

MS116-4.0



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

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General Information

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| Extended Product Type: | MS116-4.0 |
| Product ID: | 1SAM250000R1008 |
| EAN: | 4013614320316 |
| Catalog Description: | MS116-4.0 Manual Motor Starter |
| Long Description: | The MS116-4.0 manual motor starter is a compact 45 mm width devices with a rated operational current of $I_e = 4.0$ 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 $I_{cs} = 50$ 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

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| ABS Certificate: | 1SAA963000-0104 |
| Actuator Type: | Rotary Handle |
| 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 |
| Ampere Rating UL/CSA: | 4 A |
| BV Certificate: | 1SAA963000-0204 |
| CB Certificate: | 1SAA963000-2003 |
| CCC Certificate: | 1SAA963000-3804 |
| Connecting Capacity Main Circuit: | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible 1/2x 0.75 ... 2.5 mm ² Rigid 1/2x 1 ... 4 mm ² |
| Connecting Capacity Main Circuit UL/CSA: | Flexible 1/2x 16-12 AWG Stranded 1/2x 16-12 AWG |
| Contact Position Indication: | ON / OFF |
| Conventional Free-air Thermal Current (I_{th}): | Main Circuit 4 A |
| Core Credit: | 0.00 |
| Country of Origin: | Germany (DE) |
| Customs Tariff Number: | 85362010 |
| DNV Certificate: | 1SAA963000-0303 |
| DNV GL Certificate: | 1SAA963000-0303 |
| Data Sheet, Technical Information: | 2CDC131025D0201 |
| Data Sheet, Technical Information (Part 2): | 1SAM200505F0108 |
| Data Sheet, Technical Information (Part 3): | 1SAM200507F0001 1SAM200507F0002 1SAM200507F0003 1SAM200508F0001 1SAM200508F0002 1SAM200508F0003 |

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| Declaration of Conformity - CE: | 1SAD938517-0060 |
| Degree of Protection: | Housing IP20 Main Circuit Terminals IP10 |
| Dimension Diagram: | 1SAM200422F0001 |
| E-nummer: | 3111944 |
| EAC Certificate: | 1SAA963000-2701 |
| EAN: | 4013614320316 |
| EPLAN Catalog Tree: | Electrical engineering / Protection devices / Motor overload switch |
| EPLAN Function Definition: | Motor overload switch / Motor overload switch, 6 connection points / Motor overload switch three-pole 1_2_3_4_5_6 |
| ETIM 4: | EC000074 - Motor protective circuit-breaker |
| ETIM 5: | EC000074 - Motor protective circuit-breaker |
| ETIM 6: | EC000074 - Motor protection circuit-breaker |
| Electrical Durability: | 100000 cycle |
| Environmental Information: | 1SAA963001-2401 |
| GL Certificate: | 1SAA963000-0402 |
| GOST Certificate: | 1SAA963001-2702 |
| General Use Rating UL/CSA: | (600 V AC) 4 A |
| Horsepower Rating UL/CSA: | (220 ... 240 V AC) Three Phase 1 Hp (440 ... 480 V AC) Three Phase 2 Hp (550 ... 600 V AC) Three Phase 3 Hp |
| IIT Publishing Status: | Level 0 - Information enabled |
| Industrial IT Certification Level: | 0 |
| Instructions and Manuals: | 2CDC131011M6802 |
| Invoice Description: | MS116-4.0 Manual Motor Starter Trip class 10A, 2.5 ... 4.0A |
| KC Certificate: | 1SAA963000-1501 |
| LR Certificate: | 1SAA963000-0505 |
| Maximum Operating Altitude Permissible: | 2000 m |
| Maximum Operating Voltage UL/CSA: | Main Circuit 600 V AC |
| Mechanical Durability: | 100000 cycle |
| Minimum Order Quantity: | 1 piece |
| Mounting Position: | Position 1 to 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 |
| Number of Poles: | 3 |
| Number of Protected Poles: | 3 |
| Object Classification Code: | F |
| Package Level 1 EAN: | 4013614320316 |
| Package Level 1 Gross Weight: | 0.28 kg |
| Package Level 1 Height: | 50 mm |
| Package Level 1 Length: | 95 mm |
| Package Level 1 Units: | 1 piece |
| Package Level 1 Width: | 92 mm |
| Package Level 2 EAN: | 4013614408687 |
| Package Level 2 Gross Weight: | 11.586 kg |
| Package Level 2 Height: | 210 mm |
| Package Level 2 Length: | 395 mm |
| Package Level 2 Units: | 40 piece |
| Package Level 2 Width: | 280 mm |
| Part Type: | New |

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| Phase Loss Sensitive: | Yes |
| Pollution Degree: | 3 |
| Power Loss: | at Rated Operating Conditions per Pole 0.7 ... 1.8 W |
| Product Main Type: | MS116 |
| Product Name: | Manual Motor Starter |
| Product Net Depth: | 85.6 mm |
| Product Net Height: | 90 mm |
| Product Net Weight: | 0.265 kg |
| Product Net Width: | 45 mm |
| RMRS Certificate: | 1SAA918000-0704 |
| Rated Current (I_n): | 4 A |
| Rated Frequency (f): | Main Circuit 50 Hz Main Circuit 60 Hz |
| Rated Impulse Withstand Voltage (U_{imp}): | Main Circuit 6 kV |
| Rated Instantaneous Short-Circuit Current Setting (I_i): | 50 A |
| Rated Insulation Voltage (U_i): | 690 V |
| Rated Operational Current (I_e): | 4 A |
| Rated Operational Current AC-3 (I_e): | 4 A |
| Rated Operational Power AC-3 (P_e): | (400 V) Three Phase 1.5 kW |
| Rated Operational Voltage: | Main Circuit 690 V AC |
| Rated Service Short-Circuit Breaking Capacity (I_{cs}): | (230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 6 kA (500 V AC) 6 kA (690 V AC) 2 kA |
| Rated Service Short-Circuit Breaking Capacity, in % of I_{cu} (I_{cs}): | 100 % |
| Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}): | (230 V AC) 50 kA (400 V AC) 50 kA (440 V AC) 6 kA (500 V AC) 6 kA (690 V AC) 2 kA |
| Rated Uninterrupted Current (I_u): | 4 A |
| Recommended Screw Driver: | Pozidriv 2 |
| Resistance to Shock acc. to IEC 60068-2-27: | 11 ms Pulse 25g |
| Resistance to Vibrations acc. to IEC 60068-2-6: | 5g / 3 ... 150 Hz |
| RoHS Date: | 1105 |
| RoHS Information: | 1SAD938517-0060 |
| RoHS Status: | Following EU Directive 2011/65/EU |
| Selectivity Category: | A |
| Selling Unit of Measure: | piece |
| Setting Range: | 2.5 ... 4 A |
| Short Description: | MS116-4.0 Manual Motor Starter |
| Short-Circuit Protective Devices: | gG Type Fuses 25 A, 440 V AC gG Type Fuses 25 A, 500 V AC gG Type Fuses 25 A, 690 V AC |
| Standards: | IEC/EN 60947-1 IEC/EN 60947-2 IEC/EN 60947-4-1 UL 60947-1 |

UL 60947-4-1

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| Suitable for Isolation: | Yes |
| Terminal Type: | Screw Terminals |
| Tightening Torque: | Main Circuit 0.8 ... 1.2 N·m |
| Tightening Torque UL/CSA: | Main Circuit 10 in·lb |
| Trip Class: | 10A |
| UL Certificate: | UL_E137861 |
| UNSPSC: | 39121521 |
| Utilization: | Motor Protection |
| WEEE Category: | 5. Small Equipment (No External Dimension More Than 50 cm) |
| Wire Stripping Length: | Main Circuit 9 mm |
| cUL Certificate: | cUL_E137861 |
| eClass: | 7.0 27370401 |

