## **ATS01N209QN**

soft starter for asynchronous motor - ATS01 - 9 A - 380..415 V - 4 KW



## Main

Altistart 01
Soft starter
Asynchronous motors
Simple machine
ATS01
3 phases
380415 V (- 1010 %)
4 kW at 380415 V 3 phases
9 A
AC-53B conforming to EN/IEC 60947-4-2
45 A at nominal load
Start with voltage ramp
4 W at full load and at end of starting 94 W in transient state

## Complementary

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Assembly style	With heat sink
Function available	Integrated bypass
Supply voltage limits	342456 V
Supply frequency	5060 Hz (- 55 %)
Network frequency limits	47.563 Hz
Output voltage	<= power supply voltage
Control circuit voltage	Built into the starter
Starting time	1 s/100 start(s) per hour 10 s/10 start(s) per hour 5 s/20 start(s) per hour Adjustable from 1 to 10 s
Deceleration time symb	Adjustable from 1 to 10 s
Starting torque	3080 % 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	2440 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	2 A DC-13 3 A AC-15
Discrete output type	(LO1) open collector logic end of starting signal (R1A, R1C) relay outputs NO
Discrete output voltage	24 V (630 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	LED (green) for starter powered up     LED (yellow) for nominal voltage reached
Tightening torque	0.5 N.m 1.92.5 N.m
Electrical connection	1 conductor(s) rigid cable, connection via 4 mm screw clamp terminal 110 mm²/AWG 8 for power circuit 1 conductor(s) rigid cable, connection via screw connector 0.52.5 mm²/AWG 14 for control circuit 2 conductor(s) rigid cable, connection via 4 mm screw clamp terminal 16 mm²/AWG 10 for power circuit 2 conductor(s) rigid cable, connection via screw connector 0.51 mm²/AWG 17 for

control circuit

	1 conductor(s) flexible cablewith cable end, connection via screw connector 0.51 mm²/AWG 16 for control circuit 1 conductor(s) flexible cablewithout cable end, connection via 4 mm screw clamp terminal 1.510 mm²/AWG 8 for power circuit 1 conductor(s) flexible cablewithout cable end, connection via screw connector 0.52.5 mm²/AWG 14 for control circuit 2 conductor(s) flexible cablewith cable end, connection via 4 mm screw clamp terminal 16 mm²/AWG 10 for power circuit 2 conductor(s) flexible cablewithout cable end, connection via 4 mm screw clamp terminal 1.56 mm²/AWG 10 for power circuit 2 conductor(s) flexible cablewithout cable end, connection via screw connector
Marking	0.51.5 mm²/AWG 16 for control circuit CE
Operating position	Vertical +/- 10 degree
Height	124 mm
Width	45 mm
Depth	131 mm
Product weight	0.42 kg

## **Environment**

Electromagnetic compatibility	Conducted and radiated emissions conforming to CISPR 11 level B
	Conducted and radiated emissions conforming to IEC 60947-4-2 level B
	Damped oscillating waves conforming to IEC 61000-4-12 level 3
	Electrostatic discharge conforming to IEC 61000-4-2 level 3
	EMC immunity conforming to EN 50082-1
	EMC immunity conforming to EN 50082-2
	Harmonics conforming to IEC 1000-3-2
	Harmonics conforming to IEC 1000-3-4
	Immunity to conducted interference caused by radio-electrical fields conforming to IEC 61000-4-6 level 3
	Immunity to electrical transients conforming to IEC 61000-4-4 level 4
	Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3
	Micro-cuts and voltage fluctuation conforming to IEC 61000-4-11
	Voltage/current impulse conforming to IEC 61000-4-5 level 3
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 conforming to EN/IEC 60947-4-2
Vibration resistance	1.5 mm peak to peak (f = 313 Hz) conforming to EN/IEC 60068-2-6
	1 gn (f = 13150 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Relative humidity	595 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	-1040 °C without derating
	4050 °C with current derating of 2 % per °C
Ambient air temperature for storage	-2570 °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

