

# Product data sheet

Specifications



soft starter for asynchronous motor,  
Altistart 01, ATS01, 9A, 110 to  
480V, 1.1 to 4kW

ATS01N109FT

Product availability: Stock - Normally stocked in distribution facility

## 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
Phase	1 phase
[Us] rated supply voltage	110...480 V - 10...10 %
Motor power kW	4 kW, 3 phase 400 V 1.5 kW, 3 phase 230 V 1.1 kW, 1 phase 230 V
Maximum Horse Power Rating	1 hp, 3 phase 210 V 2 hp, 3 phase 230 V 5 hp, 3 phase 460 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	1 W at full load and at end of starting 46 W in transient state

## Complementary

Assembly style	With heat sink
Function Available	Integrated bypass
Supply voltage limits	99...528 V
Supply frequency	50...60 Hz - 5...5 %
Network Frequency	47.5...63 Hz
Output voltage	<= power supply voltage
[Uc] control circuit voltage	110 V AC +/- 10 % 35 mA 24 V AC/DC +/- 10 % 30 mA 240 V AC +/- 10 % 80 mA
Starting time	1 s / 100 5 s / 20 Adjustable from 1 to 5 s
Starting torque	30...80 % of starting torque of motor connected directly on the line supply
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.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

<b>Tightening torque</b>	4.4 lbf.in (0.5 N.m) 16.8...22.1 lbf.in (1.9...2.5 N.m)
<b>Electrical connection</b>	4 mm screw clamp terminal - rigid 1 1...10 mm² AWG 8 power circuit Screw connector - rigid without cable end 1 0.5...2.5 mm² AWG 14 control circuit 4 mm screw clamp terminal - rigid 2 1...6 mm² AWG 10 power circuit Screw connector - rigid 2 0.5...1 mm² AWG 17 control circuit Screw connector - flexible with cable end 1 0.5...1.5 mm² AWG 16 control circuit 4 mm screw clamp terminal - flexible without cable end 1 1.5...10 mm² AWG 8 power circuit Screw connector - flexible without cable end 1 0.5...2.5 mm² AWG 14 control circuit 4 mm screw clamp terminal - flexible with cable end 2 1...6 mm² AWG 10 power circuit 4 mm screw clamp terminal - flexible without cable end 2 1.5...6 mm² AWG 10 power circuit Screw connector - flexible without cable end 2 0.5...1.5 mm² 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>Net Weight</b>	0.62 lb(US) (0.28 kg)
<b>Compatibility code</b>	ATS01N1
<b>Motor power range AC-3</b>	1.1...2 kW 200...240 V 1 phase 2.2...3 kW 200...240 V 3 phase 4...6 kW 380...440 V 3 phase
<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>	C-tick GOST CSA CCC UL
<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

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

Category	US10I1122392
Discount Schedule	0I11
GTIN	3389110667158
Returnability	Yes
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.09 in (5.300 cm)
Package 1 Width	5.91 in (15.000 cm)
Package 1 Length	6.69 in (17.000 cm)
Package 1 Weight	12.028 oz (341.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	14
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	11.854 lb(US) (5.377 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	112
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	124.826 lb(US) (56.620 kg)

## Contractual warranty


Warranty	18 months
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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
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	<a href="#">REACH Declaration</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

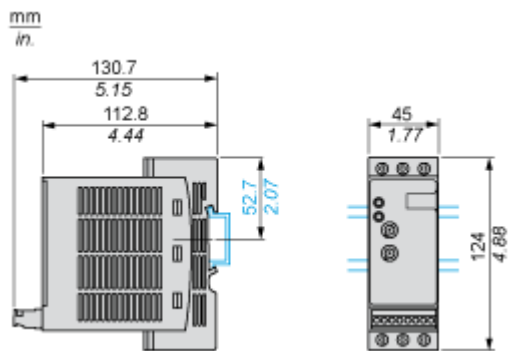
Use Again

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

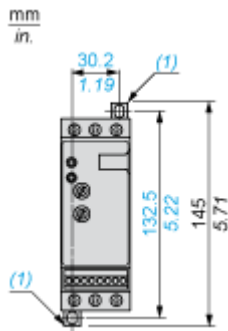
Dimensions Drawings

Dimensions

Mounting on Symetrical (35 mm) Rail

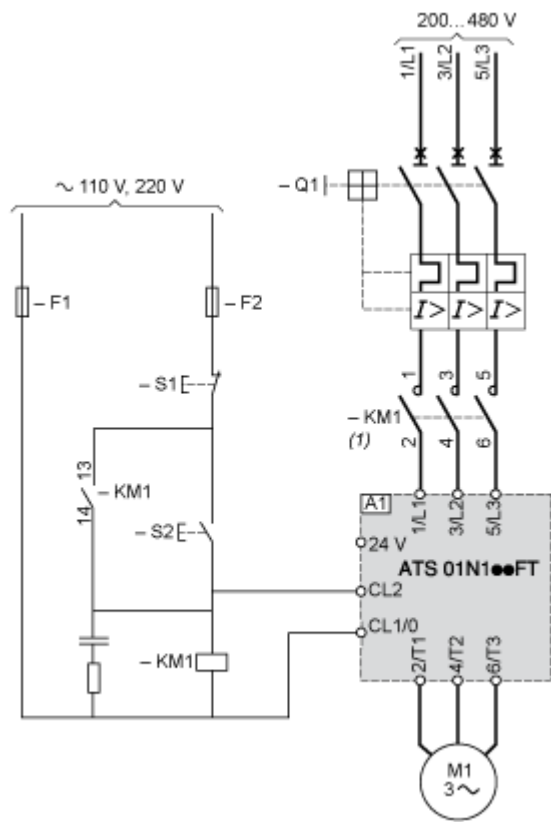


Screw Fixing



Connections and Schema

Example of 3-phase Power Supply Connection



(1) A line contactor must be used in the sequence.

A1 : Soft starter

Q1 : Motor circuit-breaker

KM1 : Contactors

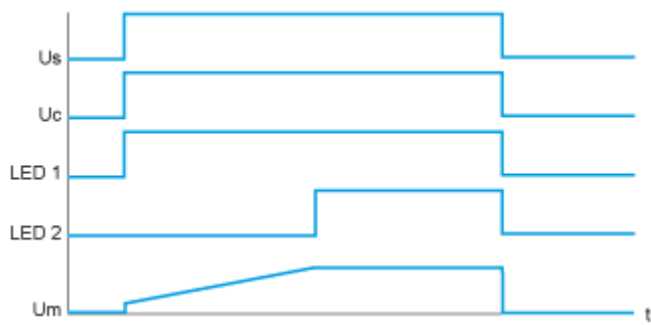
F1, F2 : Control protection fuses

S1, S2 : Pushbuttons

Technical Description

Function Diagram

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- Us : Power supply voltage
- Uc : Control supply voltage
- LED 1 : Green LED
- LED 2 : Yellow LED
- Um : Motor voltage