

ATS01N112FT

soft starter for asynchronous motor, Altistart 01,
ATS01, 12A, 110 to 480V, 1.5 to 5.5kW



Main

| | |
|------------------------------|--|
| 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 | 2.2 KW, 3 phases at 230 V 5.5 KW, 3 phases at 400 V 1.5 kW, 1 phase at 230 V |
| Motor power hp | 3 Hp, 3 phases at 230 V 1.5 Hp, 3 phases at 210 V 7.5 hp, 3 phases at 460 V |
| ICL starter rating | 12 A |
| Utilisation category | AC-53B conforming to EN/IEC 60947-4-2 |
| Current consumption | 60 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 61 W in transient state |

Complementary

| | |
|------------------------------|--|
| 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 |
| Discrete output current | 2 A DC-13 3 A AC-15 |
| Tightening torque | 1.9...2.5 N.M 0.5 N.m |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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|------------------------|--|
| Electrical connection | 4 mm screw clamp terminal - rigid 1 1...10 mm ² AWG 8 power circuit Screw connector - rigid without cable end 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 level 3 conforming to EN 50082-1 EMC immunity level B conforming to EN 50082-2 Harmonics level 3 conforming to IEC 1000-3-2 Harmonics level 3 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[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]GOST |
| 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 derating) 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 derating > 1000 m with current derating of 2.2 % per additional 100 m |

Packing Units

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|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 5.200 cm |
| Package 1 Width | 15.500 cm |
| Package 1 Length | 17.500 cm |
| Package 1 Weight | 343.000 g |
| Unit Type of Package 2 | S03 |

| | |
|------------------------------|-----------|
| Number of Units in Package 2 | 14 |
| Package 2 Height | 30.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 5.353 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 112 |
| Package 3 Height | 75.000 cm |
| Package 3 Width | 60.000 cm |
| Package 3 Length | 80.000 cm |
| Package 3 Weight | 53.940 kg |

Offer Sustainability

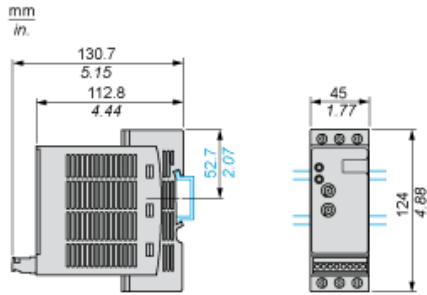
| | |
|----------------------------|---|
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| China RoHS Regulation | China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

Contractual warranty

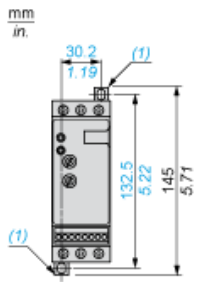
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|----------|-----------|
| Warranty | 18 months |
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Dimensions

Mounting on Symetrical (35 mm) Rail

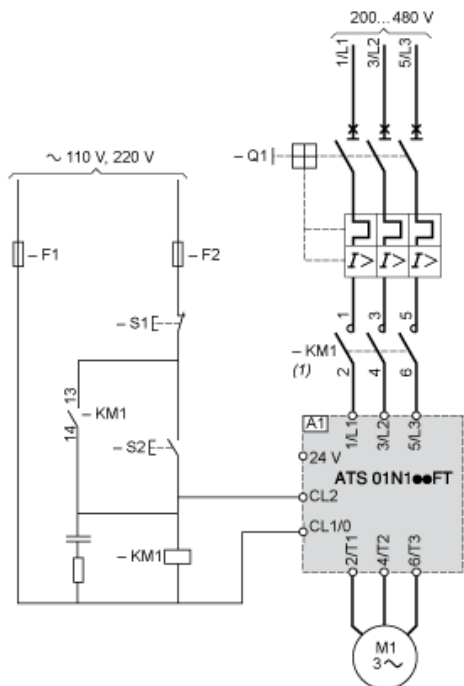


Screw Fixing



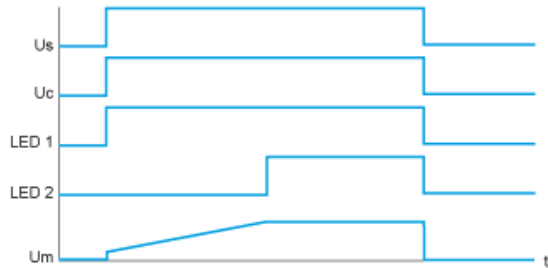
(1) Retractable fixings

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, Control protection fuses
- F2 :
- S1, Pushbuttons
- S2 :

Function Diagram



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