

# Product data sheet

Specifications



## soft starter for asynchronous motor, Altistart 01, ATS01, 9A, 460 to 480V

ATS01N209RT

**Product availability: Stock - Normally stocked in distribution facility**

## Main

Range of Product	Altistart 01
Product destination	Asynchronous motors
Product or Component Type	Soft starter
Product Specific Application	Simple machine
Device short name	ATS01
Phase	3 phase
[Us] rated supply voltage	460...480 V - 10...10 %
Maximum Horse Power Rating	5 hp, 3 phase 460...480 V
IcL starter rating	9 A
Utilisation category	AC-53B 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	414...528 V
Supply frequency	50...60 Hz - 5...5 %
Network Frequency	47.5...63 Hz
Output voltage	$\leq$ 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 $\leq$ 8 mA 27 kOhm
Discrete input voltage	24...40 V
Discrete input logic	Positive LI1, LI2, BOOST $< 5$ V $\leq$ 0.2 mA $> 13$ V, $\geq$ 0.5 mA
Discrete output current	2 A DC-13 3 A AC-15

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

<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 6...30 V) open collector logic
<b>Minimum switching current</b>	10 mA 6 V DC relay outputs
<b>Maximum switching current</b>	Relay outputs 2 A 250 V AC cos phi = 0.5 20 ms inductive Relay outputs 2 A 30 V DC cos phi = 0.5 20 ms inductive
<b>Display type</b>	1 LED Green)starter powered up 1 LED Yellow)nominal voltage reached
<b>tightening torque</b>	16.8...22.1 lbf.in (1.9...2.5 N.m) 4.4 lbf.in (0.5 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>	4.9 in (124 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	5.2 in (131 mm)
<b>Product Weight</b>	0.93 lb(US) (0.42 kg)
<b>Compatibility code</b>	ATS01N2

## 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>	CCC GOST CSA UL C-tick
<b>IP Degree of Protection</b>	IP20
<b>Pollution degree</b>	2 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 11 ms EN/IEC 60068-2-27
<b>Relative humidity</b>	5...95 % without condensation or dripping water EN/IEC 60068-2-3

<b>Ambient air temperature for operation</b>	14...104 °F (-10...40 °C) (without derating) 104...122 °F (40...50 °C) (with current derating of 2 % per °C)
<b>Ambient air temperature for storage</b>	-13...158 °F (-25...70 °C) EN/IEC 60947-4-2
<b>Operating altitude</b>	<= 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

<b>Category</b>	US10I1122392
<b>Discount Schedule</b>	0111
<b>GTIN</b>	3389110667240
<b>Returnability</b>	Yes
<b>Country of origin</b>	DE

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	2.047 in (5.200 cm)
<b>Package 1 Width</b>	5.906 in (15.000 cm)
<b>Package 1 Length</b>	6.693 in (17.000 cm)
<b>Package weight(Lbs)</b>	18.660 oz (529.000 g)
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	14
<b>Package 2 Height</b>	11.811 in (30.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	17.743 lb(US) (8.048 kg)

## Contractual warranty

<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Better



#### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	<a href="#">Compliant</a>
REACH Regulation	<a href="#">Free of Substances of Very High Concern above the threshold</a>
California proposition 65	<b>WARNING:</b> 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>

### Use Longer




#### Lifetime extension

Repair	No
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### Use Again



#### Repack and remanufacture

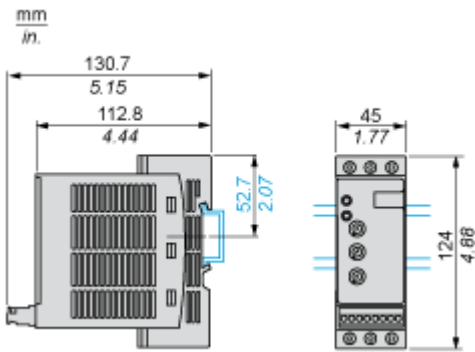
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Dimensions Drawings

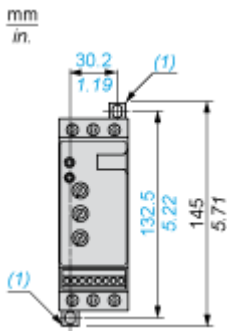
Dimensions

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Mounting on Symetrical (35 mm) Rail



Screw Fixing

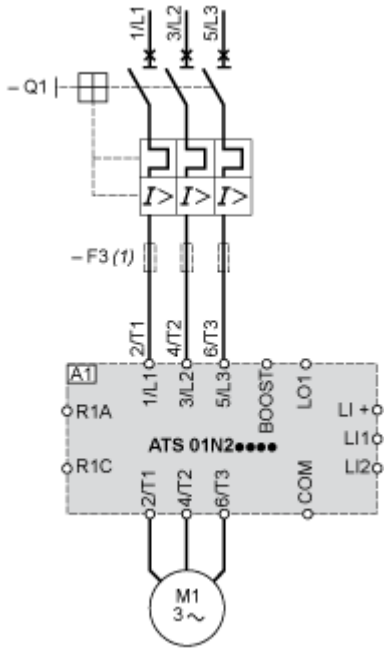


(1) Retractable fixings

Connections and Schema

Example of Manual Control

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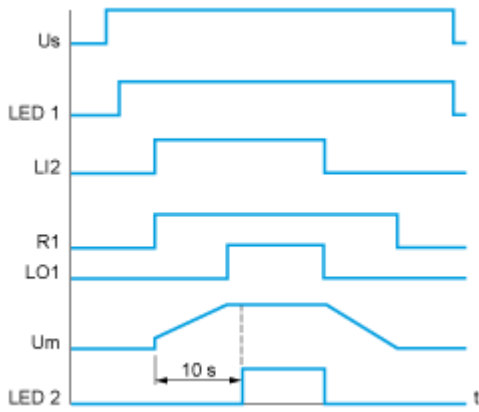
- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3 : 3 fast-acting fuses

Technical Description

Function Diagram

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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

Image of product / Alternate images

**Alternative**

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