

Product data sheet

Characteristics



ATS01N112FT

soft starter for asynchronous motor - ATS01 - 12
A - 110..480V - 1.5..5.5 KW

Product availability : Stock - Normally stocked in distribution facility



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	1 phase
[Us] rated supply voltage	110...480 V - 10...10 %
Motor power kW	2.2 kW 3 phases 230 V 5.5 kW 3 phases 400 V 1.5 kW 1 phase 230 V
Motor power hp	3 hp 3 phases 230 V 1.5 hp 3 phases 210 V 7.5 hp 3 phases 460 V
IcL 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	1 W at full load and at end of starting 61 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

[Uc] control circuit voltage	24 V AC/DC +/- 10 % 30 mA 110 V AC +/- 10 % 35 mA 240 V AC +/- 10 % 80 mA
Starting time	1 s 100 5 s 20 Adjustable from 1 to 5 s
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	4.42 lbf.in (0.5 N.m) 16.81...22.12 lbf.in (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	4.88 in (124 mm)
Width	1.77 in (45 mm)
Depth	5.16 in (131 mm)
Product weight	0.62 lb(US) (0.28 kg)
Compatibility code	ATS01N1
Power range	2.2...3 kW at 200...240 V 3 phases 4...6 kW at 380...440 V 3 phases 1.1...2 kW at 200...240 V 1 phase
Motor starter type	Soft starter

Environment

Electromagnetic compatibility	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 EMC immunity EN 50082-1
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	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
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Ordering and shipping details

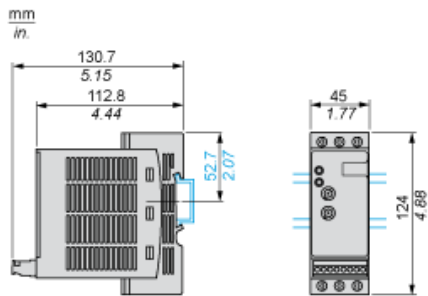
Category	22392 - ATSU01/ATS01 LOW HP SOFT STARTERS
Discount Schedule	I11
GTIN	00785901667452
Nbr. of units in pkg.	1
Package weight(Lbs)	0.7800000000000003
Returnability	Y
Country of origin	DE

Contractual warranty

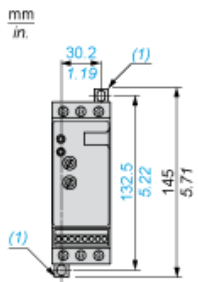
Warranty period	18 months
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Dimensions

Mounting on Symetrical (35 mm) Rail

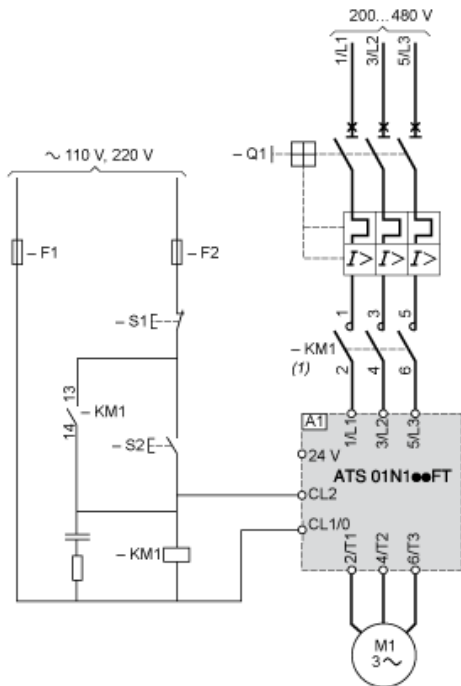


Screw Fixing



(1) Retractable fixings

Example of 3-phase Power Supply Connection



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

A1 : Soft starter

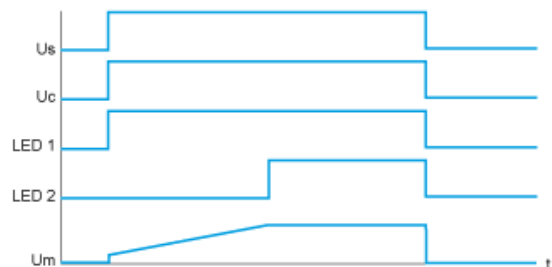
Q1 : Motor circuit-breaker

KM1 :Contactors

F1, F2 Control protection fuses

S1, S2 Pushbuttons

Function Diagram



Us : Power supply voltage
Uc : Control supply voltage
LED 1 Green LED
LED 2 Yellow LED
Um : Motor voltage