

# ATS01N222QN

soft starter for asynchronous motor, Altistart 01, ATS01, 22A, 380 to 415V, 7.5 to 11kW



## 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	380...415 V - 10...10 %
Motor power kW	11 kW, 3 phase 380...415 V 7.5 kW, 3 phase 380...415 V
lCL starter rating	22 A
Utilisation category	AC-53B EN/IEC 60947-4-2
Current consumption	110 A at nominal load
Type of start	Start with voltage ramp
Power dissipation in W	124.5 W in transient state 4.5 W at full load and at end of starting

## 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 < 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 kV DC cos phi = 0.5 20 ms inductive
Display type	1 LED Green)starter powered up 1 LED Yellow)nominal voltage reached
Tightening torque	4.43 Lbf.in (0.5 N.m) 16.82...22.13 lbf.in (1.9...2.5 N.m)

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Electrical connection	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
Marking	CE
Operating position	Vertical +/- 10 degree
Height	6.06 in (154 mm)
Width	1.77 in (45 mm)
Depth	5.16 in (131 mm)
Net Weight	1.23 lb(US) (0.56 kg)
Compatibility code	ATS01N2
Motor power range AC-3	7...11 kW 380...440 V 3 phase
Motor starter type	Soft starter

## 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 level 3 EN 50082-1 EMC immunity level B EN 50082-2 Harmonics level 3 IEC 1000-3-2 Harmonics level 3 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	CSA[RETURN]JUL[RETURN]CCC[RETURN]B44.1-96/ASME A17.5 for starter wired to the motor delta terminal[RETURN]C-tick[RETURN]GOST
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 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	3389110667318
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.24 in (5.7 cm)
Package 1 Width	5.94 in (15.1 cm)
Package 1 Length	6.77 in (17.2 cm)
Package 1 Weight	23.70 oz (672 g)
Unit Type of Package 2	S03
Number of Units in Package 2	14
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	21.94 lb(US) (9.952 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	112
Package 3 Height	30.31 in (77 cm)
Package 3 Width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)
Package 3 Weight	194.76 lb(US) (88.34 kg)

## Offer Sustainability

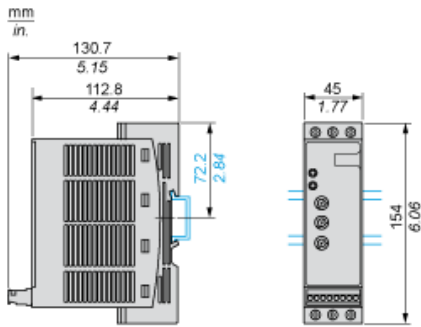
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</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>
RoHS exemption information	<a href="#">Yes</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

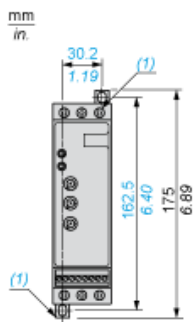
Warranty	18 months
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Dimensions

Mounting on Symetrical (35 mm) Rail

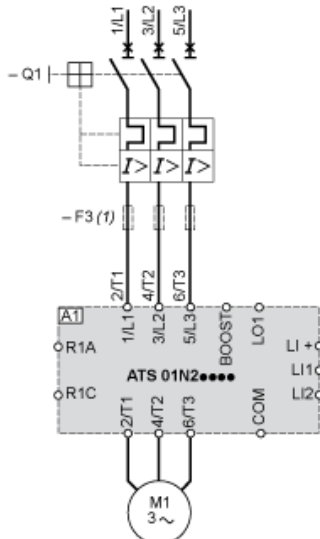


Screw Fixing



(1) Retractable fixings

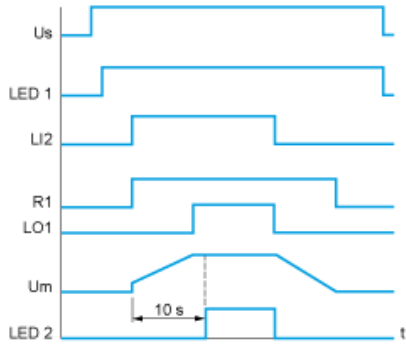
## Example of Manual Control



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

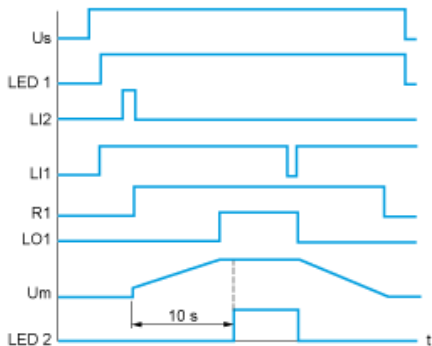
Function Diagram

2-wire Control with Deceleration



Us : Power supply voltage  
 LED Green LED  
 1 :  
 LI2 : Logic input  
 R1 : Relay output  
 LO1 : Logic output  
 LED Yellow LED  
 2 :

3-wire Control with Deceleration



Us : Power supply voltage  
 LED Green LED  
 1 :  
 LI2, Logic inputs  
 LI1 :  
 R1 : Relay output  
 LO1 : Logic output  
 Um : Motor voltage  
 LED Yellow LED  
 2 :