Product data sheet
Characteristics

ATS01N222QN
soft starter for asynchronous motor - ATS01 - 22 A - 380..415V - 7.5..11 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	3 phases
[Us] rated supply voltage	380...415 V (- 10...10 %)
motor power kW	7.5 kW at 380...415 V 3 phases 11 kW at 380...415 V 3 phases
IcL starter rating	22 A
utilisation category	AC-53B conforming to EN/IEC 60947-4-2
current consumption	110 A at nominal load
type of start	Start with voltage ramp
power dissipation in W	4.5 W at full load and at end of starting 124.5 W in transient state

Complementary

assembly style	With heat sink
function available	Integrated bypass
supply voltage limits	342...456 V
supply frequency	50...60 Hz (- 5...5 %)
network frequency	47.5...63 Hz
output voltage	<= power supply voltage
control circuit voltage	Built into the starter
starting time	5 s / 20 start(s) per hour 1 s / 100 start(s) per hour 10 s / 10 start(s) per hour Adjustable from 1 to 10 s
deceleration time symb	Adjustable from 1 to 10 s
starting torque	30...80 % of starting torque of motor connected directly on the line supply
discrete input type	(LI1, LI2, BOOST) stop, run and boost on start-up functions logic <= 8 mA 27 kOhm
discrete input voltage	24...40 V
discrete input logic	(LI1, LI2, BOOST) positive state 0 < 5 V and < 0.2 mA, state 1 > 13 V and > 0.5 mA
discrete output current	3 A AC-15 2 A DC-13
discrete output type	(R1A, R1C) relay outputs NO (LO1) open collector logic end of starting signal
discrete output voltage	24 V (6...30 V) open collector logic
minimum switching current	Relay outputs 10 mA 6 V DC
maximum switching current	Relay outputs 2 A 250 V AC inductive load, cos phi = 0.5 L/R = 20 ms Relay outputs 2 A 30 V DC inductive load, cos phi = 0.5 L/R = 20 ms
display type	1 LED (green) for starter powered up 1 LED (yellow) for nominal voltage reached
tightening torque	0.5 N.m 1.9...2.5 N.m

electrical connection	2 conductor(s) flexible cable without cable end, connection via 4 mm screw clamp terminal 1.5...6 mm² / AWG 10 for power circuit 1 conductor(s) flexible cable without cable end, connection via screw connector 0.5...2.5 mm² / AWG 14 for control circuit 2 conductor(s) rigid cable, connection via screw connector 0.5...1 mm² / AWG 17 for control circuit 2 conductor(s) flexible cable without cable end, connection via screw connector 0.5...1.5 mm² / AWG 16 for control circuit 1 conductor(s) rigid cable, connection via screw connector 0.5...2.5 mm² / AWG 14 for control circuit 1 conductor(s) rigid cable, connection via 4 mm screw clamp terminal 1...10 mm² / AWG 8 for power circuit 1 conductor(s) flexible cable with cable end, connection via screw connector 0.5...1.5 mm² / AWG 16 for control circuit 1 conductor(s) flexible cable without cable end, connection via 4 mm screw clamp terminal 1.5...10 mm² / AWG 8 for power circuit 2 conductor(s) flexible cable with cable end, connection via 4 mm screw clamp terminal 1...6 mm² / AWG 10 for power circuit 2 conductor(s) rigid cable, connection via 4 mm screw clamp terminal 1...6 mm² / AWG 10 for power circuit
marking	CE
operating position	Vertical +/- 10 degree
height	154 mm
width	45 mm
depth	131 mm
product weight	0.56 kg
compatibility code	ATS01N2

Environment

electromagnetic compatibility	EMC immunity conforming to EN 50082-2 Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3 Damped oscillating waves conforming to IEC 61000-4-12 level 3 Electrostatic discharge conforming to IEC 61000-4-2 level 3 Harmonics conforming to IEC 1000-3-2 Immunity to electrical transients conforming to IEC 61000-4-4 level 4 Immunity to conducted interference caused by radio-electrical fields conforming to IEC 61000-4-6 level 3 Harmonics conforming to IEC 1000-3-4 Conducted and radiated emissions conforming to CISPR 11 level B Voltage/Current impulse conforming to IEC 61000-4-5 level 3 EMC immunity conforming to EN 50082-1 Conducted and radiated emissions conforming to IEC 60947-4-2 level B Micro-cuts and voltage fluctuation conforming to 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 C-Tick UL GOST CCC CSA
IP degree of protection	IP20
pollution degree	2 conforming to EN/IEC 60947-4-2
vibration resistance	1.5 mm peak to peak (f = 3...13 Hz) conforming to EN/IEC 60068-2-6 1 gn (f = 13...150 Hz) conforming to EN/IEC 60068-2-6
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	-10...40 °C without derating 40...50 °C with current derating of 2 % per °C
ambient air temperature for storage	-25...70 °C conforming to EN/IEC 60947-4-2
operating altitude	<= 1000 m without derating > 1000 m with current derating of 2.2 % per additional 100 m

Contractual warranty

Warranty period	18 months