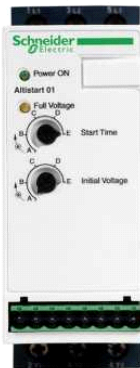


ATS01N109FT

soft starter for asynchronous motor - ATS01 - 9 A - 110..480V - 1.1..4 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	1 phase
[Us] rated supply voltage	110...480 V - 10...10 %
Motor power kW	4 kW 3 phases 400 V 1.5 kW 3 phases 230 V 1.1 kW 1 phase 230 V
Motor power hp	1 hp 3 phases 210 V 2 hp 3 phases 230 V 5 hp 3 phases 460 V
IcL starter rating	9 A
Utilisation category	AC-53B EN/IEC 60947-4-2
Current consumption	45 A at nominal load
Type of start	Start with voltage ramp
Power dissipation in W	1 W at full load and at end of starting 46 W in transient state

Complementary

Assembly style	With heat sink
Function available	Integrated bypass
Supply voltage limits	99...528 V
Supply frequency	50...60 Hz - 5...5 %
Network frequency	47.5...63 Hz
Output voltage	<= power supply voltage
Control circuit voltage	24 V AC/DC +/- 10 % 30 mA 110 V AC +/- 10 % 35 mA 240 V AC +/- 10 % 80 mA
Starting time	Adjustable from 1 to 5 s 1 s 100 5 s 20
Starting torque	30...80 % of starting torque of motor connected directly on the line supply
Discrete output current	2 A DC-13 3 A AC-15
Tightening torque	0.5 N.m 1.9...2.5 N.m
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	124 mm
Width	45 mm

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.

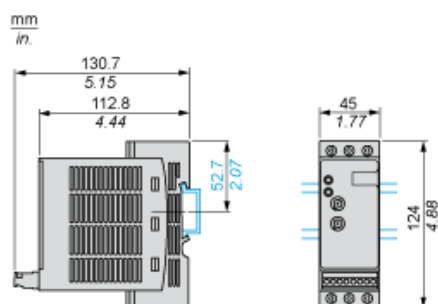
Depth	131 mm
Product weight	0.28 kg
Compatibility code	ATS01N1
Motor power range AC-3	
Motor starter type	Soft starter

Environment

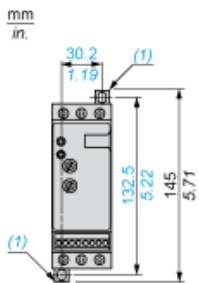
electromagnetic compatibility	EMC immunity EN 50082-1 Damped oscillating waves level 3 IEC 61000-4-12 Electrostatic discharge level 3 IEC 61000-4-2 Immunity to electrical transients level 4 IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 IEC 61000-4-3 Voltage/current impulse level 3 IEC 61000-4-5 Conducted and radiated emissions level B CISPR 11 Conducted and radiated emissions level B IEC 60947-4-2 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 Micro-cuts and voltage fluctuation IEC 61000-4-11
standards	EN/IEC 60947-4-2
product certifications	B44.1-96/ASME A17.5 for starter wired to the motor delta terminal CCC CSA C-Tick GOST UL
IP degree of protection	IP20
pollution degree	2 EN/IEC 60947-4-2
vibration resistance	1.5 mm peak to peak 3...13 Hz EN/IEC 60068-2-6 1 gn 13...150 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	-10...40 °C without derating 40...50 °C with current derating of 2 % per °C
ambient air temperature for storage	-25...70 °C EN/IEC 60947-4-2
operating altitude	≤ 1000 m without derating > 1000 m with current derating of 2.2 % per additional 100 m

Dimensions

Mounting on Symetrical (35 mm) Rail

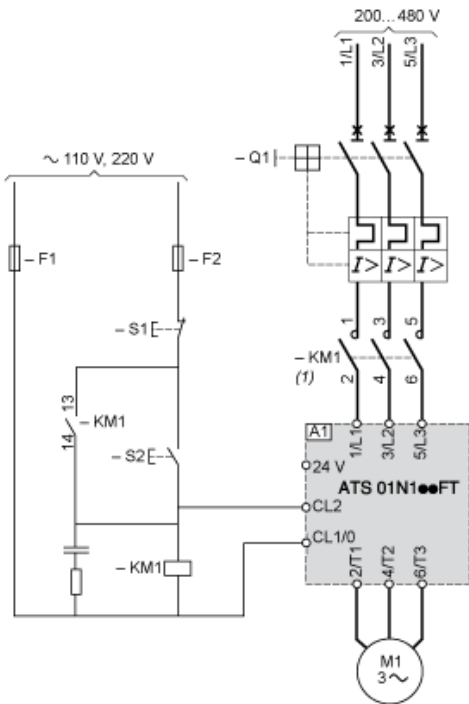


Screw Fixing



(1) Retractable fixings

Example of 3-phase Power Supply Connection



(1) A line contactor must be used in the sequence.

A1 : Soft starter

Q1 : Motor circuit-breaker

KM1 : Contactors

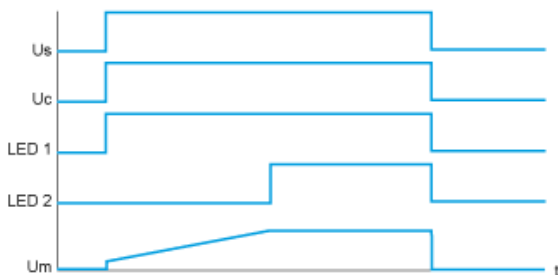
F1, Control protection fuses

F2 :

S1, Pushbuttons

S2 :

Function Diagram



Us : Power supply voltage

Uc : Control supply voltage

LED Green LED

1 :

LED Yellow LED

2 :

Um :Motor voltage