

# Product data sheet

## Characteristics

# ATS01N209RT

soft starter for asynchronous motor - ATS01 - 9 A  
- 460..480 V

Product availability : Stock - Normally stocked in distribution facility

Price\*\* : 152.00 USD



### 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	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	<= 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 L11, L12, 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 < 5 V <= 0.2 mA > 13 V, >= 0.5 mA
Discrete output current	2 A DC-13 3 A AC-15
Discrete output type	Open collector logic LO1 end of starting signal Relay outputs R1A, R1C NO
Discrete output voltage	24 V 6...30 V) open collector logic
Minimum switching current	10 mA 6 V DC relay outputs
Maximum switching current	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
Display type	1 LED green)starter powered up 1 LED yellow)nominal voltage reached
Tightening torque	16.82...22.13 lbf.in (1.9...2.5 N.m) 4.43 lbf.in (0.5 N.m)
Electrical connection	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
Marking	CE
Operating position	Vertical +/- 10 degree
Height	4.88 in (124 mm)
Width	1.77 in (45 mm)
Depth	5.16 in (131 mm)
Net weight	0.93 lb(US) (0.42 kg)
Compatibility code	ATS01N2

## Environment

Electromagnetic compatibility	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
Standards	EN/IEC 60947-4-2
Product certifications	CCC B44.1-96/ASME A17.5 for starter wired to the motor delta terminal GOST CSA UL C-Tick
IP degree of protection	IP20
Pollution degree	2 EN/IEC 60947-4-2
Vibration resistance	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) 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 > 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	00785901875871
Package weight(Lbs)	0.54 kg (1.2 lb(US))
Returnability	Yes
Country of origin	DE

### Offer Sustainability

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
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

### Contractual warranty

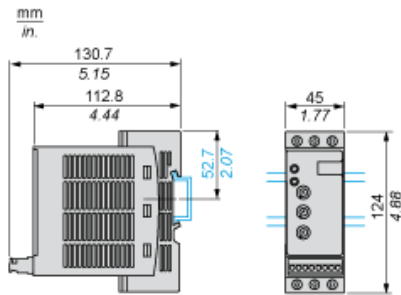
Warranty	18 months
----------	-----------

---

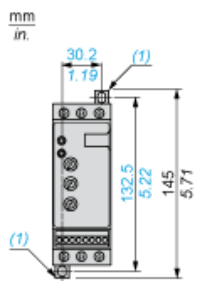
Dimensions

---

Mounting on Symetrical (35 mm) Rail

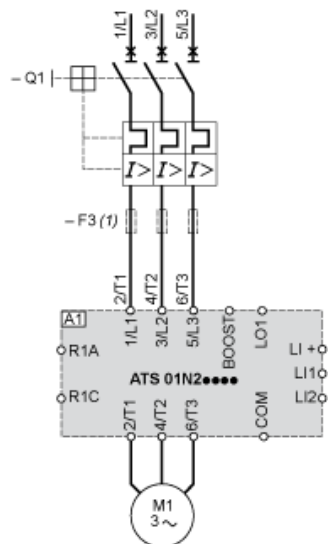


Screw Fixing



(1) Retractable fixings

Example of Manual Control



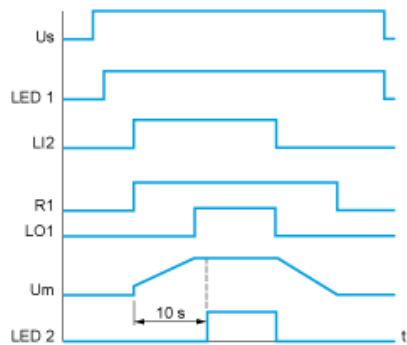
- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3 : 3 fast-acting fuses

---

Function Diagram

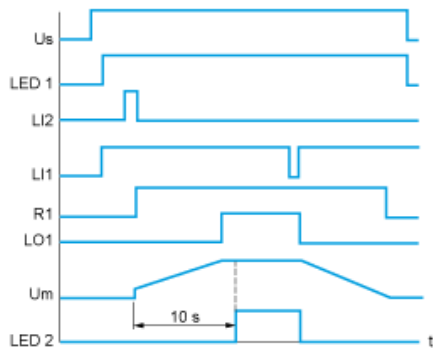
---

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