1-2-0-65K	1	piece
1SAM301903R1003	PS1-3-0-65K Busbar	PS1-3-0-65K	1	piece
1SAM301903R1004	PS1-4-0-65K Busbar	PS1-4-0-65K	1	piece
1SAM301903R1005	PS1-5-0-65K Busbar	PS1-5-0-65K	1	piece
1SAM301903R1012	PS1-2-1-65K Busbar	PS1-2-1-65K	1	piece
1SAM301903R1013	PS1-3-1-65K Busbar	PS1-3-1-65K	1	piece
1SAM301903R1014	PS1-4-1-65K Busbar	PS1-4-1-65K	1	piece
1SAM301903R1015	PS1-5-1-65K Busbar	PS1-5-1-65K	1	piece
1SAM201909R1001	FS116 Screw Fixing Kit	FS116	1	piece
1SAM301913R1001	TS1-M3-K Terminal Spacer	TS1-M3-K	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

Categories

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

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

