

General Information

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| Extended Product Type: | MS325-20 |
| Product ID: | 1SAM150000R1013 |
| EAN: | 4013614194382 |
| Catalog Description: | MS325-20 Manual Motor Starter |
| Long Description: | The MS325-20 manual motor starter is a 54 mm width devices with a rated operational current of $I_e = 20$ 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 $I_{cs} = 55$ 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

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| 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 |

Ordering

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| Minimum Order Quantity: | 1 piece |
| Customs Tariff Number: | 85362010 |
| Replacement Product ID (NEW): | 1SAM350000R1013 |

Popular Downloads

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| Data Sheet, Technical Information: | 2CDC131046D0201 |
| Data Sheet, Technical Information (Part 2): | 1SAM100513F0013 |
| Instructions and Manuals: | 2CDC131005M5703 |

Dimensions

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| Product Net Width: | 54 mm |
| Product Net Height: | 87.5 mm |
| Product Net Depth: | 75.5 mm |
| Product Net Weight: | 0.34 kg |

Technical

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| Rated Service Short-Circuit Breaking Capacity (I_{cs}): | (230 V AC) 100 kA (400 V AC) 55 kA (440 V AC) 35 kA (500 V AC) 22 kA (690 V AC) 3.5 kA |
| Rated Ultimate Short-Circuit Breaking Capacity (I_{cu}): | (230 V AC) 100 kA (400 V AC) 55 kA (440 V AC) 35 kA (500 V AC) 22 kA (690 V AC) 3.5 kA |
| Rated Instantaneous Short-Circuit Current Setting (I_i): | 300 A |
| Setting Range: | 16 ... 20 A |
| Rated Operational Power AC-3 (P_e): | (400 V) Three Phase 7.5 kW |
| Rated Operational Voltage: | Main Circuit 690 V AC Main Circuit 440 V DC |
| Rated Operational Current (I_e): | 20 A |
| Rated Operational Current AC-3 (I_e): | 20 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 1.0 ... 1.6 W |
| Number of Poles: | 3 |
| Conventional Free-air Thermal Current (I_{th}): | Main Circuit 20 A |

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| Degree of Protection: | IP20 |
| Pollution Degree: | 3 |
| Electrical Durability: | 50000 cycle |
| Mechanical Durability: | 100000 cycle |
| Connecting Capacity Main Circuit: | Flexible with Ferrule 1/2x 0.75 ... 4 mm \times 178; Flexible with Insulated Ferrule 1/2x 0.75 ... 4 mm \times 178; Flexible 1/2x 1 ... 6 mm \times 178; Rigid 1/2x 1 ... 6 mm \times 178; |
| Tightening Torque: | Main Circuit 1.4 N \times 183;m |
| Wire Stripping Length: | Auxiliary Circuit 8 mm Main Circuit 10 mm |
| Recommended Screw Driver: | M3.5 Pozidriv 2 |
| 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

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| Ambient Air Temperature: | Around the Enclosure 0 ... +40 \times 176;C Operation -25 ... +50 \times 176;C Operation Compensated -25 ... +50 \times 176;C Storage -50 ... +80 \times 176;C |
| Ambient Air Temperature Compensation: | Yes |
| Maximum Operating Altitude Permissible: | 2000 m |
| Resistance to Shock acc. to IEC 60068-2-27: | 11 ms Pulse 15g |
| Resistance to Vibrations acc. to IEC 60068-2-6: | 5g / 10 ... 150 Hz |
| RoHS Status: | Following EU Directive 2002/95/EC August 18, 2005 and amendment |

Technical UL/CSA

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| Maximum Operating Voltage UL/CSA: | Main Circuit 600 V AC |
| Horsepower Rating UL/CSA: | (220 ... 240 V AC) Three Phase 5 Hp (440 ... 480 V AC) Three Phase 10 Hp (550 ... 600 V AC) Three Phase 15 Hp |
| Ampere Rating UL/CSA: | 20 A |
| Connecting Capacity Main Circuit UL/CSA: | Flexible 1/2x 14-8 AWG Stranded 1/2x 14-8 AWG |
| Tightening Torque UL/CSA: | Auxiliary Circuit 7 in \times 183;lb Main Circuit 14 in \times 183;lb |

Certificates and Declarations (Document Number)

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| ATEX Certificate: | 1SAA918000-3903 |
| BV Certificate: | 1SAA918000-0204 |
| CB Certificate: | 1SAA918000-2002 |
| CCC Certificate: | 1SAA918000-3806 |
| cUL Certificate: | cUL_E137861 cUL_E345003 |
| Declaration of Conformity - CE: | 1SAD938513-0003 |
| DNV Certificate: | 1SAA918000-0305 |
| GL Certificate: | 1SAA918000-0403 |
| GOST Certificate: | 1SAA918000-2703 |
| LR Certificate: | 1SAA918000-0504 |
| RINA Certificate: | 1SAA918000-0803 |
| RMRS Certificate: | 1SAA918000-0703 |
| RoHS Information: | 1SAA918001-4401 |
| UL Certificate: | UL_E137861 UL_E345003 |

Container Information

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| Package Level 1 Units: | 1 piece |
| Package Level 1 Width: | 92 mm |
| Package Level 1 Length: | 58 mm |
| Package Level 1 Height: | 78 mm |
| Package Level 1 Gross Weight: | 0.37 kg |
| Package Level 2 Units: | 24 piece |
| Package Level 2 Width: | 280 mm |
| Package Level 2 Length: | 395 mm |
| Package Level 2 Height: | 210 mm |
| Package Level 2 Gross Weight: | 0.61 kg |
| Package Level 2 EAN: | 4013614494512 |

Classifications

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| Object Classification Code: | F |
| ETIM 4: | EC000074 - Motor protective circuit-breaker |
| ETIM 5: | EC000074 - Motor protective circuit-breaker |
| ETIM 6: | EC000074 - Motor protection circuit-breaker |
| eClass: | 7.0 27370401 |
| UNSPSC: | 39121521 |

