



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 |
| Device short name | ATS01 |
| Network number of phases | 1 phase |
| [Us] rated supply voltage | 110...480 V - 10...10 % |
| Motor power kW | 4 kW, 3 phases at 400 V 1.5 kW, 3 phases at 230 V 1.1 kW, 1 phase at 230 V |
| Motor power hp | 1 hp, 3 phases at 210 V 2 hp, 3 phases at 230 V 5 hp, 3 phases at 460 V |
| IcL starter rating | 9 A |
| Utilisation category | AC-53B conforming to EN/IEC 60947-4-2 |
| Current consumption | 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 |
| Supply voltage limits | 99...528 V |
| Supply frequency | 50...60 Hz - 5...5 % |
| Network frequency | 47.5...63 Hz |
| Output voltage | <= power supply voltage |
| [Uc] control circuit voltage | 110 V AC +/- 10 % at 35 mA 24 V AC/DC +/- 10 % at 30 mA 240 V AC +/- 10 % at 80 mA |
| Starting time | 1 s / 100 5 s / 20 Adjustable from 1 to 5 s |
| Starting torque | 30...80 % of starting torque of motor connected directly on the line supply |

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| Discrete output current | 2 A DC-13 3 A AC-15 |
| Tightening torque | 0.5 N.m 1.9...2.5 N.m |
| Electrical connection | 4 mm screw clamp terminal - rigid 1 1...10 mm ² AWG 8 power circuit Screw connector - rigid 1 0.5...2.5 mm ² AWG 14 control circuit 4 mm screw clamp terminal - rigid 2 1...6 mm ² AWG 10 power circuit Screw connector - rigid 2 0.5...1 mm ² AWG 17 control circuit Screw connector - flexible with cable end 1 0.5...1.5 mm ² AWG 16 control circuit 4 mm screw clamp terminal - flexible without cable end 1 1.5...10 mm ² AWG 8 power circuit Screw connector - flexible without cable end 1 0.5...2.5 mm ² AWG 14 control circuit 4 mm screw clamp terminal - flexible with cable end 2 1...6 mm ² AWG 10 power circuit 4 mm screw clamp terminal - flexible without cable end 2 1.5...6 mm ² AWG 10 power circuit Screw connector - flexible without cable end 2 0.5...1.5 mm ² AWG 16 control circuit |
| Marking | CE |
| Operating position | Vertical +/- 10 degree |
| Height | 124 mm |
| Width | 45 mm |
| Depth | 131 mm |
| Net weight | 0.28 kg |
| Compatibility code | ATS01N1 |
| Motor power range AC-3 | 1.1...2 kW at 200...240 V 1 phase 2.2...3 kW at 200...240 V 3 phases 4...6 kW at 380...440 V 3 phases |
| Motor starter type | Soft starter |

Environment

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

Offer Sustainability

REACH Regulation [REACH Declaration](#)

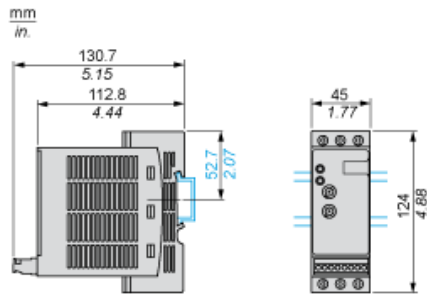
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|----------------------------|---|
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration |
| Circularity Profile | End of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

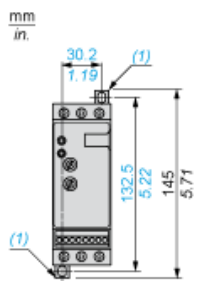
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| Warranty | 18 months |
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Dimensions

Mounting on Symetrical (35 mm) Rail

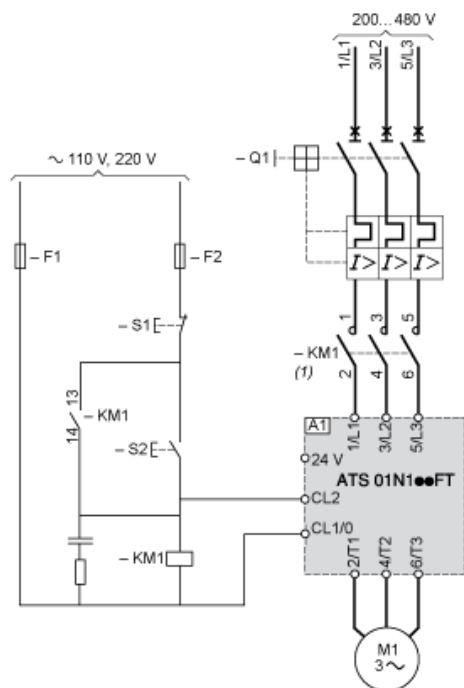


Screw Fixing



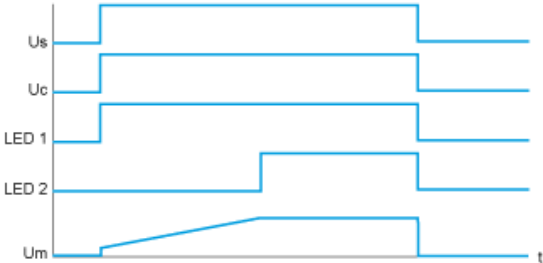
(1) Retractable fixings

Example of 3-phase Power Supply Connection



- (1) A line contactor must be used in the sequence.
A1 : Soft starter
Q1 : Motor circuit-breaker
KM1 : Contactors
F1, F2 : Control protection fuses
S1, S2 : Pushbuttons

Function Diagram



- Us : Power supply voltage
- Uc : Control supply voltage
- LED 1 : Green LED
- LED 2 : Yellow LED
- Um : Motor voltage