Product data sheet
Characteristics

ATS01N212LU
soft starter for asynchronous motor - ATS01 - 12 A - 200..240V - 2.2..3 KW

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
Network number of phases	3 phases
[Us] rated supply voltage	200...240 V - 10...10 %
Motor power kW	3 KW, 3 phases at 200...240 V 2.2 kW, 3 phases at 200...240 V
Motor power hp	3 hp, 3 phases at 200...240 V
IcL starter rating	12 A
Utilisation category	AC-53B conforming to 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	180…264 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 at State 0: < 5 V and <= 0.2 mA at State 1: > 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 (voltage limits: 6...30 V) open collector logic
Minimum switching current	10 mA at 6 V DC for relay outputs
Maximum switching current	Relay outputs: 2 A at 250 V AC cos phi = 0.5 and L/R = 20 ms inductive load Relay outputs: 2 A at 30 V DC cos phi = 0.5 and L/R = 20 ms inductive load
Display type	1 LED (green) for starter powered up 1 LED (yellow) for nominal voltage reached
Tightening torque	0.5 N.M 1.9…2.5 N.m

Electrical connection	4 mm screw clamp terminal - rigid 1 1...10 mm² AWG 8 power circuit Screw connector - rigid 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
Marking	CE
Operating position	Vertical +/- 10 degree
Height	124 mm
Width	45 mm
Depth	131 mm
Net weight	0.42 kg
Compatibility code	ATS01N2
Motor power range AC-3	2.2…3 kW at 200…240 V 3 phases
Motor starter type	Soft starter

Environment

Electromagnetic compatibility	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 conforming to EN 50082-1 EMC immunity conforming to EN 50082-2 Harmonics conforming to IEC 1000-3-2 Harmonics 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
Standards	EN/IEC 60947-4-2
Product certifications	C-Tick GOST UL CCC B44.1-96/ASME A17.5 for starter wired to the motor delta terminal CSA
IP degree of protection	IP20
Pollution degree	2 conforming to EN/IEC 60947-4-2
Vibration resistance	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
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Relative humidity	5…95 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	-10…40 °C (without derating) 40…50 °C (with current derating of 2 % per °C)
Ambient air temperature for storage	-25…70 °C conforming to EN/IEC 60947-4-2
Operating altitude	<= 1000 m without derating > 1000 m with current derating of 2.2 % per additional 100 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	534 g
Package 1 Height	5.5 cm
Package 1 width	15.2 cm

Package 1 Length	17.5 cm
Unit Type of Package 2	S03
Number of Units in Package 2	14
Package 2 Weight	7.803 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

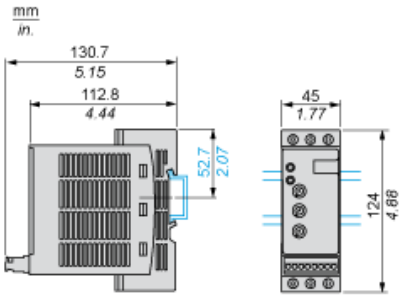
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Contractual warranty

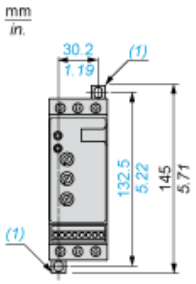
Warranty	18 months

Dimensions

Mounting on Symetrical (35 mm) Rail

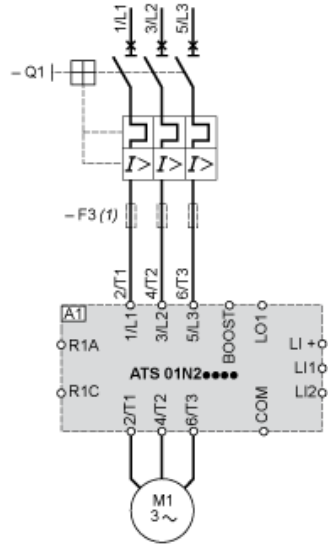


Screw Fixing



(1) Retractable fixings

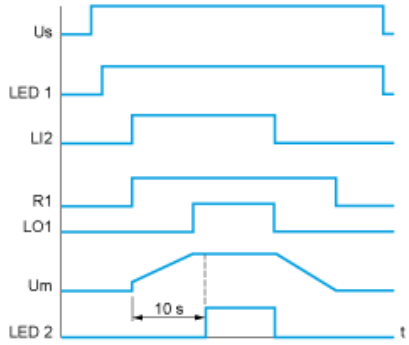
Example of Manual Control



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

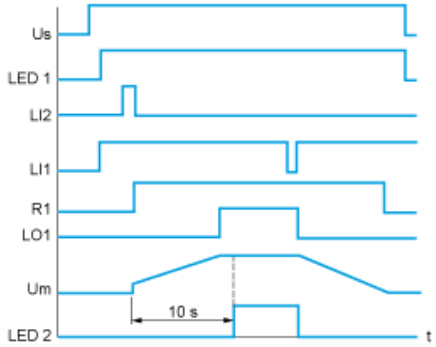
Function Diagram

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



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LO1 : Logic output
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