Product data sheet Characteristics

ATS01N212QN

soft starter for asynchronous motor - ATS01 - 12 A - 380..415V - 5.5 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
Phase	3 phase
[Us] rated supply voltage	380415 V - 1010 %
Motor power kW	5.5 kW, 3 phase 380415 V
IcL starter rating	12 A
Utilisation category	AC-53B EN/IEC 60947-4-2
Current consumption	60 A at nominal load
Type of start	Start with voltage ramp
Power dissipation in W	4 W at full load and at end of starting 124 W in transient state

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
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 <= 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	Relay outputs 2 A 250 V AC cos phi = 0.5 20 ms inductive Relay outputs 2 A 30 V DC cos phi = 0.5 20 ms inductive
Display type	LED Green)starter powered up LED Yellow)nominal voltage reached
Tightening torque	16.8222.13 Lbf.In (1.92.5 N.m) 4.43 lbf.in (0.5 N.m)

Electrical connection	4 mm screw clamp terminal - rigid 1 110 mm² AWG 8 power circuit
	Screw connector - rigid 1 0.52.5 mm ² AWG 14 control circuit
	4 mm screw clamp terminal - rigid 2 16 mm² AWG 10 power circuit
	Screw connector - rigid 2 0.51 mm ² AWG 17 control circuit
	Screw connector - flexible with cable end 1 0.51.5 mm ² AWG 16 control circuit
	4 mm screw clamp terminal - flexible without cable end 1 1.510 mm ² AWG 8 power circuit
	Screw connector - flexible without cable end 1 0.52.5 mm ² AWG 14 control circuit
	4 mm screw clamp terminal - flexible with cable end 2 16 mm² AWG 10 power circuit
	4 mm screw clamp terminal - flexible without cable end 2 1.56 mm ² AWG 10 power circuit
	Screw connector - flexible without cable end 2 0.51.5 mm ² AWG 16 control
	circuit
Marking	CE
Operating position	Vertical +/- 10 degree
Height	4.88 in (124 mm)
Width	1.77 in (45 mm)
Depth	5.16 in (131 mm)
Net Weight	0.93 lb(US) (0.42 kg)
Compatibility code	ATS01N2
Motor power range AC-3	46 kW 380440 V 3 phase
Motor starter type	Soft starter

Environment

Electromagnetic compatibility	Conducted and radiated emissions level B CISPR 11 Conducted and radiated emissions level B IEC 60947-4-2 Damped oscillating waves level 3 IEC 61000-4-12 Electrostatic discharge level 3 IEC 61000-4-2 EMC immunity EN 50082-1 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 Immunity to electrical transients level 4 IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 IEC 61000-4-3 Micro-cuts and voltage fluctuation IEC 61000-4-11 Voltage/current impulse level 3 IEC 61000-4-5
Standards	EN/IEC 60947-4-2
Product Certifications	B44.1-96/ASME A17.5 for starter wired to the motor delta terminal CCC UL GOST CSA C-tick
IP Degree of Protection	IP20
Pollution degree	2 EN/IEC 60947-4-2
Vibration resistance	1 gn 13150 Hz)EN/IEC 60068-2-6 1.5 mm peak to peak 313 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

Ordering and shipping details

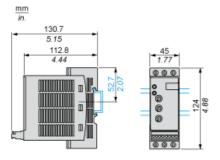
Category	22392 - ATSU01/ATS01 LOW HP SOFT STARTERS
Discount Schedule	I11
GTIN	3389110667264
Nbr. of units in pkg.	1
Package weight(Lbs)	18.84 oz (534 g)

Returnability	No
Country of origin	DE
Packing Units	
Unit Type of Package 1	PCE
Package 1 Height	2.17 in (5.5 cm)
Package 1 width	5.98 in (15.2 cm)
Package 1 Length	6.89 in (17.5 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	14
Package 2 Weight	17.60 lb(US) (7.985 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	112
Package 3 Weight	163.17 lb(US) (74.012 kg)
Package 3 Height	30.31 in (77 cm)
Package 3 width	23.62 in (60 cm)
Package 3 Length	31.50 in (80 cm)
Offer Sustainability	
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and
- Camarina proposition of	lead compounds, which is known to the State of California to cause cancer
	and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	
	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) [☑] EU RoHS
	Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	China RoHS Declaration
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
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Contractual warranty	
Warranty	18 months

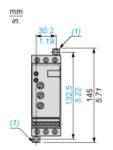
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Dimensions

Mounting on Symetrical (35 mm) Rail



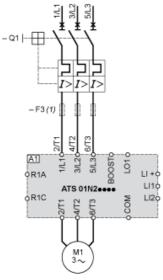
Screw Fixing



(1) Retractable fixings

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Example of Manual Control



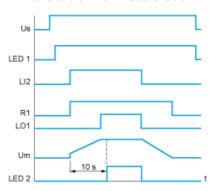
A1: Soft start/soft stop unit (1) For type 2 coordination Q1: Motor circuit-breaker F3: 3 fast-acting fuses

Product data sheet **Technical Description**

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Function Diagram

2-wire Control with Deceleration



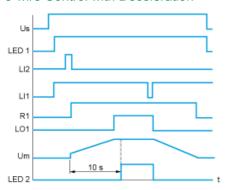
Us: Power supply voltage

LED Green LED

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

R1: Relay output LO1:Logic output Um: Motor voltage LED Yellow LED