

# Product datasheet

Specifications



## soft starter for asynchronous motor - ATS01 - 9 A - 380..415 V - 4 KW

Local distributor code:  
389528850

ATS01N209QN

EAN Code: 3389110667233

### 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	4 kW, 3 phases at 380...415 V
ICI Starter Rating	9 A
Utilisation Category	AC-53B conforming to EN/IEC 60947-4-2
Current Consumption	45 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 94 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	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
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

<b>Discrete Output Current</b>	2 A DC-13 3 A AC-15
<b>Discrete Output Type</b>	Open collector logic LO1 end of starting signal Relay outputs R1A, R1C NO
<b>Discrete Output Voltage</b>	24 V (voltage limits: 6...30 V) open collector logic
<b>Minimum Switching Current</b>	10 mA at 6 V DC for relay outputs
<b>Maximum Switching Current</b>	Relay outputs: 2 A at 250 V AC cos phi = 0.5 and L/R = 20 ms inductive load Relay outputs: 2 A at 30 V DC cos phi = 0.5 and L/R = 20 ms inductive load
<b>Display Type</b>	1 LED (green) for starter powered up 1 LED (yellow) for nominal voltage reached
<b>Tightening Torque</b>	0.5 N.m 1.9...2.5 N.m
<b>Electrical Connection</b>	4 mm screw clamp terminal - rigid 1 1...10 mm <sup>2</sup> AWG 8 power circuit Screw connector - rigid without cable end 1 0.5...2.5 mm <sup>2</sup> AWG 14 control circuit 4 mm screw clamp terminal - rigid 2 1...6 mm <sup>2</sup> AWG 10 power circuit Screw connector - rigid 2 0.5...1 mm <sup>2</sup> AWG 17 control circuit Screw connector - flexible with cable end 1 0.5...1.5 mm <sup>2</sup> AWG 16 control circuit 4 mm screw clamp terminal - flexible without cable end 1 1.5...10 mm <sup>2</sup> AWG 8 power circuit Screw connector - flexible without cable end 1 0.5...2.5 mm <sup>2</sup> AWG 14 control circuit 4 mm screw clamp terminal - flexible with cable end 2 1...6 mm <sup>2</sup> AWG 10 power circuit 4 mm screw clamp terminal - flexible without cable end 2 1.5...6 mm <sup>2</sup> AWG 10 power circuit Screw connector - flexible without cable end 2 0.5...1.5 mm <sup>2</sup> AWG 16 control circuit
<b>Marking</b>	CE
<b>Operating Position</b>	Vertical +/- 10 degree
<b>Height</b>	124 mm
<b>Width</b>	45 mm
<b>Depth</b>	131 mm
<b>Net Weight</b>	0.42 kg
<b>Compatibility Code</b>	ATS01N2
<b>Motor Power Range Ac-3</b>	4...6 kW at 380...440 V 3 phases
<b>Motor Starter Type</b>	Soft starter

## Environment

<b>Electromagnetic Compatibility</b>	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
<b>Standards</b>	EN/IEC 60947-4-2
<b>Product Certifications</b>	GOST CCC CSA C-Tick UL
<b>Ip Degree Of Protection</b>	IP20
<b>Pollution Degree</b>	2 conforming to EN/IEC 60947-4-2

<b>Vibration Resistance</b>	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
<b>Shock Resistance</b>	15 gn for 11 ms conforming to EN/IEC 60068-2-27
<b>Relative Humidity</b>	5...95 % without condensation or dripping water conforming to EN/IEC 60068-2-3
<b>Ambient Air Temperature For Operation</b>	-10...40 °C (without derating) 40...50 °C (with current derating of 2 % per °C)
<b>Ambient Air Temperature For Storage</b>	-25...70 °C conforming to EN/IEC 60947-4-2
<b>Operating Altitude</b>	<= 1000 m without derating > 1000 m with current derating of 2.2 % per additional 100 m

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	5.300 cm
<b>Package 1 Width</b>	15.200 cm
<b>Package 1 Length</b>	17.300 cm
<b>Package 1 Weight</b>	535.000 g
<b>Unit Type Of Package 2</b>	S03
<b>Number Of Units In Package 2</b>	14
<b>Package 2 Height</b>	30 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	8.053 kg
<b>Unit Type Of Package 3</b>	P06
<b>Number Of Units In Package 3</b>	112
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	74.124 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## 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-CO<sub>2</sub> 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](#)

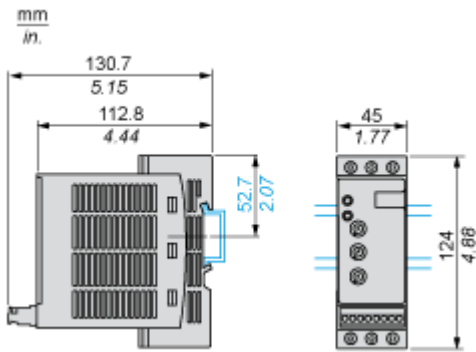
**Weee** The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

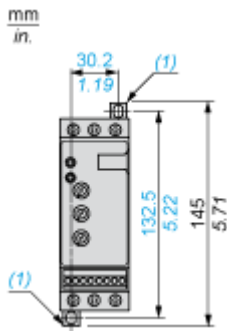
Dimensions

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Mounting on Symetrical (35 mm) Rail



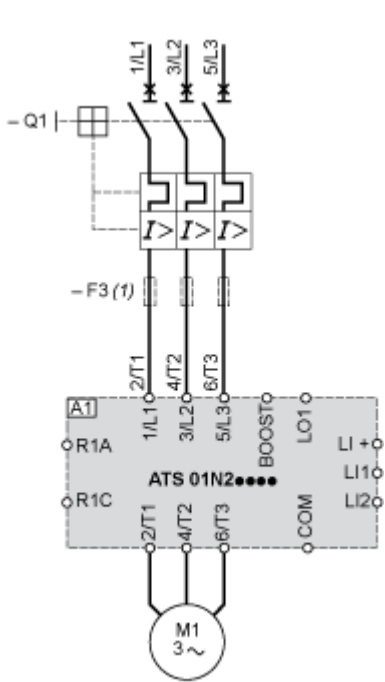
Screw Fixing



(1) Retractable fixings

Connections and Schema

Example of Manual Control

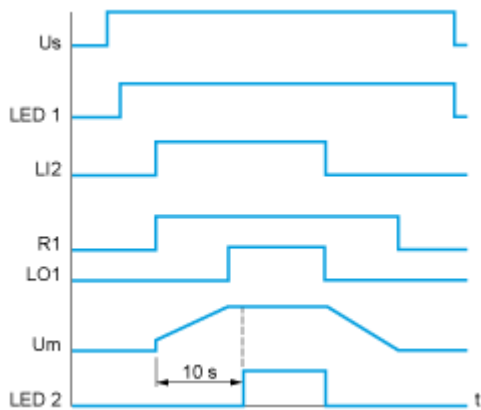


- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3 : 3 fast-acting fuses

Technical Description

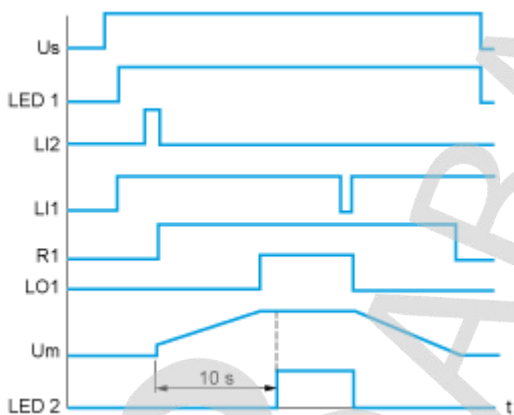
Function Diagram

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

