

# MS116-0.25



Products Low Voltage Products and Systems Circuit Breakers Manual Motor Starters

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## General Information

<b>Extended Product Type:</b>	MS116-0.25
<b>Product ID:</b>	1SAM250000R1002
<b>EAN:</b>	4013614320255
<b>Catalog Description:</b>	MS116-0.25 Manual Motor Starter
<b>Long Description:</b>	The MS116-0.25 manual motor starter is a compact 45 mm width devices with a rated operational current of $I_e = 0.25$ 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>	0.25 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 0.25 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>	1SAM200505F0002
<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 Terminal IP40

Main Circuit Terminals I<sup>2</sup>TU

<b>Dimension Diagram:</b>	1SAM200422F0001
<b>E-number:</b>	3111932
<b>EAC Certificate:</b>	1SAA963000-2701
<b>EAN:</b>	4013614320255
<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) 0.25 A
<b>IT Publishing Status:</b>	Level 0 - Information enabled
<b>Industrial IT Certification Level:</b>	0
<b>Instructions and Manuals:</b>	2CDC131011M6802
<b>Invoice Description:</b>	MS116-0.25 Manual Motor Starter Trip class 10A, 0.16 ... 0.25A
<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>	4013614320255
<b>Package Level 1 Gross Weight:</b>	0.24 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>	4013614408625
<b>Package Level 2 Gross Weight:</b>	9.986 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 ... 1.7 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>	0.225 kg
<b>Product Net Width:</b>	45 mm
<b>RMRS Certificate:</b>	1SAA918000-0704
<b>Rated Current (<math>I_n</math>):</b>	0.25 A
<b>Rated Frequency (f):</b>	Main Circuit 50 Hz Main Circuit 60 Hz
<b>Rated Impulse Withstand Voltage (<math>U_{imp}</math>):</b>	Main Circuit 6 kV
<b>Rated Instantaneous Short-Circuit Current Setting (<math>I_t</math>):</b>	3.1 A
<b>Rated Insulation Voltage (<math>U_i</math>):</b>	690 V
<b>Rated Operational Current (<math>I_e</math>):</b>	0.25 A
<b>Rated Operational Current AC-3 (<math>I_e</math>):</b>	0.25 A
<b>Rated Operational Power AC-3 (<math>P_e</math>):</b>	(400 V) Three Phase 0.06 kW
<b>Rated Operational Voltage:</b>	Main Circuit 690 V AC
<b>Rated Service Short-Circuit Breaking Capacity (<math>I_{cs}</math>):</b>	(230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 30 kA (500 V AC) 30 kA (690 V AC) 30 kA
<b>Rated Service Short-Circuit Breaking Capacity, in % of <math>I_{cu}</math> (<math>I_{cs}</math>):</b>	100 %
<b>Rated Ultimate Short-Circuit Breaking Capacity (<math>I_{cu}</math>):</b>	(230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 30 kA (500 V AC) 30 kA (690 V AC) 30 kA
<b>Rated Uninterrupted Current (<math>I_u</math>):</b>	0.25 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>	0.16 ... 0.25 A
<b>Short Description:</b>	MS116-0.25 Manual Motor Starter
<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

**Wire Stripping Length:** Main Circuit 9 mm

**cUL Certificate:** cUL\_E137861

**eClass:** 7.0 27370401

**DNV GL Certificate:** 1SAA963000-0303

**KC Certificate:** 1SAA963000-1501

