

ATS01N212QN

soft starter for asynchronous motor, Altistart 01, ATS01, 12A, 380 to 415V, 5.5kW



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	5.5 kW, 3 phase 380...415 V
lcl starter rating	12 A
Utilisation category	AC-53B EN/IEC 60947-4-2
Current consumption	60 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 124 W in transient state

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	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 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)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Electrical connection	4 mm screw clamp terminal - rigid 1 1...10 mm ² AWG 8 power circuit Screw connector - rigid 1 0.5...2.5 mm ² AWG 14 control circuit 4 mm screw clamp terminal - rigid 2 1...6 mm ² AWG 10 power circuit Screw connector - rigid 2 0.5...1 mm ² AWG 17 control circuit Screw connector - flexible with cable end 1 0.5...1.5 mm ² AWG 16 control circuit 4 mm screw clamp terminal - flexible without cable end 1 1.5...10 mm ² AWG 8 power circuit Screw connector - flexible without cable end 1 0.5...2.5 mm ² AWG 14 control circuit 4 mm screw clamp terminal - flexible with cable end 2 1...6 mm ² AWG 10 power circuit 4 mm screw clamp terminal - flexible without cable end 2 1.5...6 mm ² AWG 10 power circuit Screw connector - flexible without cable end 2 0.5...1.5 mm ² 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
Motor power range AC-3	4...6 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 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	B44.1-96/ASME A17.5 for starter wired to the motor delta terminal[RETURN]CCC[RETURN]UL[RETURN]GOST[RETURN]CSA[RETURN]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 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	3389110667264
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	18.84 oz (534.000 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	17.60 lb(US) (7.985 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	163.17 lb(US) (74.012 kg)

Offer Sustainability

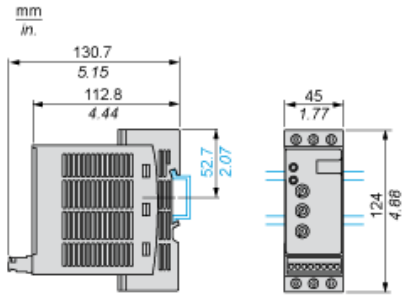
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

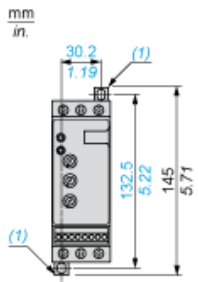
Warranty	18 months
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Dimensions

Mounting on Symetrical (35 mm) Rail

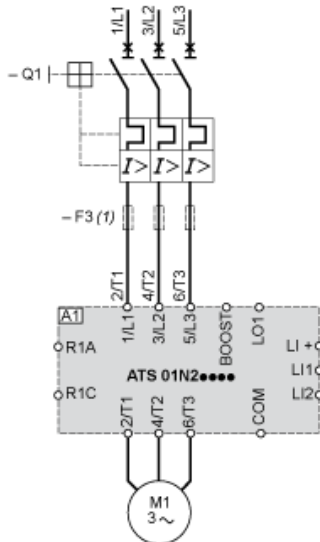


Screw Fixing



(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

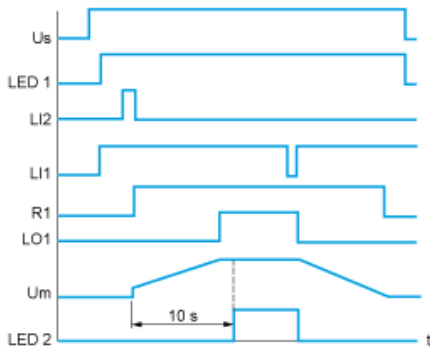
Function Diagram

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 :