Product datasheet

Specifications



soft starter for asynchronous motor, Altistart 01, ATS01, 22A, 460 to 480V

ATS01N222RT

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	460480 V - 1010 %
Motor power hp	10 hp, 3 phases at 460480 V 15 hp, 3 phases at 460480 V
IcL starter rating	22 A
Utilisation category	AC-53B conforming to 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	414528 V
Supply frequency	5060 Hz - 55 %
Network frequency	47.563 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	3080 % 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	2440 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: 630 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 1.92.5 N.m
Electrical connection	 4 mm screw clamp terminal - rigid 1 110 mm² AWG 8 power circuit Screw connector - rigid without cable end 1 0.52.5 mm² AWG 14 control circuit 4 mm screw clamp terminal - rigid 2 16 mm² AWG 10 power circuit Screw connector - rigid 2 0.51 mm² AWG 17 control circuit Screw connector - flexible with cable end 1 0.51.5 mm² AWG 16 control circuit 4 mm screw clamp terminal - flexible without cable end 1 1.510 mm² AWG 8 power circuit Screw connector - flexible without cable end 1 0.52.5 mm² AWG 14 control circuit 4 mm screw clamp terminal - flexible without cable end 2 16 mm² AWG 10 power circuit 4 mm screw clamp terminal - flexible with cable end 2 16 mm² AWG 10 power circuit 4 mm screw clamp terminal - flexible without cable end 2 1.56 mm² AWG 10 power circuit
marking	CE
Operating position	Vertical +/- 10 degree
Height	154 mm
Width	45 mm
Depth	131 mm
net weight	0.56 kg
Compatibility code	ATS01N2

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 level 3 conforming to EN 50082-1
	EMC immunity level B conforming to EN 50082-2
	Harmonics level 3 conforming to IEC 1000-3-2
	Harmonics level 3 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	UL
	CCC
	C-Tick
	GOST
	CSA
IP degree of protection	IP20
Pollution degree	2 conforming to EN/IEC 60947-4-2
Vibration resistance	
Vibration resistance	1 gn (f= 13150 Hz) conforming to EN/IEC 60068-2-6

Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Relative humidity	595 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	-1040 °C (without derating) 4050 °C (with current derating of 2 % per °C)
Ambient air temperature for storage	-2570 °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 Height	5.500 cm
Package 1 Width	15.200 cm
Package 1 Length	17.500 cm
Package 1 Weight	678.000 g
Unit Type of Package 2	\$03
Number of Units in Package 2	14
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.975 kg

Contractual warranty

Warranty

18 months

Sustainability

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Well-being performance

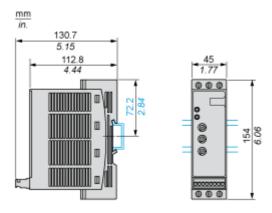
Reach Free Of Svhc	
V Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes
Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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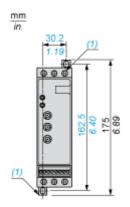
Dimensions Drawings

Dimensions

Mounting on Symetrical (35 mm) Rail



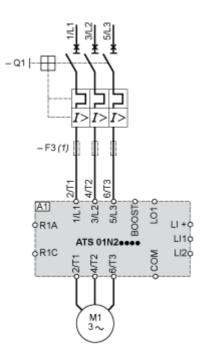
Screw Fixing



(1) Retractable fixings

Connections and Schema

Example of Manual Control



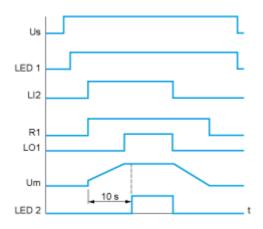
- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3: 3 fast-acting fuses

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Technical Description

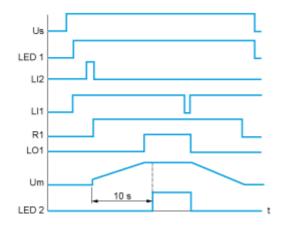
Function Diagram

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