

# MS116-2.5



Products Low Voltage Products and Systems Circuit Breakers Manual Motor Starters

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## General Information

<b>Extended Product Type:</b>	MS116-2.5
<b>Product ID:</b>	1SAM250000R1007
<b>EAN:</b>	4013614320309
<b>Catalog Description:</b>	MS116-2.5 Manual Motor Starter
<b>Long Description:</b>	The MS116-2.5 manual motor starter is a compact 45 mm width devices with a rated operational current of $I_n = 2.5$ 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 $I_{cs} = 50$ 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.

## Additional Information

<b>ABS Certificate:</b>	1SAA963000-0104
<b>Actuator Type:</b>	Rotary Handle
<b>Ambient Air Temperature:</b>	Around the Enclosure 0 ... +40 °C Operation -25 ... +70 °C Operation Compensated -25 ... +55 °C Storage -50 ... +80 °C
<b>Ambient Air Temperature Compensation:</b>	Yes
<b>Ampere Rating UL/CSA:</b>	2.5 A
<b>BV Certificate:</b>	1SAA963000-0204
<b>CB Certificate:</b>	1SAA963000-2003
<b>CCC Certificate:</b>	1SAA963000-3804
<b>Connecting Capacity Main Circuit UL/CSA:</b>	Flexible 1/2x 16-12 AWG Stranded 1/2x 16-12 AWG
<b>Connecting Capacity Main Circuit:</b>	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup>
<b>Contact Position Indication:</b>	ON / OFF
<b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b>	Main Circuit 2.5 A
<b>Country of Origin:</b>	Germany (DE)
<b>Customs Tariff Number:</b>	85362010
<b>DNV Certificate:</b>	1SAA963000-0303
<b>Data Sheet, Technical Information:</b>	2CDC131025D0201
<b>Data Sheet, Technical Information (Part 2):</b>	1SAM200505F0007
<b>Data Sheet, Technical Information (Part 3):</b>	1SAM200507F0001 1SAM200507F0002 1SAM200507F0003 1SAM200508F0001 1SAM200508F0002 1SAM200508F0003
<b>Declaration of Conformity - CE:</b>	1SAD938517-0060
<b>Degree of Protection:</b>	Housing IP20 Main Circuit Terminals IP40

## Main Circuit Terminals IP10

<b>Dimension Diagram:</b>	1SAM200422F0001
<b>E-number:</b>	3111942
<b>EAC Certificate:</b>	1SAA963000-2701
<b>EAN:</b>	4013614320309
<b>EPLAN Catalog Tree:</b>	Electrical engineering / Protection devices / Motor overload switch
<b>EPLAN Function Definition:</b>	Motor overload switch / Motor overload switch, 6 connection points / Motor overload switch three-pole 1_2_3_4_5_6
<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>Electrical Durability:</b>	100000 cycle
<b>Environmental Information:</b>	1SAA963001-2401
<b>GL Certificate:</b>	1SAA963000-0402
<b>GOST Certificate:</b>	1SAA963001-2702
<b>General Use Rating UL/CSA:</b>	(600 V AC) 2.5 A
<b>Horsepower Rating UL/CSA:</b>	(220 ... 240 V AC) Three Phase 0.5 Hp (440 ... 480 V AC) Three Phase 1 Hp (550 ... 600 V AC) Three Phase 1.5 Hp
<b>IIT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	2CDC131011M6802
<b>Invoice Description:</b>	MS116-2.5 Manual Motor Starter Trip class 10A, 1.6 ... 2.5A
<b>LR Certificate:</b>	1SAA963000-0505
<b>Maximum Operating Altitude Permissible:</b>	2000 m
<b>Maximum Operating Voltage UL/CSA:</b>	Main Circuit 600 V AC
<b>Mechanical Durability:</b>	100000 cycle
<b>Minimum Order Quantity:</b>	1 piece
<b>Mounting Position:</b>	Position 1 to 6
<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>Number of Poles:</b>	3
<b>Number of Protected Poles:</b>	3
<b>Object Classification Code:</b>	F
<b>Package Level 1 EAN:</b>	4013614320309
<b>Package Level 1 Gross Weight:</b>	0.28 kg
<b>Package Level 1 Height:</b>	50 mm
<b>Package Level 1 Length:</b>	95 mm
<b>Package Level 1 Units:</b>	1 piece
<b>Package Level 1 Width:</b>	92 mm
<b>Package Level 2 EAN:</b>	4013614408670
<b>Package Level 2 Gross Weight:</b>	11.586 kg
<b>Package Level 2 Height:</b>	210 mm
<b>Package Level 2 Length:</b>	395 mm
<b>Package Level 2 Units:</b>	40 piece
<b>Package Level 2 Width:</b>	280 mm
<b>Phase Loss Sensitive:</b>	Yes
<b>Pollution Degree:</b>	3
<b>Power Loss:</b>	at Rated Operating Conditions per Pole 0.7 ... 1.8 W
<b>Product Main Type:</b>	MS116

<b>Product Name:</b>	Manual Motor Starter
<b>Product Net Depth:</b>	85.6 mm
<b>Product Net Height:</b>	90 mm
<b>Product Net Weight:</b>	0.265 kg
<b>Product Net Width:</b>	45 mm
<b>RMRS Certificate:</b>	1SAA918000-0704
<b>Rated Current (I<sub>n</sub>):</b>	2.5 A
<b>Rated Frequency (f):</b>	Main Circuit 50 Hz Main Circuit 60 Hz
<b>Rated Impulse Withstand Voltage (U<sub>imp</sub>):</b>	Main Circuit 6 kV
<b>Rated Instantaneous Short-Circuit Current Setting (I<sub>i</sub>):</b>	31.3 A
<b>Rated Insulation Voltage (U<sub>i</sub>):</b>	690 V
<b>Rated Operational Current (I<sub>e</sub>):</b>	2.5 A
<b>Rated Operational Current AC-3 (I<sub>e</sub>):</b>	2.5 A
<b>Rated Operational Power AC-3 (P<sub>e</sub>):</b>	(400 V) Three Phase 0.75 kW
<b>Rated Operational Voltage:</b>	Main Circuit 690 V AC
<b>Rated Service Short-Circuit Breaking Capacity (I<sub>cs</sub>):</b>	(230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 10 kA (500 V AC) 10 kA (690 V AC) 5 kA
<b>Rated Service Short-Circuit Breaking Capacity, in % of I<sub>cu</sub> (I<sub>cs</sub>):</b>	100 %
<b>Rated Ultimate Short-Circuit Breaking Capacity (I<sub>cu</sub>):</b>	(230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 10 kA (500 V AC) 10 kA (690 V AC) 5 kA
<b>Rated Uninterrupted Current (I<sub>u</sub>):</b>	2.5 A
<b>Recommended Screw Driver:</b>	Pozidriv 2
<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 Date:</b>	1105
<b>RoHS Information:</b>	1SAD938517-0060
<b>RoHS Status:</b>	Following EU Directive 2011/65/EC
<b>Selectivity Category:</b>	A
<b>Selling Unit of Measure:</b>	piece
<b>Setting Range:</b>	1.6 ... 2.5 A
<b>Short Description:</b>	MS116-2.5 Manual Motor Starter
<b>Short-Circuit Protective Devices:</b>	gG Type Fuses 25 A, 440 V AC gG Type Fuses 25 A, 500 V AC gG Type Fuses 25 A, 690 V AC
<b>Standards:</b>	IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-1 UL 60947-4-1
<b>Suitable for Isolation:</b>	Yes
<b>Terminal Type:</b>	Screw Terminals
<b>Tightening Torque:</b>	Main Circuit 0.8 ... 1.2 N·m

<b>Tightening Torque UL/CSA:</b>	Main Circuit 10 in·lb
<b>Trip Class:</b>	10A
<b>UL Certificate:</b>	UL_E137861
<b>UNSPSC:</b>	39121521
<b>Utilization:</b>	Motor Protection
<b>Wire Stripping Length:</b>	Main Circuit 9 mm
<b>cUL Certificate:</b>	cUL_E137861
<b>eClass:</b>	7.0 27370401
<b>DNV GL Certificate:</b>	1SAA963000-0303
<b>KC Certificate:</b>	1SAA963000-1501

