# Product datasheet Characteristics

# ATS01N222QN



### Main

Wall	
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	3 phases
[Us] rated supply voltage	380415 V - 1010 %
Motor power kW	11 kW 3 phases 380415 V 7.5 kW 3 phases 380415 V
IcL starter rating	22 A
Utilisation category	AC-53B EN/IEC 60947-4-2
Current consumption	110 A at nominal load
Type of start	Start with voltage ramp
Power dissipation in W	124.5 W in transient state 4.5 W at full load and at end of starting

# Complementary

complementary	
Assembly style	With heat sink
Function available	Integrated bypass
Supply voltage limits	342456 V
Supply frequency	5060 Hz - 55 %
Network frequency	47.563 Hz
Output voltage	<= power supply voltage
[Uc] control circuit voltage	Built into the starter
Starting time	Adjustable from 1 to 10 s 1 s 100 10 s 10 5 s 20
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	Logic LI1, LI2, BOOST stop, run and boost on start-up functions <= 8 mA 27 kOhm
Discrete input voltage	2440 V
Discrete input logic	Positive LI1, LI2, BOOST < 5 V and <= 0.2 mA > 13 V >= 0.5 mA
Discrete output current	2 A DC-13 3 A AC-15
Discrete output type	Open collector logic LO1 end of starting signal Relay outputs R1A, R1C NO
Discrete output voltage	24 V 630 V open collector logic
Minimum switching current	10 mA 6 V DC relay outputs
Maximum switching current	2 A 250 V AC inductive cos phi = 0.5 20 ms relay outputs 2 A 30 V DC inductive cos phi = 0.5 20 ms relay outputs
Display type	1 LED green starter powered up 1 LED yellow nominal voltage reached
Tightening torque	4.42 lbf.in (0.5 N.m) 16.8122.12 lbf.in (1.92.5 N.m)
Electrical connection	4 mm screw clamp terminal rigid 1 110 mm <sup>2</sup> AWG 8 power circuit Screw connector rigid 1 0.52.5 mm <sup>2</sup> AWG 14 control circuit 4 mm screw clamp terminal rigid 2 16 mm <sup>2</sup> AWG 10 power circuit Screw connector rigid 2 0.51 mm <sup>2</sup> AWG 17 control circuit Screw connector flexible with cable end 1 0.51.5 mm <sup>2</sup> AWG 16 control circuit 4 mm screw clamp terminal flexible without cable end 1 1.510 mm <sup>2</sup> AWG 8 power circuit

Screw connector flexible without cable end 1 0.5...2.5 mm<sup>2</sup> AWG 14 control circuit



4 mm screw clamp terminal flexible with cable end 2 1...6 mm<sup>2</sup> AWG 10 power circuit 4 mm screw clamp terminal flexible without cable end 2 1.5...6 mm<sup>2</sup> AWG 10 power circuit

Screw connector flexible without cable end 2 0.51.5 mm <sup>2</sup> AWG 16 control circuit
CE
Vertical +/- 10 degree
6.06 in (154 mm)
1.77 in (45 mm)
5.16 in (131 mm)
1.23 lb(US) (0.56 kg)
ATS01N2
711 kW at 380440 V 3 phases
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 313 Hz EN/IEC 60068-2-6 1 gn 13150 Hz EN/IEC 60068-2-6
shock resistance	15 gn 11 ms EN/IEC 60068-2-27
relative humidity	595 % without condensation or dripping water EN/IEC 60068-2-3
ambient air temperature for operation	14104 °F (-1040 °C) without derating 104122 °F (4050 °C) with current derating of 2 % per °C
ambient air temperature for storage	-13158 °F (-2570 °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

# **Offer Sustainability**

WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.
Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm.	Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm.
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov

#### Contractual warranty

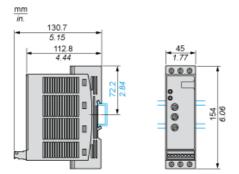
Warranty period

18 months

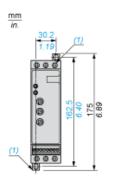
# Dimensions



#### Mounting on Symetrical (35 mm) Rail

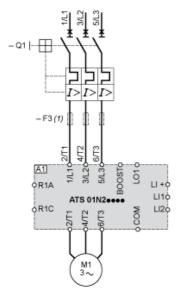


#### Screw Fixing



(1) Retractable fixings

# **Example of Manual Control**

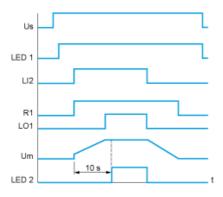


- A1 : Soft start/soft stop unit
- (1) For type 2 coordination
- Q1 : Motor circuit-breaker
- F3: 3 fast-acting fuses

# **Function Diagram**

2-wire Control with Deceleration





Us : Power supply voltage

LED Green LED

1:

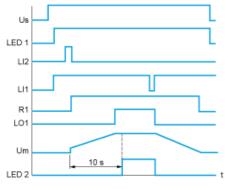
LI2 : Logic input

R1 : Relay output

LO1 :Logic output LED Yellow LED

2 :

#### **3-wire Control with Deceleration**



Us : Power supply voltage LED Green LED 1 : LI2, Logic inputs LI1 : R1 : Relay output LO1 :Logic output Um :Motor voltage

LED Yellow LED

2:

