



Main

Range of product	Altistart 48
Product or component type	Soft starter
Product destination	Asynchronous motors
Product specific application	Pumping and ventilation machine Severe and standard applications
Device short name	ATS48
[Us] rated supply voltage	208...690 V (- 15...10 %)
Motor power kW	110 kW at 660 V for standard applications 110 kW at 690 V for standard applications 30 kW at 230 V for severe applications 37 kW at 230 V for standard applications 55 kW at 400 V for severe applications 55 kW at 440 V for severe applications 75 kW at 400 V for standard applications 75 kW at 440 V for standard applications 75 kW at 500 V for severe applications 75 kW at 525 V for severe applications 90 kW at 500 V for standard applications 90 kW at 525 V for standard applications 90 kW at 660 V for severe applications 90 kW at 690 V for severe applications
Motor power hp	100 hp at 460 V for standard applications 100 hp at 575 V for severe applications 125 hp at 575 V for standard applications 30 hp at 208 V for severe applications 40 hp at 208 V for standard applications 40 hp at 230 V for severe applications 50 hp at 230 V for standard applications 75 hp at 460 V for severe applications
Power dissipation in W	For standard applications 306 W For standard applications 391 W
Utilisation category	AC-53A
Type of start	Start with torque control (current limited to 5 In)
IcL starter rating	110 A for standard applications 140 A for standard applications

IP degree of protection	IP00
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Complementary

Assembly style	With heat sink
Function available	External bypass (optional)
Supply voltage limits	177...759 V
Supply frequency	50...60 Hz (- 5...5 %)
Network frequency	47.5...63 Hz
Device connection	In the motor supply line
Factory setting current	124 A
Control circuit voltage	110 - 15 % to 230 + 10 %, 50/60 Hz
Control circuit consumption	30 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	Relay outputs 10 mA at 6 V DC
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, L/R = 20 ms Relay outputs 1.8 A at 30 V DC inductive load, cos phi = 0.5, L/R = 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	(Stop, Run, LI3, LI4) positive logic state 0 < 5 V and <= 2 mA, state 1 > 11 V and >= 5 mA
Supply inrush current	Adjustable 0.4...1.3 Icl
Analogue output type	(AO) current output 0-20 mA or 4-20 mA <= 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
Installed device	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	340 mm
Width	200 mm
Depth	265 mm
Product weight	12.4 kg

Environment

Electromagnetic compatibility	Conducted and radiated emissions conforming to IEC 60947-4-2 level A 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 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 Voltage/Current impulse conforming to IEC 61000-4-5 level 3
Standards	EN/IEC 60947-4-2
Product certifications	DNV

UL
C-Tick
SEPRO
CCC
TCF
CSA
GOST
NOM 117

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	50 dB
Pollution degree	Level 3 conforming to IEC 60664-1
Relative humidity	<= 95 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	-10...40 °C without derating > 40...60 °C with current derating of 2 % per °C
Ambient air temperature for storage	-25...70 °C
Operating altitude	<= 1000 m without derating > 1000...2000 m with current derating of 2.2 % per additional 100 m

Contractual warranty

Warranty period	18 months
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