

# Product data sheet

Specifications



## soft starter for asynchronous motor - ATS01 - 6 A - 380..415V - 1.5..3 KW

ATS01N206QN

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

**Price\* : 159.60 USD**

### Main

<b>Range of Product</b>	Altistart 01
<b>Product or Component Type</b>	Soft starter
<b>Product destination</b>	Asynchronous motors
<b>Product Specific Application</b>	Simple machine
<b>Device short name</b>	ATS01
<b>Phase</b>	3 phase
<b>[Us] rated supply voltage</b>	380...415 V - 10...10 %
<b>Motor power kW</b>	3 kW, 3 phase 380...415 V 1.5 kW, 3 phase 380...415 V 2.2 kW, 3 phase 380...415 V
<b>IcL starter rating</b>	6 A
<b>Utilisation category</b>	AC-53B EN/IEC 60947-4-2
<b>Current consumption</b>	30 A at nominal load
<b>Type of start</b>	Start with voltage ramp
<b>Power dissipation in W</b>	4 W at full load and at end of starting 64 W in transient state

### Complementary

<b>Assembly style</b>	With heat sink
<b>Function Available</b>	Integrated bypass
<b>Supply voltage limits</b>	342...456 V
<b>Supply frequency</b>	50...60 Hz - 5...5 %
<b>Network Frequency</b>	47.5...63 Hz
<b>Output voltage</b>	<= power supply voltage
<b>[Uc] control circuit voltage</b>	Built into the starter
<b>Starting time</b>	1 s / 100 5 s / 20 10 s / 10 Adjustable from 1 to 10 s
<b>Deceleration time symb</b>	Adjustable from 1 to 10 s
<b>Starting torque</b>	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.

<b>Discrete input type</b>	Logic LI1, LI2, BOOST) stop, run and boost on start-up functions <= 8 mA 27 kOhm
<b>Discrete input voltage</b>	24...40 V
<b>Discrete input logic</b>	Positive LI1, LI2, BOOST < 5 V <= 0.2 mA > 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 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>	16.82...22.13 lbf.in (1.9...2.5 N.m) 4.43 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 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>	4.88 in (124 mm)
<b>Width</b>	1.77 in (45 mm)
<b>Depth</b>	5.16 in (131 mm)
<b>Net Weight</b>	0.93 lb(US) (0.42 kg)
<b>Compatibility code</b>	ATS01N2
<b>Motor power range AC-3</b>	1.1...2 kW 380...440 V 3 phase 2.2...3 kW 380...440 V 3 phase
<b>Motor starter type</b>	Soft starter

## Environment

<b>Electromagnetic compatibility</b>	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 EN 50082-2 Harmonics IEC 1000-3-2 Harmonics IEC 1000-3-4 Immunity to conducted interference caused by radio-electrical fields level 3 IEC 61000-4-6 Immunity to electrical transients level 4 IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 IEC 61000-4-3 Micro-cuts and voltage fluctuation IEC 61000-4-11 Voltage/current impulse level 3 IEC 61000-4-5
<b>Standards</b>	EN/IEC 60947-4-2
<b>Product Certifications</b>	UL B44.1-96/ASME A17.5 for starter wired to the motor delta terminal CSA GOST C-tick CCC
<b>IP Degree of Protection</b>	IP20
<b>Pollution degree</b>	2 EN/IEC 60947-4-2
<b>Vibration resistance</b>	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

Category	22392-ATSU01/ATS01 LOW HP SOFT STARTERS
Discount Schedule	I11
GTIN	3389110667202
Returnability	No
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 (5.500 cm)
Package 1 Width	5.98 in (15.200 cm)
Package 1 Length	6.89 in (17.500 cm)
Package 1 Weight	18.87 oz (535.000 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	17.50 lb(US) (7.936 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	163.42 lb(US) (74.124 kg)

## Offer Sustainability

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>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>

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**RoHS exemption information**      Yes

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

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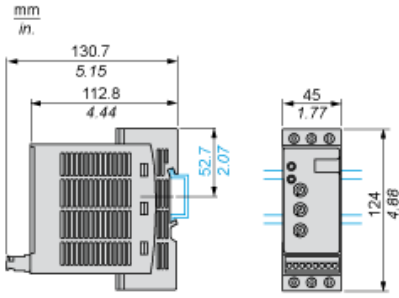
**Contractual warranty**

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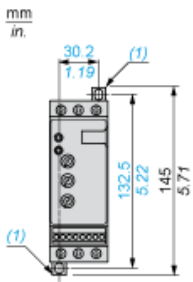
**Warranty**      18 months

Dimensions

Mounting on Symmetrical (35 mm) Rail



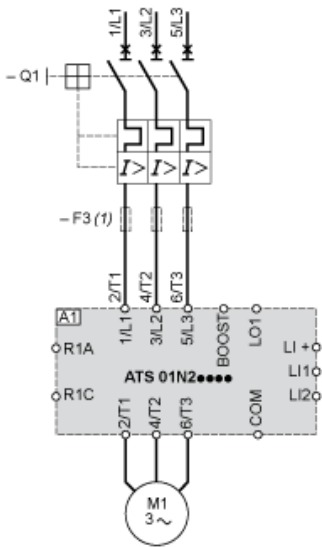
Screw Fixing



(1) Retractable fixings

**Example of Manual Control**

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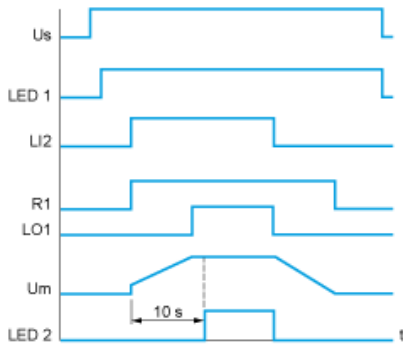


- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3 : 3 fast-acting fuses

**Function Diagram**

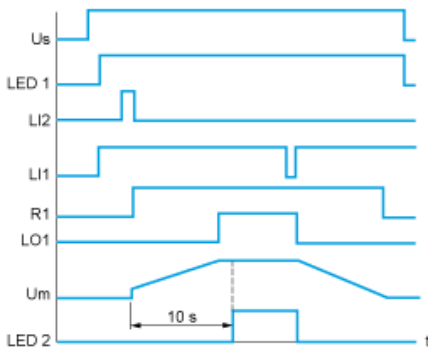
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**2-wire Control with Deceleration**



- 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

**Recommended replacement(s)**