



Main

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| Range of product | Altistart 01 |
| Product or component type | Soft starter |
| Product destination | Asynchronous motors |
| Product specific application | Simple machine |
| Component name | ATS01 |
| Network number of phases | 3 phases Single phase |
| Power supply voltage | 110...480 V (- 10...10 %) |
| Motor power kW | 4 kW at 400 V 3 phases 1.1 kW at 230 V single phase 1.5 kW at 230 V 3 phases |
| Motor power hp | 1 hp at 210 V 3 phases 2 hp at 230 V 3 phases 5 hp at 460 V 3 phases |
| Icl nominal current | 9 A |
| Utilisation category | AC-53B conforming to EN/IEC 60947-4-2 |
| Current at nominal load | 45 A at nominal load |
| Type of start | Start with voltage ramp |
| Power dissipation in W | 1 W at full load and at end of starting 46 W in transient state |

Complementary

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| Assembly style | With heat sink |
| Function available | Integrated bypass |
| Power supply voltage limits | 99...528 V |
| Power supply frequency | 50...60 Hz (- 5...5 %) |
| Power supply frequency limits | 47.5...63 Hz |
| Output voltage | <= power supply voltage |
| Control circuit voltage | 110 V +/- 10 % AC, 35 mA 24 V +/- 10 % AC/DC, 30 mA 240 V +/- 10 % AC, 80 mA |
| Starting time | 1 s/100 start(s) per hour 5 s/20 start(s) per hour Adjustable from 1 to 5 s |
| Starting torque | 30...80 % of starting torque of motor connected directly on the line supply |
| Discrete output current | 2 A DC-13 3 A AC-15 |
| Tightening torque | 0.5 N.m 1.9...2.5 N.m |

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| Electrical connection | <p>1 conductor(s)rigid cable , connection via 4 mm screw clamp terminal 1...10 mm²/AWG 8 for power circuit</p> <p>1 conductor(s)rigid cable , connection via screw connector 0.5...2.5 mm²/AWG 14 for control circuit</p> <p>2 conductor(s)rigid cable , connection via 4 mm screw clamp terminal 1...6 mm²/AWG 10 for power circuit</p> <p>2 conductor(s)rigid cable , connection via screw connector 0.5...1 mm²/AWG 17 for control circuit</p> <p>1 conductor(s)flexible cable with cable end, connection via screw connector 0.5...1.5 mm²/AWG 16 for control circuit</p> <p>1 conductor(s)flexible cable without cable end, connection via 4 mm screw clamp terminal 1.5...10 mm²/AWG 8 for power circuit</p> <p>1 conductor(s)flexible cable without cable end, connection via screw connector 0.5...2.5 mm²/AWG 14 for control circuit</p> <p>2 conductor(s)flexible cable with cable end, connection via 4 mm screw clamp terminal 1...6 mm²/AWG 10 for power circuit</p> <p>2 conductor(s)flexible cable without cable end, connection via 4 mm screw clamp terminal 1.5...6 mm²/AWG 10 for power circuit</p> <p>2 conductor(s)flexible cable without cable end, connection via screw connector 0.5...1.5 mm²/AWG 16 for control circuit</p> |
| Marking | CE |
| Operating position | Vertical +/- 10 degree |
| Product weight | 0.28 kg |

Environment

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| Electromagnetic compatibility | <p>Conducted and radiated emissions conforming to CISPR 11 level B</p> <p>Conducted and radiated emissions conforming to IEC 60947-4-2 level B</p> <p>Damped oscillating waves conforming to IEC 61000-4-12 level 3</p> <p>Electrostatic discharge conforming to IEC 61000-4-2 level 3</p> <p>EMC immunity conforming to EN 50082-1</p> <p>EMC immunity conforming to EN 50082-2</p> <p>Harmonics conforming to IEC 1000-3-2</p> <p>Harmonics conforming to IEC 1000-3-4</p> <p>Immunity to conducted interference caused by radio-electrical fields conforming to IEC 61000-4-6 level 3</p> <p>Immunity to electrical transients conforming to IEC 61000-4-4 level 4</p> <p>Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3</p> <p>Micro-cuts and voltage fluctuation conforming to IEC 61000-4-11</p> <p>Voltage/Current impulse conforming to IEC 61000-4-5 level 3</p> |
| Standards | EN/IEC 60947-4-2 |
| Product certifications | <p>B44.1-96/ASME A17.5 for starter wired to the motor delta terminal</p> <p>CCC</p> <p>CSA</p> <p>C-Tick</p> <p>GOST</p> <p>UL</p> |
| IP degree of protection | IP20 |
| Pollution degree | 2 conforming to EN/IEC 60947-4-2 |
| Vibration resistance | <p>1 gn (f = 13...150 Hz) conforming to EN/IEC 60068-2-6</p> <p>1.5 mm peak to peak (f = 3...13 Hz) conforming to EN/IEC 60068-2-6</p> |
| Shock resistance | 15 gn for 11 ms conforming to EN/IEC 60068-2-27 |
| Relative humidity | 5...95 % without condensation or dripping water conforming to EN/IEC 60068-2-3 |
| Ambient air temperature for operation | <p>-10...40 °C without derating</p> <p>40...50 °C with current derating of 2 % per °C</p> |
| Ambient air temperature for storage | -25...70 °C conforming to EN/IEC 60947-4-2 |
| Operating altitude | <p><= 1000 m without derating</p> <p>> 1000 m with current derating of 2.2 % per additional 100 m</p> |
| RoHS EUR status | Compliant |
| RoHS EUR conformity date | 0905 |