Product data sheet
Characteristics

ATS48C21Y
soft starter for asynchronous motor - ATS48 - 180 A - 208..690 V - 45..200 KW

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
Component name	ATS48
Power supply voltage	208...690 V (- 15...10 %)
Motor power kW	90 kW at 440 V for severe applications 90 kW at 400 V for severe applications 55 kW at 230 V for standard applications 45 kW at 230 V for severe applications 200 kW at 690 V for standard applications 160 kW at 690 V for severe applications 160 kW at 660 V for standard applications 132 kW at 660 V for severe applications 132 kW at 525 V for standard applications 132 kW at 500 V for standard applications 110 kW at 525 V for severe applications 110 kW at 500 V for severe applications 110 kW at 440 V for standard applications 110 kW at 400 V for standard applications
Motor power hp	75 hp at 230 V for standard applications 60 hp at 230 V for severe applications 60 hp at 208 V for standard applications 50 hp at 208 V for severe applications 200 hp at 575 V for standard applications 150 hp at 575 V for severe applications 150 hp at 460 V for standard applications 125 hp at 460 V for severe applications
Power dissipation in W	580 W for standard applications 468 W for standard applications
Utilisation category	AC-53A
Type of start	Start with torque control (current limited to 5 In)
Icl nominal current	210 A for standard applications 170 A for standard applications
IP degree of protection	IP00

Complementary

Assembly style	With heat sink
Function available	External bypass (optional)
Power supply voltage limits	177...759 V
Power supply frequency	50...60 Hz (- 5...5 %)
Power supply frequency limits	47.5...63 Hz
Factory setting current	180 A
Control circuit voltage	110 - 15 % to 230 + 10 %, 50/60 Hz
Control circuit consumption	50 W
Discrete output number	2
Discrete output type	(R3) relay outputs motor powered NO (R2) relay outputs end of starting relay NO (R1) relay outputs fault relay NO (LO2) logic output 0 V common configurable (LO1) logic output 0 V common configurable
Output absolute accuracy precision	+/- 5 %
Minimum switching current	Relay outputs 10 mA at 6 V DC

Maximum switching current	Relay outputs 1.8 A at 30 V DC inductive load, cos phi = 0.5, L/R = 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5, L/R = 20 ms Logic output 0.2 A at 30 V DC
Discrete input number	5
Discrete input type	(Stop, Run, LI3, LI4) logic <= 8 mA 4300 Ohm PTC 750 Ohm at 25 °C
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
Starting 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
Max nodes number	31
Protection type	Thermal protection (starter) Thermal protection (motor) Phase failure (line)
Marking	CE
Type of cooling	Forced convection
Operating position	Vertical +/- 10 degree
Height	380 mm
Width	320 mm
Depth	265 mm
Product weight	18.2 kg

Environment

Electromagnetic compatibility	Voltage/Current impulse conforming to IEC 61000-4-5 level 3 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 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 A
Standards	EN/IEC 60947-4-2
Product certifications	CCC CSA C-Tick DNV GOST NOM 117 SEPRO TCF UL
Vibration resistance	1.5 mm (f = 2...13 Hz) conforming to EN/IEC 60068-2-6 1 gn (f = 13...200 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Noise level	54 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...2000 m with current derating of 2.2 % per additional 100 m <= 1000 m without derating