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Products   Low Voltage Products and Systems   Control Products   Manual Motor Starters   Manual Motor Starters

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| Extended Product Type: | MS495-100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Product ID:            | 1SAM550000R1010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| EAN:                   | 4013614265488                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Catalog Description:   | MS495-100 Manual Motor Starter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Long Description:      | The MS495-100 manual motor starter is a 70 mm width devices with a rated operational current of $I_e = 100.0$ 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 $I_{cs} = 25$ kA at 400 VAC and the trip class 10. 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. The handle is lockable to protect against unauthorized changes. Auxiliary contacts, signalling contacts, undervoltage releases and shunt trips are available as accessory. |

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| <b>ATEX Certificate:</b>                                       | 1SAA937000-3901                                                                                                                                                           |
| <b>Actuator Type:</b>                                          | Rotary Handle                                                                                                                                                             |
| <b>Ambient Air Temperature:</b>                                | Operation -20 ... +70 °C<br>Operation Compensated -20 ... +60 °C<br>Storage -50 ... +80 °C                                                                                |
| <b>Ambient Air Temperature Compensation:</b>                   | Yes                                                                                                                                                                       |
| <b>Ampere Rating UL/CSA:</b>                                   | 99 A                                                                                                                                                                      |
| <b>BV Certificate:</b>                                         | 1SAA937000-0202                                                                                                                                                           |
| <b>CCC Certificate:</b>                                        | 1SAA937001-3803                                                                                                                                                           |
| <b>Connecting Capacity Main Circuit UL/CSA:</b>                | Flexible 1x 10-2/0 AWG<br>Flexible 1/2x 10-1/0 AWG<br>Stranded 1x 10-2/0 AWG<br>Stranded 1/2x 10-1/0 AWG                                                                  |
| <b>Connecting Capacity Main Circuit:</b>                       | Flexible with Ferrule 1x 2.5 ... 50 mm²<br>Flexible with Ferrule 2x 2.5 ... 35 mm²<br>Solid 1/2x 2.5 ... 16 mm²<br>Stranded 1x 10 ... 70 mm²<br>Stranded 2x 10 ... 50 mm² |
| <b>Contact Position Indication:</b>                            | ON / OFF / TRIP                                                                                                                                                           |
| <b>Conventional Free-air Thermal Current (I<sub>th</sub>):</b> | Main Circuit 100 A                                                                                                                                                        |
| <b>Country of Origin:</b>                                      | Germany (DE)                                                                                                                                                              |
| <b>Customs Tariff Number:</b>                                  | 85362090                                                                                                                                                                  |
| <b>DNV Certificate:</b>                                        | 1SAA937000-0302                                                                                                                                                           |
| <b>Data Sheet, Technical Information:</b>                      | 1SBC100173C0201                                                                                                                                                           |
| <b>Data Sheet, Technical Information (Part 2):</b>             | 1SAM500501F0010                                                                                                                                                           |
| <b>Data Sheet, Technical Information (Part 3):</b>             | 9AKK105713A1102                                                                                                                                                           |
| <b>Declaration of Conformity - CE:</b>                         | 1SAD938506-0050                                                                                                                                                           |
| <b>Degree of Protection:</b>                                   | Housing IP20<br>Main Circuit Terminals IP00                                                                                                                               |
| <b>E-nummer:</b>                                               | 3112270                                                                                                                                                                   |
| <b>EAC Certificate:</b>                                        | 1SAA937001-2703                                                                                                                                                           |
| <b>EAN:</b>                                                    | 4013614265488                                                                                                                                                             |

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| <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>                  | 25000 cycle                                                                                                                                                                           |
| <b>Environmental Information:</b>              | 1SAA918004-2401                                                                                                                                                                       |
| <b>GL Certificate:</b>                         | 1SAA937000-0404                                                                                                                                                                       |
| <b>GOST Certificate:</b>                       | 1SAA963001-2702                                                                                                                                                                       |
| <b>General Use Rating UL/CSA:</b>              | (600 V AC) 99 A                                                                                                                                                                       |
| <b>Horsepower Rating UL/CSA:</b>               | (200 V AC) Three Phase 30 Hp<br>(208 V AC) Three Phase 30 Hp<br>(220 ... 240 V AC) Three Phase 40 Hp<br>(440 ... 480 V AC) Three Phase 75 Hp<br>(550 ... 600 V AC) Three Phase 100 Hp |
| <b>IT Publishing Status:</b>                   | Level 0 - Information enabled                                                                                                                                                         |
| <b>Industrial IT Certification Level:</b>      | 0                                                                                                                                                                                     |
| <b>Instructions and Manuals:</b>               | 1SAM507001R1001                                                                                                                                                                       |
| <b>Instructions and Manuals (Part 2):</b>      | 2CDC131017M5701                                                                                                                                                                       |
| <b>Invoice Description:</b>                    | MS495-100 Manual Motor Starter                                                                                                                                                        |
| <b>LR Certificate:</b>                         | 1SAA937000-0504                                                                                                                                                                       |
| <b>Maximum Operating Altitude Permissible:</b> | 2000 m                                                                                                                                                                                |
| <b>Maximum Operating Voltage UL/CSA:</b>       | Main Circuit 600 V AC                                                                                                                                                                 |
| <b>Mechanical Durability:</b>                  | 50000 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<br>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>                    | 4013614265488                                                                                                                                                                         |
| <b>Package Level 1 Gross Weight:</b>           | 2.276 kg                                                                                                                                                                              |
| <b>Package Level 1 Height:</b>                 | 171 mm                                                                                                                                                                                |
| <b>Package Level 1 Length:</b>                 | 190 mm                                                                                                                                                                                |
| <b>Package Level 1 Units:</b>                  | 1 piece                                                                                                                                                                               |
| <b>Package Level 1 Width:</b>                  | 76.5 mm                                                                                                                                                                               |
| <b>Phase Loss Sensitive:</b>                   | Yes                                                                                                                                                                                   |
| <b>Pollution Degree:</b>                       | 3                                                                                                                                                                                     |
| <b>Power Loss:</b>                             | at Rated Operating Conditions per Pole 3.5 ... 5.4 W                                                                                                                                  |
| <b>Product Main Type:</b>                      | MS495                                                                                                                                                                                 |
| <b>Product Name:</b>                           | Manual Motor Starter                                                                                                                                                                  |
| <b>Product Net Depth:</b>                      | 174 mm                                                                                                                                                                                |
| <b>Product Net Height:</b>                     | 165 mm                                                                                                                                                                                |
| <b>Product Net Weight:</b>                     | 2.295 kg                                                                                                                                                                              |
| <b>Product Net Width:</b>                      | 70 mm                                                                                                                                                                                 |
| <b>RMRS Certificate:</b>                       | 1SAA918000-0704                                                                                                                                                                       |
| <b>Rated Current (I<sub>n</sub>):</b>          | 100 A                                                                                                                                                                                 |
| <b>Rated Frequency (f):</b>                    | Main Circuit 50 Hz<br>Main Circuit 60 Hz                                                                                                                                              |

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| Main Circuit 6 kV                                                             |                                                                                                 |
| Rated Impulse Withstand Voltage ( $U_{imp}$ ):                                | Main Circuit 6 kV                                                                               |
| Rated Instantaneous Short-Circuit Current Setting ( $I_i$ ):                  | 1235 A                                                                                          |
| Rated Insulation Voltage ( $U_i$ ):                                           | 690 V                                                                                           |
| Rated Operational Current ( $I_e$ ):                                          | 100 A                                                                                           |
| Rated Operational Current AC-3 ( $I_e$ ):                                     | 100 A                                                                                           |
| Rated Operational Power AC-3 ( $P_e$ ):                                       | (400 V) Three Phase 55 kW                                                                       |
| Rated Operational Voltage:                                                    | Main Circuit 690 V AC<br>Main Circuit 450 V DC                                                  |
| Rated Service Short-Circuit Breaking Capacity ( $I_{cs}$ ):                   | (230 V AC) 100 kA<br>(400 V AC) 25 kA<br>(440 V AC) 20 kA<br>(500 V AC) 4 kA<br>(690 V AC) 3 kA |
| Rated Service Short-Circuit Breaking Capacity, in % of $I_{cu}$ ( $I_{cs}$ ): | 50 %                                                                                            |
| Rated Ultimate Short-Circuit Breaking Capacity ( $I_{cu}$ ):                  | (230 V AC) 100 kA<br>(400 V AC) 50 kA<br>(440 V AC) 50 kA<br>(500 V AC) 8 kA<br>(690 V AC) 5 kA |
| Rated Uninterrupted Current ( $I_u$ ):                                        | 100 A                                                                                           |
| Recommended Screw Driver:                                                     | Hexagon 4                                                                                       |
| Resistance to Shock acc. to IEC 60068-2-27:                                   | 11 ms Pulse 25g                                                                                 |
| RoHS Date:                                                                    | 0016                                                                                            |
| RoHS Information:                                                             | 1SAD938506-0050                                                                                 |
| RoHS Status:                                                                  | Following EU Directive 2011/65/EC                                                               |
| Selectivity Category:                                                         | A                                                                                               |
| Selling Unit of Measure:                                                      | piece                                                                                           |
| Setting Range:                                                                | 80 ... 100 A                                                                                    |
| Short Description:                                                            | MS495-100 Manual Motor Starter                                                                  |
| Short-Circuit Protective Devices:                                             | gG Type Fuses 125 A, 690 V AC<br>gG Type Fuses 160 A, 400 V AC                                  |
| Standards:                                                                    | IEC/EN 60947-1<br>IEC/EN 60947-2<br>IEC/EN 60947-4-1<br>UL 508<br>CSA 22.2 No. 14               |
| Suitable for Isolation:                                                       | Yes                                                                                             |
| Tightening Torque:                                                            | Main Circuit 4 ... 6 N·m                                                                        |
| Tightening Torque UL/CSA:                                                     | Main Circuit 35 ... 53 in·lb                                                                    |
| Trip Class:                                                                   | 10                                                                                              |
| UL Certificate:                                                               | UL_E167205<br>UL_E195536                                                                        |
| UNSPSC:                                                                       | 39121521                                                                                        |
| Utilization:                                                                  | Motor Protection                                                                                |
| Wire Stripping Length:                                                        | Main Circuit 17 mm                                                                              |
| cUL Certificate:                                                              | cUL_E195536                                                                                     |
| eClass:                                                                       | 7.0 27370401                                                                                    |