



### Main

Range of product	Altistart 48
Product or component type	Soft starter
Product destination	Asynchronous motors
Product specific application	Heavy duty industry and pumps
Device short name	ATS48
Power supply voltage	230...415 V - 15...10 %
Motor power kW	90 kW at 230 V connection in the motor supply line for severe applications 110 kW at 230 V connection in the motor supply line for standard applications 160 kW at 230 V connection to the motor delta terminals for severe applications 160 kW at 400 V connection in the motor supply line for severe applications 220 kW at 230 V connection to the motor delta terminals for standard applications 220 kW at 400 V connection in the motor supply line for standard applications 250 kW at 400 V connection to the motor delta terminals for severe applications 315 kW at 400 V connection to the motor delta terminals for standard applications
Power dissipation in W	1017 W for severe applications 1339 W for standard applications
Utilisation category	AC-53A
Type of start	Start with torque control (current limited to 5 In)
Icl nominal current	410 A for connection in the motor supply line for severe applications 410 A for connection in the motor supply line for standard applications 710 A for connection to the motor delta terminals for severe applications 710 A for connection to the motor delta terminals for standard applications
IP degree of protection	IP00

### Complementary

Assembly style	With heat sink
Function available	External bypass (optional)
Power supply voltage limits	195...456 V
Power supply frequency	50...60 Hz - 5...5 %
Power supply frequency limits	47.5...63 Hz
Device connection	In the motor supply line

	To the motor delta terminals
Factory setting current	388 A
[Uc] control circuit voltage	220 - 15 % to 415 + 10 %, 50/60 Hz
Control circuit consumption	80 W
Discrete output number	2
Discrete output type	(LO1) logic output 0 V common configurable (LO2) logic output 0 V common configurable (R1) relay outputs fault relay NO (R2) relay outputs end of starting relay NO (R3) relay outputs motor powered NO
Output absolute accuracy precision	+/- 5 %
Minimum switching current	10 mA at 6 V DC for relay outputs
Maximum switching current	Logic output 0.2 A at 30 V DC Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 30 V DC inductive load, cos phi = 0.5 20 ms
Discrete input number	5
Discrete input type	PTC, 750 Ohm at 25 °C (Stop, Run, LI3, LI4) logic, <= 8 mA 4300 Ohm
Discrete input voltage	24 V <= 30 V
Discrete input logic	Positive logic Stop, Run, LI3, LI4 at State 0: < 5 V and <= 2 mA at State 1: > 11 V, >= 5 mA
Starting current	0.4...1.3 Icl adjustable
Analogue output type	Current output AO: 0-20 mA or 4-20 mA, impedance <500 Ohm
Communication port protocol	Modbus
Connector type	1 RJ45
Communication data link	Serial
Physical interface	RS485 multidrop
Transmission rate	4800, 9600 or 19200 bps
Max nodes number	31
Protection type	Phase failure: line Thermal protection: motor Thermal protection: starter
Marking	CE
Type of cooling	Forced convection
Operating position	Vertical +/- 10 degree
Height	670 mm
Width	400 mm
Depth	300 mm
Net weight	51.4 kg
Motor power range AC-3	55...100 kW at 200...240 V 3 phases 110...220 kW at 380...440 V 3 phases 110...220 kW at 200...240 V 3 phases 250...500 kW at 380...440 V 3 phases
Motor starter type	Soft starter

## Environment

Electromagnetic compatibility	Conducted and radiated emissions level A conforming to IEC 60947-4-2 Damped oscillating waves level 3 conforming to IEC 61000-4-12 Electrostatic discharge level 3 conforming to IEC 61000-4-2 Immunity to electrical transients level 4 conforming to IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 conforming to IEC 61000-4-3 Voltage/current impulse level 3 conforming to IEC 61000-4-5
Standards	EN/IEC 60947-4-2
Product certifications	DNV C-Tick CSA NOM 117 TCF UL SEPRO GOST

## CCC

Vibration resistance	1 gn (f= 13...200 Hz) conforming to EN/IEC 60068-2-6 1.5 mm (f= 2...13 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Noise level	55 dB
Pollution degree	Level 3 conforming to IEC 60664-1
Relative humidity	0...95 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	40...60 °C (with current derating of 2 % per °C) -10...40 °C (without)
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without > 1000...2000 m with current derating of 2.2 % per additional 100 m

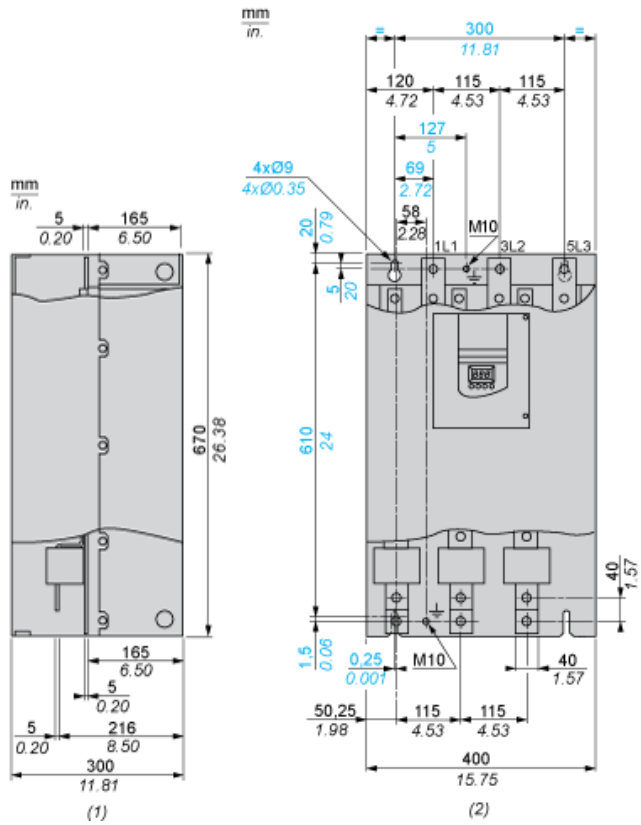
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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Dimensions



(1) Right View  
(2) Front View

Clearance

