

# Product data sheet

Specifications



## soft starter for asynchronous motor - ATS01 - 25 A - 110..480V - 2.2..11 KW

ATS01N125FT

### 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               | 11 kW, 3 phases at 400 V<br>3 kW, 3 phases at 230 V<br>4 kW, 3 phases at 230 V<br>9 kW, 3 phases at 400 V<br>7.5 kW, 3 phases at 400 V<br>5.5 kW, 3 phases at 230 V<br>2.2 kW, 1 phase at 230 V |
| Motor power hp               | 11 hp, 3 phases at 460 V<br>2 hp, 3 phases at 210 V<br>3 hp, 3 phases at 210 V<br>5 hp, 3 phases at 230 V<br>9 hp, 3 phases at 460 V<br>7.5 hp, 3 phases at 230 V                               |
| IcL starter rating           | 25 A  |
| Utilisation category         | AC-53B conforming to EN/IEC 60947-4-2   |
| Current consumption          | 125 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<br>126 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<br>24 V AC/DC +/- 10 % at 30 mA<br>240 V AC +/- 10 % at 80 mA |

|                         |  |
|-------------------------|--|
| Starting time           | 1 s / 100<br>5 s / 20<br>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<br>3 A AC-15   |
| Tightening torque       | 0.5 N.m<br>1.9...2.5 N.m   |
| Electrical connection   | 4 mm screw clamp terminal - rigid 1 1...10 mm² AWG 8 power circuit<br>Screw connector - rigid 1 0.5...2.5 mm² AWG 14 control circuit<br>4 mm screw clamp terminal - rigid 2 1...6 mm² AWG 10 power circuit<br>Screw connector - rigid 2 0.5...1 mm² AWG 17 control circuit<br>Screw connector - flexible with cable end 1 0.5...1.5 mm² AWG 16 control circuit<br>4 mm screw clamp terminal - flexible without cable end 1 1.5...10 mm² AWG 8 power circuit<br>Screw connector - flexible without cable end 1 0.5...2.5 mm² AWG 14 control circuit<br>4 mm screw clamp terminal - flexible with cable end 2 1...6 mm² AWG 10 power circuit<br>4 mm screw clamp terminal - flexible without cable end 2 1.5...6 mm² AWG 10 power circuit<br>Screw connector - flexible without cable end 2 0.5...1.5 mm² AWG 16 control circuit |
| Marking                 | CE   |
| Operating position      | Vertical +/- 10 degree   |
| Height                  | 124 mm   |
| Width                   | 45 mm  |
| Depth                   | 131 mm   |
| Net weight              | 0.35 kg  |
| Compatibility code      | ATS01N1  |
| Motor power range AC-3  | 2.2...3 kW at 200...240 V 3 phases<br>2.2...3 kW at 200...240 V 1 phase<br>4...6 kW at 200...240 V 3 phases<br>7...11 kW at 200...240 V 3 phases<br>7...11 kW at 380...440 V 3 phases  |
| Motor starter type      | Soft starter   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Electromagnetic compatibility         | Conducted and radiated emissions level B conforming to CISPR 11<br>Conducted and radiated emissions level B conforming to IEC 60947-4-2<br>Damped oscillating waves level 3 conforming to IEC 61000-4-12<br>Electrostatic discharge level 3 conforming to IEC 61000-4-2<br>EMC immunity conforming to EN 50082-1<br>EMC immunity conforming to EN 50082-2<br>Harmonics conforming to IEC 1000-3-2<br>Harmonics conforming to IEC 1000-3-4<br>Immunity to conducted interference caused by radio-electrical fields level 3 conforming to IEC 61000-4-6<br>Immunity to electrical transients level 4 conforming to IEC 61000-4-4<br>Immunity to radiated radio-electrical interference level 3 conforming to IEC 61000-4-3<br>Micro-cuts and voltage fluctuation conforming to IEC 61000-4-11<br>Voltage/current impulse level 3 conforming to IEC 61000-4-5 |
| Standards                             | EN/IEC 60947-4-2   |
| Product certifications                | B44.1-96/ASME A17.5 for starter wired to the motor delta terminal<br>C-Tick<br>CCC<br>GOST<br>CSA<br>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<br>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)<br>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<br>> 1000 m with current derating of 2.2 % per additional 100 m |
|--------------------|--|

Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 5.2 cm   |
| Package 1 Width              | 15.5 cm  |
| Package 1 Length             | 17.5 cm  |
| Package 1 Weight             | 413.0 g  |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 14       |
| Package 2 Height             | 30 cm    |
| Package 2 Width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Package 2 Weight             | 6.333 kg |

Offer Sustainability

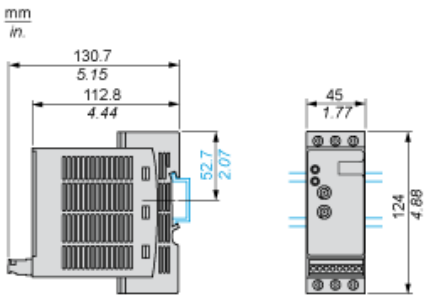
|                            |   |
|----------------------------|---|
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>   |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>  |
| RoHS exemption information | <a href="#">Yes</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

Contractual warranty

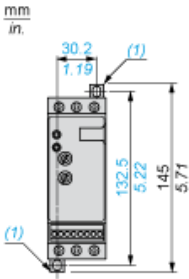
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions

Mounting on Symetrical (35 mm) Rail

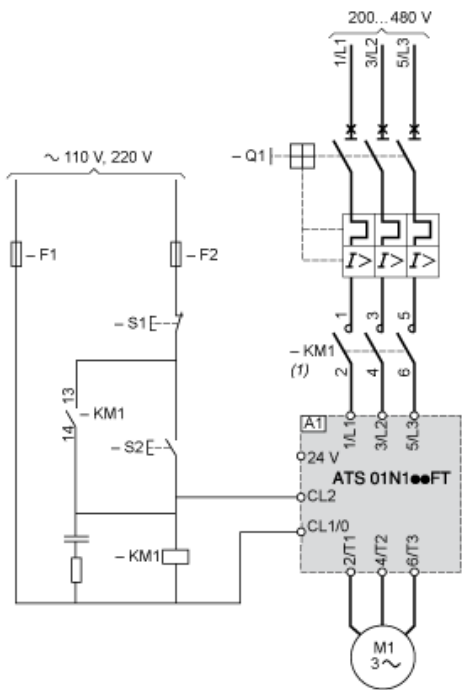


Screw Fixing



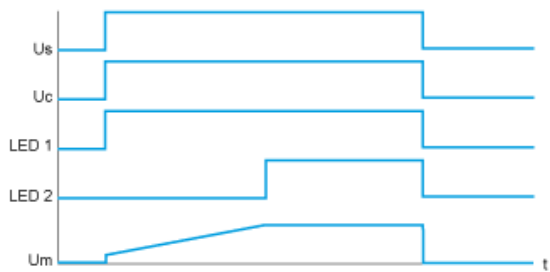
(1) Retractable fixings

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

Recommended replacement(s)