



## 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     | 3 phases                                                                |
| [Us] rated supply voltage    | 200...240 V - 10...10 %                                                 |
| Motor power kW               | 7.5 kW, 3 phases at 200...240 V                                         |
| Motor power hp               | 10 hp, 3 phases at 200...240 V                                          |
| ICL starter rating           | 32 A                                                                    |
| Utilisation category         | AC-53B conforming to EN/IEC 60947-4-2                                   |
| Current consumption          | 160 A at nominal load                                                   |
| Type of start                | Start with voltage ramp                                                 |
| Power dissipation in W       | 4.5 W at full load and at end of starting<br>324.5 W in transient state |

## Complementary

|                              |                                                                                                                                                           |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assembly style               | With heat sink                                                                                                                                            |
| Function available           | Integrated bypass                                                                                                                                         |
| Supply voltage limits        | 180...264 V                                                                                                                                               |
| Supply frequency             | 50...60 Hz - 5...5 %                                                                                                                                      |
| Network frequency            | 47.5...63 Hz                                                                                                                                              |
| Output voltage               | <= power supply voltage                                                                                                                                   |
| [Uc] control circuit voltage | Built into the starter                                                                                                                                    |
| Starting time                | Adjustable from 1 to 10 s<br>1 s / 50<br>10 s / 5<br>5 s / 10                                                                                             |
| Deceleration time symb       | Adjustable from 1 to 10 s                                                                                                                                 |
| Starting torque              | 30...80 % of starting torque of motor connected directly on the line supply                                                                               |
| Discrete input type          | Logic (LI1, LI2, BOOST) stop, run and boost on start-up functions <= 8 mA 27 kOhm                                                                         |
| Discrete input voltage       | 24...40 V                                                                                                                                                 |
| Discrete input logic         | Positive LI1, LI2, BOOST at State 0: < 5 V and <= 0.2 mA at State 1: > 13 V, >= 0.5 mA                                                                    |
| Discrete output current      | 2 A DC-13<br>3 A AC-15                                                                                                                                    |
| Discrete output type         | Open collector logic LO1 end of starting signal<br>Relay outputs R1A, R1C NO                                                                              |
| Discrete output voltage      | 24 V (voltage limits: 6...30 V) open collector logic                                                                                                      |
| Minimum switching current    | 10 mA at 6 V DC for relay outputs                                                                                                                         |
| Maximum switching current    | Relay outputs: 2 A at 250 V AC cos phi = 0.5 and L/R = 20 ms inductive load<br>Relay outputs: 2 A at 30 V DC cos phi = 0.5 and L/R = 20 ms inductive load |
| Display type                 | 1 LED (green) for starter powered up<br>1 LED (yellow) for nominal voltage reached                                                                        |
| Tightening torque            | 1.9...2.5 N.M<br>0.5 N.m                                                                                                                                  |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical connection  | 4 mm screw clamp terminal - rigid 1 1...10 mm <sup>2</sup> AWG 8 power circuit<br>Screw connector - rigid 1 0.5...2.5 mm <sup>2</sup> AWG 14 control circuit<br>4 mm screw clamp terminal - rigid 2 1...6 mm <sup>2</sup> AWG 10 power circuit<br>Screw connector - rigid 2 0.5...1 mm <sup>2</sup> AWG 17 control circuit<br>Screw connector - flexible with cable end 1 0.5...1.5 mm <sup>2</sup> AWG 16 control circuit<br>4 mm screw clamp terminal - flexible without cable end 1 1.5...10 mm <sup>2</sup> AWG 8 power circuit<br>Screw connector - flexible without cable end 1 0.5...2.5 mm <sup>2</sup> AWG 14 control circuit<br>4 mm screw clamp terminal - flexible with cable end 2 1...6 mm <sup>2</sup> AWG 10 power circuit<br>4 mm screw clamp terminal - flexible without cable end 2 1.5...6 mm <sup>2</sup> AWG 10 power circuit<br>Screw connector - flexible without cable end 2 0.5...1.5 mm <sup>2</sup> AWG 16 control circuit |
| Marking                | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Operating position     | Vertical +/- 10 degree                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Height                 | 154 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Width                  | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Depth                  | 131 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Net weight             | 0.56 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Compatibility code     | ATS01N2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Motor power range AC-3 | 7...11 kW at 200...240 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>UL<br>C-Tick<br>CSA<br>CCC<br>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<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 Weight             | 645 g   |
| Package 1 Height             | 5.5 cm  |
| Package 1 width              | 15.2 cm |

|                              |          |
|------------------------------|----------|
| Package 1 Length             | 17.2 cm  |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 14       |
| Package 2 Weight             | 9.685 kg |
| Package 2 Height             | 30 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

### Offer Sustainability

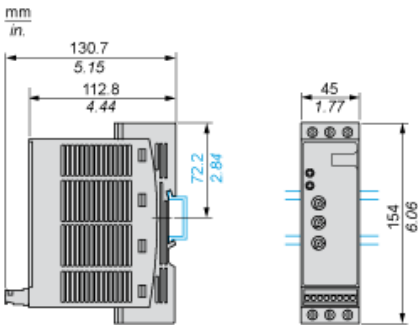
|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 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) <a href="#">EU RoHS Declaration</a>                              |
| Toxic heavy metal free     | Yes                                                                                                                         |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</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 |

### Contractual warranty

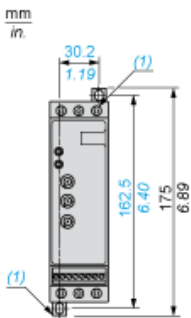
|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions

Mounting on Symetrical (35 mm) Rail

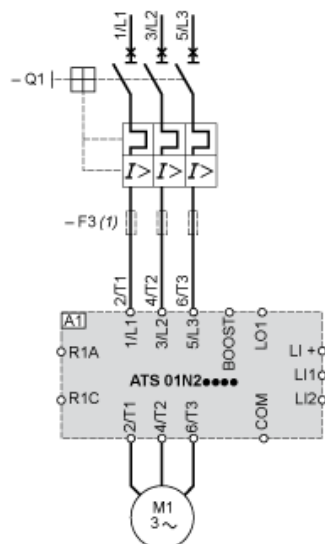


Screw Fixing



(1) Retractable fixings

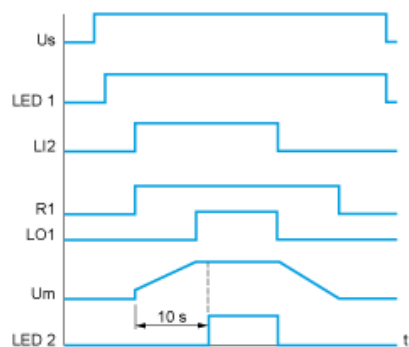
## Example of Manual Control



A1 : Soft start/soft stop unit  
(1) For type 2 coordination  
Q1 : Motor circuit-breaker  
F3 : 3 fast-acting fuses

## Function Diagram

### 2-wire Control with Deceleration



Us : Power supply voltage

LED Green LED

1 :

LI2 : Logic input

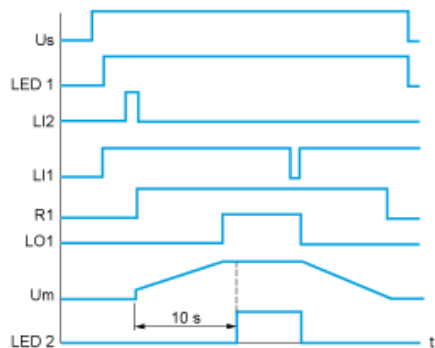
R1 : Relay output

LO1 : Logic output

LED Yellow LED

2 :

### 3-wire Control with Deceleration



Us : Power supply voltage

LED Green LED

1 :

LI2, Logic inputs

LI1 :

R1 : Relay output

LO1 : Logic output

Um : Motor voltage

LED Yellow LED

2 :