

Product data sheet

Specifications



soft starter for asynchronous motor,
Altistart U01, TeSys U, ATSU01,
12A, 200 to 480V, 2.2 to 5.5kW

ATSU01N212LT

Product availability: Non-Stock - Not normally stocked in
distribution facility

Price*: 210.00 USD

Main

| | |
|------------------------------|---|
| Range Of Product | Altistart U01 and TeSys U |
| Product Or Component Type | Soft starter |
| Product Destination | Asynchronous motors |
| Product Specific Application | Simple machine |
| Device Short Name | ATSU01 |
| Phase | 3 phase |
| [Us] Rated Supply Voltage | 200...480 V - 10...10 % |
| Motor Power Kw | 2.2 kW, 3 phase 230 V 5.5 kW, 3 phase 400 V 3 kW, 3 phase 230 V |
| Maximum Horse Power Rating | 3 hp, 3 phase 230 V 7.5 hp, 3 phase 460 V |
| Icl Starter Rating | 12 A |
| Utilisation Category | AC-53B EN/IEC 60947-4-2 |
| Current Consumption | 65 mA |
| Type Of Start | Start with voltage ramp |
| Power Dissipation In W | 1.5 W at full load and at end of starting 121.5 W in transient state |

Complementary

| | |
|------------------------------|---|
| Assembly Style | With heat sink |
| Function Available | Integrated bypass |
| Supply Voltage Limits | 180...528 V |
| Supply Frequency | 50...60 Hz - 5...5 % |
| Network Frequency | 47.5...63 Hz |
| Output Voltage | <= power supply voltage |
| [Uc] Control Circuit Voltage | 24 V DC +/- 10 % |
| Starting Time | 1 s / 100 5 s / 20 10 s / 10 Adjustable from 1 to 10 s |
| Deceleration Time Symb | Adjustable from 1 to 10 s |
| Starting Torque | 30...80 % of starting torque of motor connected directly on the line supply |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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|----------------------------------|--|
| 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 |
| Input Output Isolation | Galvanic between power and control |
| Discrete Input Logic | Positive LI1, LI2, BOOST < 5 V <= 0.2 mA > 13 V, >= 0.5 mA |
| Discrete Output Current | 2 A DC-13 3 A AC-15 |
| Discrete Output Type | Open collector logic LO1 end of starting signal Relay outputs R1A, R1C NO |
| Discrete Output Voltage | 24 V 6...30 V) open collector logic |
| Minimum Switching Current | 10 mA 6 V DC relay outputs |
| Maximum Switching Current | Relay outputs 2 A 30 V DC cos phi = 0.5 20 ms inductive Relay outputs 2 A 250 V AC AC-15 cos phi = 0.5 20 ms inductive |
| Maximum Switching Voltage | 440 V relay outputs |
| Display Type | 1 LED Green)starter powered up 1 LED Yellow)nominal voltage reached |
| Tightening Torque | 16.82...22.13 lbf.in (1.9...2.5 N.m) 4.43 lbf.in (0.5 N.m) |
| 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 | 9.21 in (234 mm) |
| Width | 1.77 in (45 mm) |
| Depth | 5.91 in (150 mm) |
| Net Weight | 0.75 lb(US) (0.34 kg) |
| Motor Power Range Ac-3 | 2.2...3 kW 200...240 V 3 phase 4...6 kW 380...440 V 3 phase |
| Motor Starter Type | Soft starter |

Environment

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|--------------------------------------|--|
| Electromagnetic Compatibility | Conducted and radiated emissions level B CISPR 11 Conducted and radiated emissions level B IEC 60947-4-2 Damped oscillating waves level 3 IEC 61000-4-12 Electrostatic discharge level 3 IEC 61000-4-2 EMC immunity EN 50082-1 EMC immunity level B EN 50082-2 Harmonics level 3 IEC 1000-3-2 Harmonics level 3 IEC 1000-3-4 Immunity to electrical transients level 4 IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 IEC 61000-4-3 Voltage/current impulse level 3 IEC 61000-4-5 Conducted and radiated emissions level 3 IEC 61000-4-6 Immunity to conducted interference caused by radio-electrical fields level 4 IEC 61000-4-11 |
| Standards | EN/IEC 60947-4-2 |

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|--|--|
| Product Certifications | UL CCC C-tick CSA |
| Ip Degree Of Protection | IP20 |
| Pollution Degree | 2 EN/IEC 60947-4-2 |
| Vibration Resistance | 1 gn 13...150 Hz)EN/IEC 60068-2-6 1.5 mm peak to peak 3...13 Hz)EN/IEC 60068-2-6 |
| Shock Resistance | 15 gn 11 ms EN/IEC 60068-2-27 |
| Relative Humidity | 5...95 % without condensation or dripping water EN/IEC 60068-2-3 |
| Ambient Air Temperature For Operation | 14...104 °F (-10...40 °C) without derating) 104...122 °F (40...50 °C) with current derating of 2 % per °C) |
| Ambient Air Temperature For Storage | -13...158 °F (-25...70 °C) EN/IEC 60947-4-2 |
| Operating Altitude | <= 3280.84 ft (1000 m) without derating > 3280.84 ft (1000 m) with current derating of 2.2 % per additional 100 m |

Ordering and shipping details

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|--------------------------|---------------|
| Category | US10I1122392 |
| Discount Schedule | 0I11 |
| Gtin | 3389110667103 |
| Returnability | Yes |
| Country Of Origin | DE |

Packing Units

| | |
|-------------------------------------|-------------------------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 2.17 in (5.5 cm) |
| Package 1 Width | 6.89 in (17.5 cm) |
| Package 1 Length | 5.91 in (15.0 cm) |
| Package 1 Weight | 15.98 oz (453.0 g) |
| Unit Type Of Package 2 | S03 |
| Number Of Units In Package 2 | 14 |
| Package 2 Height | 11.81 in (30.0 cm) |
| Package 2 Width | 11.81 in (30.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 15.19 lb(US) (6.889 kg) |

Contractual warranty

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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

Well-being performance

✓ Reach Free Of Svhc

✓ Toxic Heavy Metal Free

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)
[EU RoHS Declaration](#)

China Rohs Regulation [China RoHS declaration](#)

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 www.P65Warnings.ca.gov

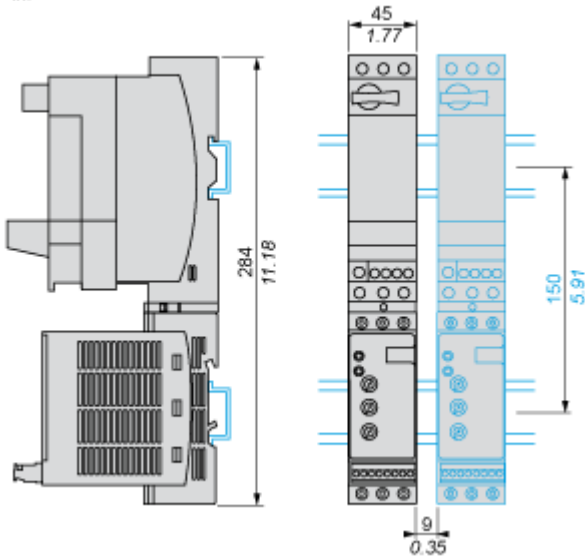
Dimensions Drawings

Dimensions

With TeSys U Combination (Non Reversing Power Base)

Mounting on symetrical (35 mm) rail with power connector between ATS and TeSys U.

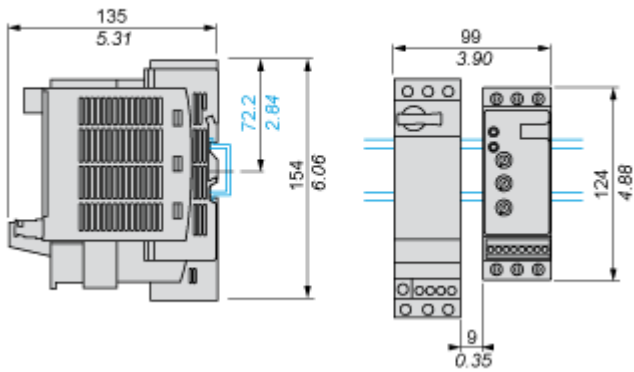
mm
in.



With TeSys U Combination (Non Reversing or Reversing Power Base)

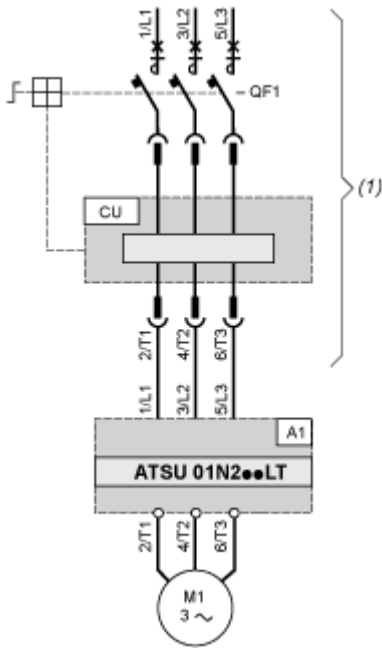
Side by side mounting

mm
in.



Connections and Schema

Power Wiring



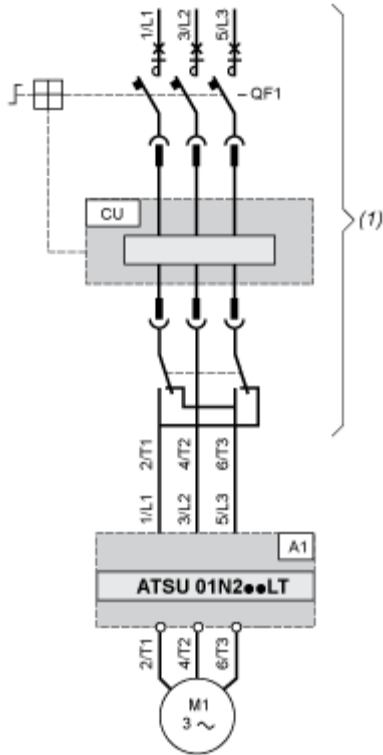
(1) TeSys U

A1 : Soft start/soft stop unit

QF1 : TeSys U controller-starter

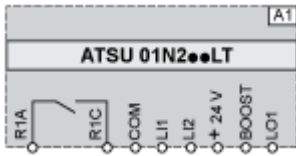
CU : TeSys U control unit

With Reversing Unit



- (1) TeSys U with reversing unit
- A1 : Soft start/soft stop unit
- QF1 : TeSys U controller-starter
- CU : TeSys U control unit

Control Wiring



A1 : Soft start/soft stop unit

R1A, R1C : Relay output NO

COM : Commun

LI1, LI2 : Logic inputs (stop and run functions)

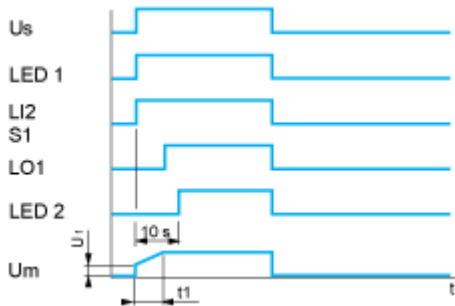
BOOST : Logic input (boost on start-up function)

LO1 : Logic output

Technical Description

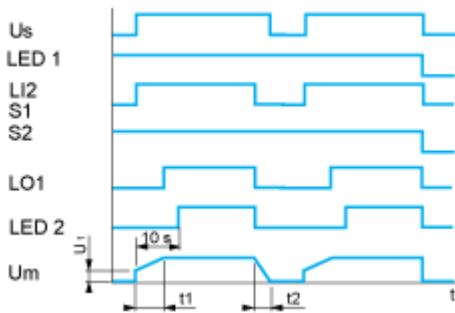
Functional Diagram Automatic 2-wire Control

Without Deceleration



- Us : Power supply voltage
- LED 1 : Green LED
- LI2 : Logic input
- S1 : Pushbutton
- LED 2 : Yellow LED
- Um : Motor voltage
- t1 : Acceleration time can be controlled by a potentiometer
- U1 : Starting time can be controlled by a potentiometer

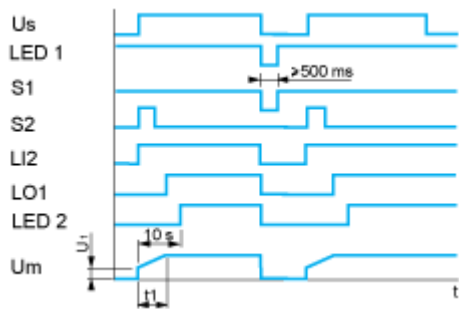
With and without Deceleration



- Us : Power supply voltage
- LED 1 : Green LED
- LI2 : Logic input
- S1, S2 : Pushbuttons
- LO1 : Logic output
- LED 2 : Yellow LED
- Um : Motor voltage
- t1 : Acceleration time can be controlled by a potentiometer
- t2 : Deceleration time can be controlled by a potentiometer
- U1 : Starting time can be controlled by a potentiometer

Functional Diagram Automatic 3-wire Control

Without Deceleration



U_s : Power supply voltage

LED 1 : Green LED

S1, S2 : Pushbuttons

LI2 : Logic input

LO1 : Logic output

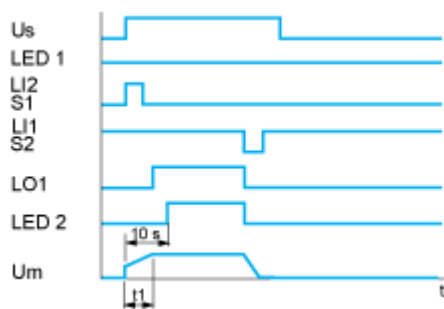
LED 2 : Yellow LED

U_m : Motor voltage

t_1 : Acceleration time can be controlled by a potentiometer

U : Starting time can be controlled by a potentiometer

With Deceleration



U_s : Power supply voltage

LED 1 : Green LED

S1, S2 : Pushbuttons

LI1, LI2 : Logic inputs

LO1 : Logic output

LED 2 : Yellow LED

U_m : Motor voltage

t_1 : Acceleration time can be controlled by a potentiometer