

ATS01N106FT

soft starter for asynchronous motor - ATS01 - 6 A -
110..480V - 0.75..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	1 phase
[Us] rated supply voltage	110...480 V - 10...10 %
Motor power kW	3 kW 3 phases 400 V 0.75 kW 3 phases 230 V 1.1 kW 3 phases 230 V 2.2 kW 3 phases 400 V 0.75 kW 1 phase 230 V
Motor power hp	1 hp 3 phases 230 V 2 hp 3 phases 460 V 3 hp 3 phases 460 V 0.5 hp 3 phases 210 V 1.5 hp 3 phases 230 V
IcL starter rating	6 A
Utilisation category	AC-53B EN/IEC 60947-4-2
Current consumption	30 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 31 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	110 V AC +/- 10 % 30 mA 24 V AC/DC +/- 10 % 25 mA 240 V AC +/- 10 % 65 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	0.8 N.m
Electrical connection	Cage type connector rigid 1 2.5 mm ² AWG 14 control circuit Cage type connector rigid 1 2.5 mm ² AWG 14 power circuit Cage type connector rigid 2 1 mm ² AWG 17 control circuit Cage type connector rigid 2 1 mm ² AWG 17 power circuit Cage type connector flexible with cable end 1 2.5 mm ² AWG 14 control circuit Cage type connector flexible with cable end 1 2.5 mm ² AWG 14 power circuit Cage type connector flexible without cable end 1 2.5 mm ² AWG 14 control circuit Cage type connector flexible without cable end 1 2.5 mm ² AWG 14 power circuit Cage type connector flexible with cable end 2 0.75 mm ² AWG 18 control circuit Cage type connector flexible with cable end 2 0.75 mm ² AWG 18 power circuit Cage type connector flexible without cable end 2 1 mm ² AWG 17 control circuit Cage type connector flexible without cable end 2 1 mm ² AWG 17 power circuit
Marking	CE
Operating position	Vertical +/- 10 degree

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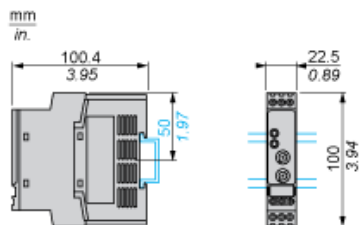
Height	100 mm
Width	23 mm
Depth	100 mm
Product weight	0.16 kg
Compatibility code	ATS01N1
Motor power range AC-3	
Motor starter type	Soft starter

Environment

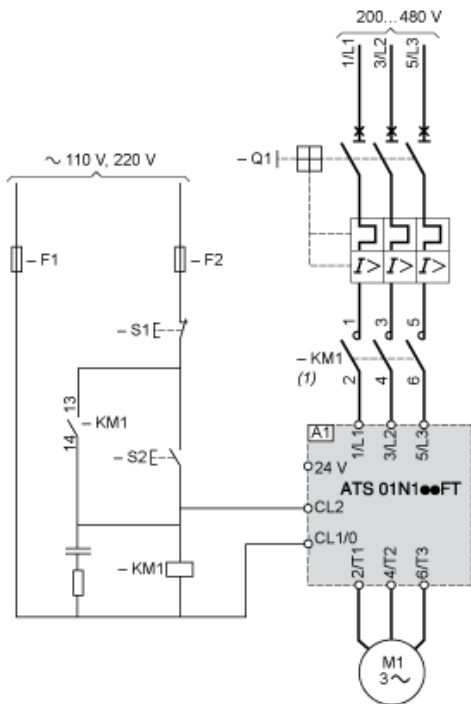
electromagnetic compatibility	EMC immunity EN 50082-1 Damped oscillating waves level 3 IEC 61000-4-12 Electrostatic discharge level 3 IEC 61000-4-2 Immunity to electrical transients level 4 IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 IEC 61000-4-3 Voltage/current impulse 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 or Asymetrical Rail with Adaptor RHZ 66



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

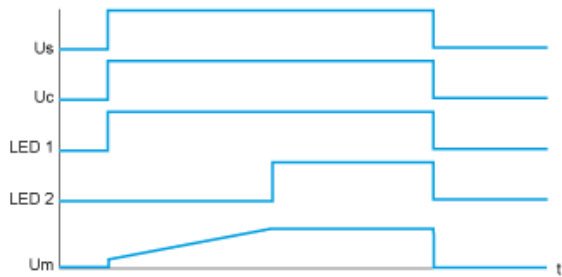
F1, Control protection fuses

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