MS116-0.16

General Information

Extended Product Type:	MS116-0.16
Product ID:	1SAM250000R1001
EAN:	4013614320248
Catalog Description:	MS116-0.16 Manual Motor Starter
Long Description:	The MS116-0.16 manual motor starter is a compact 45 mm width devices with a rated operational current of Ie = 0.16 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 Ics = 50 kA at 400 VAC and the trip class 10A. 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. Auxiliary contacts, signalling contacts, undervoltage releases, shunt trips, 3-phase bus bars, power in-feed blocks and locking devices for protection against unauthorized changes 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

Accessories Show accessory images

Identifier	Type	Description	Qty
1SAM201901R1002	HKF1-20	HKF1-20 Auxiliary Contact	1
1SAM201901R1001	HKF1-11	HKF1-11 Auxiliary Contact	1
1SAM201902R1001	HK1-11	HK1-11 Auxiliary Contact	1
1SAM201902R1002	HK1-20	HK1-20 Auxiliary Contact	1
1SAM201902R1003	HK1-02	HK1-02 Auxiliary Contact	1
1SAM201902R1004	HK1-20L	HK1-20L Auxiliary Contact	1
1SAM201903R1001	SK1-11	SK1-11 Signal Contact	1
1SAM201903R1002	SK1-20	SK1-20 Signal Contact	1
1SAM201903R1003	SK1-02	SK1-02 Signal Contact	1
1SAM201904R1001	UA1-24	UA1-24 Undervoltage Release	1
1SAM201904R1004	UA1-110	UA1-110 Undervoltage Release	1
1SAM201904R1005	UA1-230	UA1-230 Undervoltage Release	1
1SAM201904R1006	UA1-400	UA1-400 Undervoltage Release	1
1SAM201904R1007	UA1-415	UA1-415 Undervoltage Release	1
1SAM201906R1102	PS1-2-0-65	PS1-2-0-65 3-Phase Busbar	1
1SAM201906R1103	PS1-3-0-65	PS1-3-0-65 3-Phase Busbar	1
1SAM201906R1104	PS1-4-0-65	PS1-4-0-65 3-Phase Busbar	1
1SAM201906R1105	PS1-5-0-65	PS1-5-0-65 3-Phase Busbar	1
1SAM201906R1112	PS1-2-1-65	PS1-2-1-65 3-Phase Busbar	1
1SAM201906R1113	PS1-3-1-65	PS1-3-1-65 3-Phase Busbar	1
1SAM201906R1114	PS1-4-1-65	PS1-4-1-65 3-Phase Busbar	1
1SAM201906R1115	PS1-5-1-65	PS1-5-1-65 3-Phase Busbar	1
1SAM201906R1122	PS1-2-2-65	PS1-2-2-65 3-Phase Busbar	1
1SAM201906R1123	PS1-3-2-65	PS1-3-2-65 3-Phase Busbar	1
1SAM201906R1124	PS1-4-2-65	PS1-4-2-65 3-Phase Busbar	1
1SAM201906R1125	PS1-5-2-65	PS1-5-2-65 3-Phase Busbar	1
1SAM201907R1101	S1-M1-25	S1-M1-25 3-Phase Power Infeed Block	1

1SAM201907R1102	S1-M2-25	S1-M2-25 3-Phase Power Infeed Block	1
1SAM201907R1103	S1-M3-25	S1-M3-25 3-Phase Power Infeed Block	1
1SAM201908R1001	BS1-3	BS1-3 Protection Cover	1
1SAM201910R1001	AA1-24	AA1-24 Shunt Trip	1
1SAM201910R1002	AA1-110	AA1-110 Shunt Trip	1
1SAM201910R1003	AA1-230	AA1-230 Shunt Trip	1
1SAM201910R1004	AA1-400	AA1-400 Shunt Trip	1
1SAM201911R1010	IB132-G	IB132-G Enclosure	1
1SAM201911R1012	IB132-F	IB132-F Enclosure	1
1SAM201912R1010	DMS132-G	DMS132-G Door Mounting Kit	1
1SAM201912R1011	DMS132-Y	DMS132-Y Door Mounting Kit	1
1SAM201913R1103	S1-M3-35	S1-M3-35 3-Phase Power Infeed Block	1
1SAM201916R1103	PS1-3-0-100	PS1-3-0-100 3-Phase Busbar	1
1SAM201916R1104	PS1-4-0-100	PS1-4-0-100 3-Phase Busbar	1
1SAM201916R1105	PS1-5-0-100	PS1-5-0-100 3-Phase Busbar	1
1SAM201916R1113	PS1-3-1-100	PS1-3-1-100 3-Phase Busbar	1
1SAM201916R1115	PS1-5-1-100	PS1-5-1-100 3-Phase Busbar	1
1SAM201916R1123	PS1-3-2-100	PS1-3-2-100 3-Phase Busbar	1
1SAM201920R1001	MSHD-LB	MSHD-LB Handles	1
1SAM201920R1002	MSHD-LY	MSHD-LY Handles	1
1SAM201920R1011	MSHD-LTB	MSHD-LTB Handles	1
1SAM201920R1012	MSHD-LTY	MSHD-LTY Handles	1
1SAM201909R1021	MSAH1	MSAH1 Shaft Supporter	1

Ordering

EAN:	4013614320248
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85362010

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	92.0 mm
Package Level 1 Length:	95.0 mm
Package Level 1 Height:	50.0 mm
Package Level 1 Gross Weight:	0.240 kg
Package Level 2 Units:	40 piece
Package Level 2 Width:	280.0 mm
Package Level 2 Length:	395.0 mm
Package Level 2 Height:	210.0 mm
Package Level 2 Gross Weight:	9.986 kg
Package Level 2 EAN:	4013614408618

Dimensions

Product Net Width:	45.0 mm
Product Net Height:	90.0 mm
Product Net Depth:	85.6 mm
Product Net Weight:	0.225 kg

Technical

Rated Service Short-Circuit Breaking Capacity (I_{cs}):	(230V AC) 50.0 kA (400V AC) 50.0 kA (440V AC) 30.0 kA (500V AC) 30.0 kA (690V AC) 30.0 kA

Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}):	(230V AC) 50.0 kA (400V AC) 50.0 kA (440V AC) 30.0 kA (500V AC) 30.0 kA (690V AC) 30.0 kA
Rated Instantaneous Short-Circuit Current Setting (I_i):	2.0 A
Setting Range:	0.10 ... 0.16 A
Rated Operational Power AC-3 (P_e):	(400V) Three Phase 0.03 kW
Rated Operational Voltage:	Main Circuit 690 V AC
Rated Operational Current (I_e):	0.16 A
Rated Operational Current AC-3 (I_e):	0.16 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:	Per Pole 0.7 ... 1.7 W
Number of Poles:	3
Conventional Free-air Thermal Current (I_{th}):	Main Circuit 0.16 A
Degree of Protection:	IP20
Pollution Degree:	3
Electrical Durability:	100000 cycle
Mechanical Durability:	100000 cycle
Connecting Capacity-Main Circuit:	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm² Flexible 1/2x 0.75 ... 2.5 mm² Rigid 1/2x 1 ... 4 mm²
Tightening Torque:	Main Circuit 0.8 ... 1.2 N·m
Wire Stripping Length:	Main Circuit 9 mm
Recommended Screw Driver:	M3.5
Mounting Position:	Position 1 to 6
Actuator Type:	Rotary Handle
Contact Position Indication:	ON / OFF
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

Environmental

Ambient Air Temperature:	Around the Enclosure 0 ... +40 °C Operation -25 ... +70 °C Operation Compensated -25 ... +55 °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 250 m/s²
Resistance to Vibrations acc. to IEC 60068-2-6:	5g / 3 ... 150 Hz
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V AC
Ampere Rating UL/CSA:	0.16 A
General Use Rating UL/CSA:	600V AC 0.16 A
Connecting Capacity-Main Circuit UL/CSA:	Flexible 1/2x 16 ... 12 AWG Stranded 1/2x 16 ... 12 AWG
Tightening Torque UL/CSA:	Main Circuit 10 in·lb

Certificates and Declarations (Document Number)

ABS Certificate:	1SAA963000-0102
BV Certificate:	1SAA963000-0202
CB Certificate:	1SAA963000-2002
CCC Certificate:	1SAA963000-3803
cUL Certificate:	cUL_E137861
Declaration of Conformity - CE:	1SAD938515-0060
DNV Certificate:	1SAA963000-0302
EAC Certificate:	1SAA963000-2701
GL Certificate:	1SAA963000-0402
GOST Certificate:	1SAA937000-2703
LR Certificate:	1SAA963000-0504
RMRS Certificate:	1SAA918000-0703
RoHS Information:	1SAA963001-4407
UL Certificate:	UL_E137861

Classifications

Object Classification Code:	F
E-nummer:	3111930
UNSPSC:	39121521