# Product data sheet Characteristics

## ATS01N232LU

soft starter for asynchronous motor - ATS01 - 32 A - 200..240V - 7.5 KW



#### Main Range of product Altistart 01 Product or component Soft starter Product destination Asynchronous motors Product specific appli-Simple machine cation Component name ATS01 Network number of 3 phases phases Power supply voltage 200...240 V (- 10...10 %) Motor power kW 7.5 kW at 200...240 V 3 phases 10 hp at 200...240 V 3 phases Motor power hp Icl nominal current AC-53B conforming to EN/IEC 60947-4-2 Utilisation category Current at nominal load 160 A at nominal load Type of start Start with voltage ramp

4.5 W at full load and at end of starting

324.5 W in transient state

#### Complementary

Assembly style	With heat sink
Function available	Integrated bypass
Power supply voltage limits	180264 V
Power supply frequency	5060 Hz (- 55 %)
Power supply frequency limits	47.563 Hz
Output voltage	<= power supply voltage
Control circuit voltage	Built into the starter
Starting time	Adjustable from 1 to 10 s 5 s / 10 start(s) per hour 10 s / 5 start(s) per hour 1 s / 50 start(s) per hour
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	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 (630 V) open collector logic
Minimum switching current	Relay outputs 10 mA 6 V DC
Maximum switching current	Relay outputs 2 A 30 V DC inductive load, cos phi = 0.5 L/R = 20 ms Relay outputs 2 A 250 V AC inductive load, cos phi = 0.5 L/R = 20 ms
Display type	LED (yellow) for nominal voltage reached     LED (green) for starter powered up
Tightening torque	0.5 N.m 1.92.5 N.m

Power dissipation in W

Electrical connection	2 conductor(s) flexible cable without cable end, connection via screw connector 0.51.5 mm² / AWG 16 for control circuit 2 conductor(s) flexible cable without cable end, connection via 4 mm screw clamp terminal 1.56 mm² / AWG 10 for power circuit 2 conductor(s) flexible cable with cable end, connection via 4 mm screw clamp terminal 16 mm² / AWG 10 for power circuit 1 conductor(s) flexible cable without cable end, connection via screw connector 0.52.5 mm² / AWG 14 for control circuit 1 conductor(s) flexible cable without cable end, connection via 4 mm screw clamp terminal 1.510 mm² / AWG 8 for power circuit 1 conductor(s) flexible cable with cable end, connection via screw connector 0.51.5 mm² / AWG 16 for control circuit 2 conductor(s) rigid cable, connection via screw connector 0.51 mm² / AWG 17 for control circuit 2 conductor(s) rigid cable, connection via 4 mm screw clamp terminal 16 mm² /
	AWG 10 for power circuit 1 conductor(s) rigid cable, connection via screw connector 0.52.5 mm² / AWG 14 for control circuit 1 conductor(s) rigid cable, connection via 4 mm screw clamp terminal 110 mm² / AWG 8 for power circuit
Marking	CE
Operating position	Vertical +/- 10 degree
Height	154 mm
Width	45 mm
Depth	131 mm
Product weight	0.56 kg

## Environment

Electromagnetic compatibility	Voltage/Current impulse conforming to IEC 61000-4-5 level 3 Micro-cuts and voltage fluctuation conforming to IEC 61000-4-11 Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3 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 Harmonics conforming to IEC 1000-3-2 EMC immunity conforming to EN 50082-2 EMC immunity conforming to EN 50082-1
	Electrostatic discharge conforming to IEC 61000-4-2 level 3 Damped oscillating waves conforming to IEC 61000-4-12 level 3 Conducted and radiated emissions conforming to IEC 60947-4-2 level B Conducted and radiated emissions conforming to CISPR 11 level B
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	4050 °C with current derating of 2 % per °C -1040 °C without derating
Ambient air temperature for storage	-2570 °C conforming to EN/IEC 60947-4-2
Operating altitude	> 1000 m with current derating of 2.2 % per additional 100 m <= 1000 m without derating

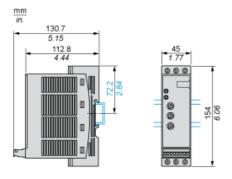


# Product data sheet Dimensions Drawings

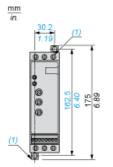
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### **Dimensions**

# Mounting on Symetrical (35 mm) Rail



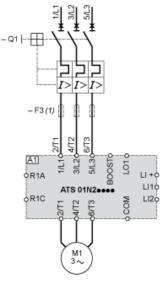
## Screw Fixing



(1) Retractable fixings

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## **Example of Manual Control**



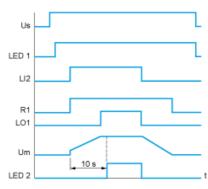
A1: Soft start/soft stop unit (1) For type 2 coordination Q1: Motor circuit-breaker F3: 3 fast-acting fuses

## Product data sheet **Technical Description**

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### **Function Diagram**

#### 2-wire Control with Deceleration



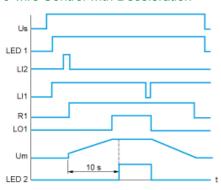
Us: Power supply voltage

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

LI2, Logic inputs

LI1:

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