



## Main

Range of product	Altistart 01
Product or component type	Soft starter
Product destination	Asynchronous motors
Product specific application	Simple machine
Component name	ATS01
Network number of phases	3 phases Single phase
Power supply voltage	110...480 V (- 10...10 %)
Motor power kW	3 kW at 400 V 3 phases 0.75 kW at 230 V 3 phases 0.75 kW at 230 V single phase 1.1 kW at 230 V 3 phases 2.2 kW at 400 V 3 phases
Motor power hp	1 hp at 230 V 3 phases 2 hp at 460 V 3 phases 3 hp at 460 V 3 phases 0.5 hp at 210 V 3 phases 1.5 hp at 230 V 3 phases
Icl nominal current	6 A
Utilisation category	AC-53B conforming to EN/IEC 60947-4-2
Current at nominal load	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
Power supply voltage limits	99...528 V
Power supply frequency	50...60 Hz (- 5...5 %)
Power supply frequency limits	47.5...63 Hz
Output voltage	<= power supply voltage
Control circuit voltage	110 V +/- 10 % AC, 30 mA 24 V +/- 10 % AC/DC, 25 mA 240 V +/- 10 % AC, 65 mA
Starting time	1 s/100 start(s) per hour 5 s/20 start(s) per hour 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	0.8 N.m

Electrical connection	<p>1 conductor(s)rigid cable , connection via cage type connector 2.5 mm<sup>2</sup>/AWG 14 for control circuit</p> <p>1 conductor(s)rigid cable , connection via cage type connector 2.5 mm<sup>2</sup>/AWG 14 for power circuit</p> <p>2 conductor(s)rigid cable , connection via cage type connector 1 mm<sup>2</sup>/AWG 17 for control circuit</p> <p>2 conductor(s)rigid cable , connection via cage type connector 1 mm<sup>2</sup>/AWG 17 for power circuit</p> <p>1 conductor(s)flexible cable with cable end, connection via cage type connector 2.5 mm<sup>2</sup>/AWG 14 for control circuit</p> <p>1 conductor(s)flexible cable with cable end, connection via cage type connector 2.5 mm<sup>2</sup>/AWG 14 for power circuit</p> <p>1 conductor(s)flexible cable without cable end, connection via cage type connector 2.5 mm<sup>2</sup>/AWG 14 for control circuit</p> <p>1 conductor(s)flexible cable without cable end, connection via cage type connector 2.5 mm<sup>2</sup>/AWG 14 for power circuit</p> <p>2 conductor(s)flexible cable with cable end, connection via cage type connector 0.75 mm<sup>2</sup>/AWG 18 for control circuit</p> <p>2 conductor(s)flexible cable with cable end, connection via cage type connector 0.75 mm<sup>2</sup>/AWG 18 for power circuit</p> <p>2 conductor(s)flexible cable without cable end, connection via cage type connector 1 mm<sup>2</sup>/AWG 17 for control circuit</p> <p>2 conductor(s)flexible cable without cable end, connection via cage type connector 1 mm<sup>2</sup>/AWG 17 for power circuit</p>
Marking	CE
Operating position	Vertical +/- 10 degree
Product weight	0.16 kg

## Environment

Electromagnetic compatibility	<p>Conducted and radiated emissions conforming to CISPR 11 level B</p> <p>Conducted and radiated emissions conforming to IEC 60947-4-2 level B</p> <p>Damped oscillating waves conforming to IEC 61000-4-12 level 3</p> <p>Electrostatic discharge conforming to IEC 61000-4-2 level 3</p> <p>EMC immunity conforming to EN 50082-1</p> <p>EMC immunity conforming to EN 50082-2</p> <p>Harmonics conforming to IEC 1000-3-2</p> <p>Harmonics conforming to IEC 1000-3-4</p> <p>Immunity to conducted interference caused by radio-electrical fields conforming to IEC 61000-4-6 level 3</p> <p>Immunity to electrical transients conforming to IEC 61000-4-4 level 4</p> <p>Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3</p> <p>Micro-cuts and voltage fluctuation conforming to IEC 61000-4-11</p> <p>Voltage/Current impulse conforming to IEC 61000-4-5 level 3</p>
Standards	EN/IEC 60947-4-2
Product certifications	<p>B44.1-96/ASME A17.5 for starter wired to the motor delta terminal</p> <p>CCC</p> <p>CSA</p> <p>C-Tick</p> <p>GOST</p> <p>UL</p>
IP degree of protection	IP20
Pollution degree	2 conforming to EN/IEC 60947-4-2
Vibration resistance	<p>1 gn (f = 13...150 Hz) conforming to EN/IEC 60068-2-6</p> <p>1.5 mm peak to peak (f = 3...13 Hz) conforming to EN/IEC 60068-2-6</p>
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Relative humidity	5...95 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	<p>-10...40 °C without derating</p> <p>40...50 °C with current derating of 2 % per °C</p>
Ambient air temperature for storage	-25...70 °C conforming to EN/IEC 60947-4-2
Operating altitude	<p>&lt;= 1000 m without derating</p> <p>&gt; 1000 m with current derating of 2.2 % per additional 100 m</p>
RoHS EUR status	Compliant
RoHS EUR conformity date	0905