

soft starter for asynchronous motor - ATSU01 - 12 A - 200..480V - 2.2..5.5 KW

Local distributor code: 389704331

ATSU01N212LT

EAN Code: 3389110667103

Main

Range Of Product	Altistart U01 and TeSys U	
Product Or Component Type	Soft starter	
Product Destination	Asynchronous motors	
Product Specific Application	Simple machine	
Device Short Name	ATSU01	
Network Number Of Phases	umber Of Phases 3 phases	
[Us] Rated Supply Voltage	200480 V - 1010 %	
Motor Power Kw	2.2 kW, 3 phases at 230 V 5.5 kW, 3 phases at 400 V 3 kW, 3 phases at 230 V	
Motor Power Hp	3 hp, 3 phases at 230 V 7.5 hp, 3 phases at 460 V	
Icl Starter Rating	12 A	
Utilisation Category	AC-53B conforming to EN/IEC 60947-4-2	
Current Consumption	65 mA	
Type Of Start	Start with voltage ramp	
Power Dissipation In W	1.5 W at full load and at end of starting 121.5 W in transient state	

Complementary

Assembly Style	With heat sink	
Function Available	Integrated bypass	
Supply Voltage Limits	180528 V	
Supply Frequency	5060 Hz - 55 %	
Network Frequency	47.563 Hz	
Output Voltage	<= power supply voltage	
[Uc] Control Circuit Voltage	/oltage 24 V DC +/- 10 %	
Starting Time	1 s / 100 5 s / 20 10 s / 10 Adjustable from 1 to 10 s	
Deceleration Time Symb	ime Symb Adjustable from 1 to 10 s	
Starting Torque	que 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	rete Input Voltage 2440 V	

Galvanic between power and control
Positive LI1, LI2, BOOST at State 0: < 5 V and <= 0.2 mA at State 1: > 13 V, >= 0.5 mA
2 A DC-13 3 A AC-15
Open collector logic LO1 end of starting signal Relay outputs R1A, R1C NO
24 V (voltage limits: 630 V) open collector logic
10 mA at 6 V DC for relay outputs
Relay outputs: 2 A at 30 V DC cos phi = 0.5 and L/R = 20 ms inductive load Relay outputs: 2 A at 250 V AC AC-15 cos phi = 0.5 and L/R = 20 ms inductive load
440 V relay outputs
LED (green) for starter powered up LED (yellow) for nominal voltage reached
1.92.5 N.m 0.5 N.m
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 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 5 crew connector - flexible without cable end 2 0.51.5 mm² AWG 10 control circuit
CE
Vertical +/- 10 degree
234 mm
45 mm
150 mm
0.34 kg
2.23 kW at 200240 V 3 phases 46 kW at 380440 V 3 phases

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 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 electrical transients level 4 conforming to IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 conforming to IEC 61000-4-5 Conducted and radiated emissions level 3 conforming to IEC 61000-4-6 Immunity to conducted interference caused by radio-electrical fields level 4 conforming to IEC 61000-4-11
Standards	EN/IEC 60947-4-2

Product Certifications	UL	
Froduct Certifications		
	CCC	
	C-Tick	
	CSA	
Ip Degree Of Protection	IP20	
Pollution Degree	2 conforming to EN/IEC 60947-4-2	
Vibration Resistance	1 gn (f= 13150 Hz) conforming to EN/IEC 60068-2-6	
	1.5 mm peak to peak (f= 313 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	-1040 °C (without derating)	
Operation	4050 °C (with current derating of 2 % per °C)	
Ambient Air Temperature For Storage	• • • • • • • • • • • • • • • • • • • •	
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	5.5 cm
Package 1 Width	17.5 cm
Package 1 Length	15.0 cm
Package 1 Weight	453.0 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	14
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	6.889 kg

Logistical informations

Country Of Origin

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

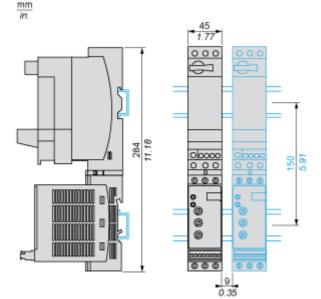
②	Reach Free Of Svhc	
⊘	Toxic Heavy Metal Free	
⊘	Mercury Free	
⊘	Rohs Exemption Information	Yes
Rea	ch Regulation	REACh Declaration
Eu F	Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Chir	na Rohs Regulation	China RoHS declaration
Wee	e	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

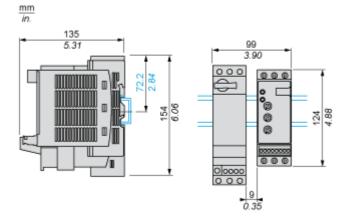
With TeSys U Combination (Non Reversing Power Base)

Mounting on symetrical (35 mm) rail with power connector between ATS and TeSys U.



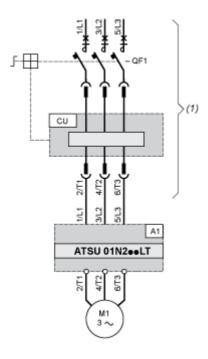
With TeSys U Combination (Non Reversing or Reversing Power Base)

Side by side mounting



Connections and Schema

Power Wiring



(1) TeSys U

A1: Soft start/soft stop unit

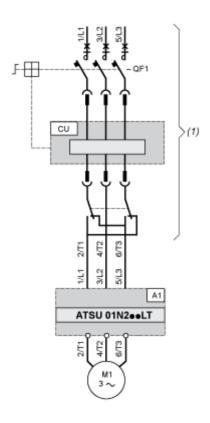
QF1: TeSys U controller-starter

CU: TeSys U control unit

With Reversing Unit

Product datasheet

ATSU01N212LT



(1) TeSys U with reversing unit

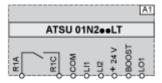
A1: Soft start/soft stop unit

QF1: TeSys U controller-starter

CU: TeSys U control unit

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Control Wiring



A1: Soft start/soft stop unit R1A, R1C: Relay output NO

COM: Commun

LI1, LI2: Logic inputs (stop and run functions)

BOOST: Logic input (boost on start-up function)

LO1: Logic output

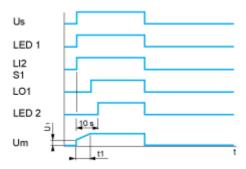
Product datasheet

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Technical Description

Functional Diagram Automatic 2-wire Control

Without Deceleration



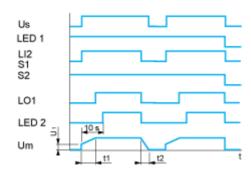
Us: Power supply voltage

LED 1 : Green LED
LI2 : Logic input
S1 : Pushbutton
LED 2 : Yellow LED
Um : Motor voltage

t1: Acceleration time can be controlled by a potentiometer

U1: Starting time can be controlled by a potentiometer

With and without Deceleration



Us: Power supply voltage

LED 1: Green LED
LI2: Logic input
S1, S2: Pushbuttons
LO1: Logic output

Um : Motor voltage

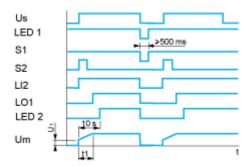
Yellow LED

LED 2:

t1: Acceleration time can be controlled by a potentiometer
 t2: Deceleration time can be controlled by a potentiometer
 U1: Starting time can be controlled by a potentiometer

Functional Diagram Automatic 3-wire Control

Without Deceleration



Us: Power supply voltage

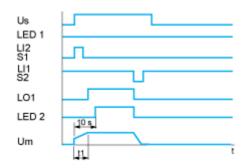
LED 1: Green LED S1, S2: Pushbuttons

LI2: Logic input
LO1: Logic output
LED 2: Yellow LED
Um: Motor voltage

t1: Acceleration time can be controlled by a potentiometer

U1: Starting time can be controlled by a potentiometer

With Deceleration



Us: Power supply voltage

LED 1: Green LED
S1, S2: Pushbuttons
LI1, LI2: Logic inputs
LO1: Logic output
LED 2: Yellow LED
Um: Motor voltage

t1: Acceleration time can be controlled by a potentiometer