# Product data sheet Characteristics

## ATS48C14Y

soft starter for asynchronous motor - ATS48 - 124 A - 208..690 V - 30..110 KW



#### Main Range of product Altistart 48 Product or component Soft starter Product destination Asynchronous motors Product specific appli-Pumping and ventilation machine Severe and standard applications Component name ATS48 Power 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 306 W for standard applications 391 W for standard applications

AC-53A

IP00

Start with torque control (current limited to 5 In)

110 A for standard applications 140 A for standard applications

#### Complementary

Complementary		
Assembly style	With heat sink	
Function available	External bypass (optional)	
Power supply voltage limits	177759 V	
Power supply frequency	5060 Hz (- 55 %)	
Power supply frequency limits	47.563 Hz	
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	

Utilisation category

Icl nominal current

IP degree of protection

Type of start

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, Ll3, Ll4) 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
Starting current	Adjustable 0.41.3 lcl
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	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

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	CCC CSA C-Tick DNV GOST NOM 117 SEPRO TCF UL	
Vibration resistance	1 gn (f = 13200 Hz) conforming to EN/IEC 60068-2-6 1.5 mm (f = 213 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	> 4060 °C with current derating of 2 % per °C -1040 °C without derating	
Ambient air temperature for storage	-2570 °C	
Operating altitude	<= 1000 m without derating > 10002000 m with current derating of 2.2 % per additional 100 m	
RoHS EUR status	Compliant	
RoHS EUR conformity date	1009	