

# Lembar data produk

Spesifikasi



## soft starter for asynchronous motor - ATS01 - 12 A - 380..415V - 5.5 KW

ATS01N212QN

### 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    | 380...415 V - 10...10 %                                             |
| Motor Power Kw               | 5.5 kW, 3 phases at 380...415 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       | 4 W at full load and at end of starting<br>124 W in transient state |

### Complementary

|                              |                                                                                        |
|------------------------------|----------------------------------------------------------------------------------------|
| Assembly Style               | With heat sink                                                                         |
| Function Available           | Integrated bypass                                                                      |
| Supply Voltage Limits        | 342...456 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                                                              |
| 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                                                                 |

Disclaimer: Dokumentasi ini tidak ditujukan sebagai pengganti dan tidak untuk digunakan untuk menentukan kesesuaian atau keandalan produk ini untuk aplikasi pengguna

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 mm² AWG 8 power circuit<br>Screw connector - rigid without cable end 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                | 0.42 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Compatibility Code        | ATS01N2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Motor Power Range Ac-3    | 4...6 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 level 3 conforming to EN 50082-1<br>EMC immunity level B conforming to EN 50082-2<br>Harmonics level 3 conforming to IEC 1000-3-2<br>Harmonics level 3 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        | CCC<br>UL<br>GOST<br>CSA<br>C-Tick                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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             | 5.500 cm  |
| Package 1 Width              | 15.200 cm |
| Package 1 Length             | 17.500 cm |
| Package 1 Weight             | 534.000 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             | 7.985 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             | 74.012 kg |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 12 months |
|----------|-----------|

## Keberlanjutan

**Green Premium™** label adalah komitmen Schneider Electric untuk memberikan produk dengan performa lingkungan terbaik di kelasnya. Green Premium menjanjikan kepatuhan pada peraturan terbaru, transparansi pada dampak lingkungan, serta produk melingkar dan rendah CO<sub>2</sub>.

**Panduan untuk menilai keberlanjutan produk** adalah laporan resmi yang menjelaskan standar label lingkungan global dan bagaimana menafsirkan deklarasi lingkungan.

[Pelajari lebih lanjut tentang Green Premium >](#)

[Panduan untuk menilai keberlanjutan produk >](#)

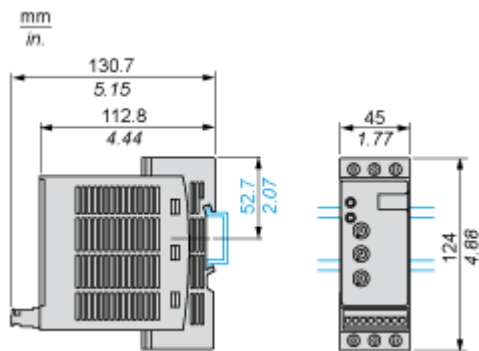
## Kinerja kesejahteraan

|                                                                                   |                            |                                                                                                                             |
|-----------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|  | Reach Free Of Svhc         |                                                                                                                             |
|  | Toxic Heavy Metal Free     |                                                                                                                             |
|  | Mercury Free               |                                                                                                                             |
|  | Rohs Exemption Information | Yes                                                                                                                         |
|                                                                                   |                            |                                                                                                                             |
| Reach Regulation                                                                  |                            | <a href="#">REACH Declaration</a>                                                                                           |
|                                                                                   |                            |                                                                                                                             |
| Eu Rohs Directive                                                                 |                            | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                           |
|                                                                                   |                            |                                                                                                                             |
| China Rohs Regulation                                                             |                            | <a href="#">China RoHS declaration</a>                                                                                      |
|                                                                                   |                            |                                                                                                                             |
| Weee                                                                              |                            | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

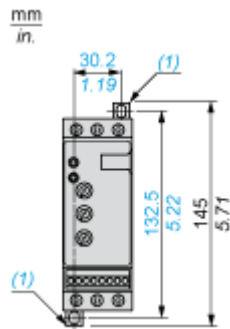
Dimensions Drawings

Dimensions

Mounting on Symetrical (35 mm) Rail



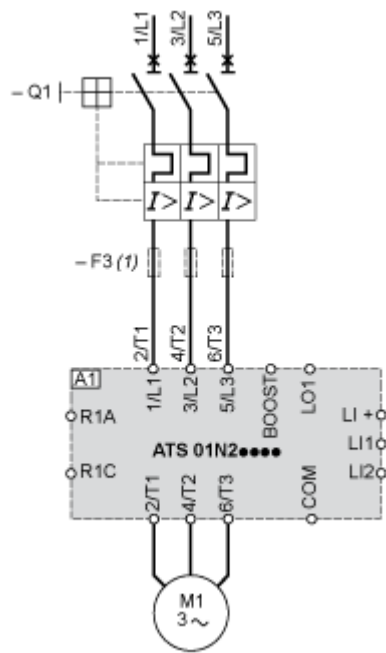
Screw Fixing



(1) Retractable fixings

Connections and Schema

Example of Manual Control

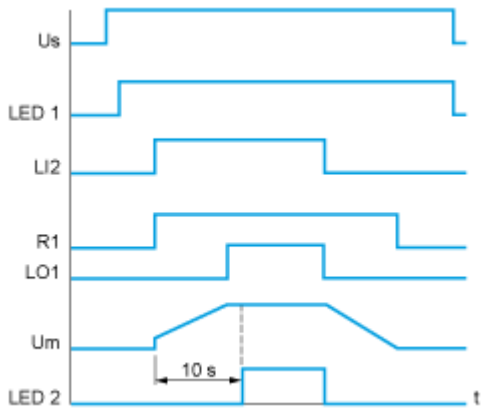


- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3 : 3 fast-acting fuses

Technical Description

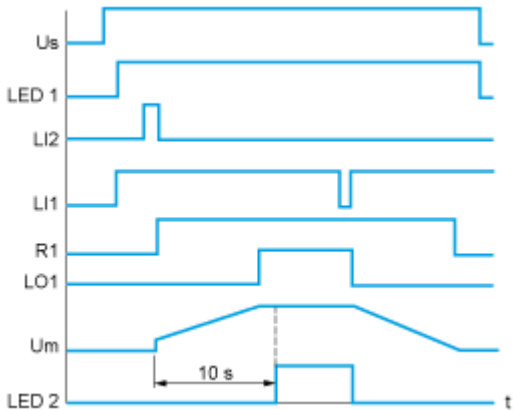
Function Diagram

2-wire Control with Deceleration



- Us : Power supply voltage
- LED 1 : Green LED
- LI2 : Logic input
- R1 : Relay output
- LO1 : Logic output
- LED 2 : Yellow LED

3-wire Control with Deceleration



- Us : Power supply voltage
- LED 1 : Green LED
- LI2, LI1 : Logic inputs
- R1 : Relay output
- LO1 : Logic output
- Um : Motor voltage
- LED 2 : Yellow LED