Product datasheet Characteristics

ATS48D47Q

soft starter for asynchronous motor - ATS48 - 42 A - 230..415 V - 9..45 KW



Price*: 791.00 GBP



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	230415 V - 1510 %	
Motor power kW	9 kW at 230 V connection in the motor supply line for severe applications 11 kW at 230 V connection in the motor supply line for standard applications 18.5 kW at 230 V connection to the motor delta terminals for severe applications 18.5 kW at 400 V connection in the motor supply line for severe applications 22 kW at 230 V connection to the motor delta terminals for standard applications 22 kW at 400 V connection in the motor supply line for standard applications 30 kW at 400 V connection to the motor delta terminals for severe applications 45 kW at 400 V connection to the motor delta terminals for standard applications	
Power dissipation in W	116 W for severe applications 142 W for standard applications	
Utilisation category	AC-53A	
Type of start	Start with torque control (current limited to 5 ln)	
Icl nominal current	47 A for connection in the motor supply line for severe applications 47 A for connection in the motor supply line for standard applications 81 A for connection to the motor delta terminals for severe applications 81 A for connection to the motor delta terminals for standard applications	
IP degree of protection	IP20	

Complementary

Complementary		.≌
Assembly style	With heat sink	en ta
Function available	External bypass (optional)	
Power supply voltage limits	195456 V	
Power supply frequency	5060 Hz - 55 %	
Power supply frequency limits	47.563 Hz	SC SC

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Factory setting current	Device connection	To the motor delta terminals In the motor supply line
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 and of starting relay NO (R3) relay outputs and of starting relay NO (R3) relay outputs and 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 230 V AC inductive load, cos phi = 0.5 20 ms Discrete input number 5 Discrete input voltage PTC. 750 Ohm at 25 °C (Stop, Run, L13, L14) logic, <= 8 mA 4300 Ohm	Factory setting current	42 A
Discrete output number 2 (LO1) logic output 0 V common configurable (LO2) logic output 0 V common configurable (LO2) logic output 0 V common configurable (R1) relay outputs fault relay NO (R2) relay voltputs and of starting relay NO (R3) relay outputs and of starting relay NO (R3) relay outputs mad of starting relay NO (R3) relay outputs 18 A at 30 V DC (R	[Uc] control circuit voltage	220 - 15 % to 415 + 10 %, 50/60 Hz
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 fault relay NO (R3) relay outputs moder powered NO Output absolute accuracy precision	Control circuit consumption	30 W
(LO2) logic output 0 V common configurable (R1) relay outputs faul trelay NO (R2) relay outputs faul trelay NO (R3) relay outputs motor powered NO Output absolute accuracy precision +7-5 % Minimum switching current 10 mA at 6 V DC for relay outputs Maximum switching current 20 cgic output 0.2 A at 30 V DC Relay output 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Relay output 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms Discrete input voltage PTC, 750 Ohm at 25 °C (Slop, Run, LI3, LI4) logic, <= 8 mA 4300 Ohm Discrete input tologic 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 lc adjustable Analogue output type Current output AO: 0-20 mA or 4-20 mA, impedance <500 Ohm Communication port protocol Modbus Connector type 11 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 190 mm Width 160 mm Depth 190 mm Width 4.9 kg Motor power range AC-3 15. 25 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 5020 kW at 380440 V 3 phases	Discrete output number	2
Minimum switching current 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 230 V AC inductive load, cos phi = 0.5 20 ms Poscrete 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 A1.3 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 Themal protection: motor Thermal protection: motor Thermal protection: starter Marking CE Type of cooling Forced convection Operating position Vertical +/- 10 degree Height 275 mm Width 160 mm Depth 190 mm Product weight Motor power range AC-3 3056 kW at 280240 V 3 phases 3050 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Discrete output type	(LO2) logic output 0 V common configurable (R1) relay outputs fault relay NO (R2) relay outputs end of starting relay NO
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 230 V AC 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	Output absolute accuracy precision	+/- 5 %
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, L13, L14) logic, <= 8 mA 4300 Ohm Discrete input voltage 24 V <= 30 V Discrete input logic Positive logic Stop, Run, L13, L14 at State 0: <5 V and <= 2 mA at State 1: > 11 V, >= 5 mA Starting current 0.41.3 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 Operating position Vertical +/- 10 degree Height 275 mm Width 160 mm Depth Product weight Motor power range AC-3 3050 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Minimum switching current	10 mA at 6 V DC for relay outputs
Discrete input type	Maximum switching current	Relay outputs 1.8 A at 230 V AC inductive load, cos phi = 0.5 20 ms
(Stop, Run, LI3, LI4) logic, <= 8 mA 4300 Ohm Discrete input voltage 24 V <= 30 V	Discrete input number	5
Discrete input logic Positive logic Stop, Run, L13, L14 at State 0: < 5 V and <= 2 mA at State 1: > 11 V, >= 5 mA Starting current 0.41.3 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 Vertical +/- 10 degree Height 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 380440 V 3 phases 3050 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Discrete input type	
Starting current 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 275 mm Width 160 mm Product weight Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Discrete input voltage	24 V <= 30 V
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 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 \$1,25 kW at 200240 V 3 phases 525 kW at 380440 V 3 phases	Discrete input logic	Positive logic Stop, Run, Ll3, Ll4 at State 0: < 5 V and <= 2 mA at State 1: > 11 V, >= 5 mA
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 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 Note the start of the st	Starting current	0.41.3 lcl adjustable
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 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 \$\begin{array}{l} 18,145 \\ 0,25 kW at 200240 \ V 3 phases \\ 0,50 kW at 380440 \ V 3 phases \\ 1525 kW at 200240 \ V 3 phases \\ 1525 kW at 380440 \ V 3 phases \\ 1525 kW at 380440 \ V 3 phases \\ 1525 kW at 380440 \ V 3 phases Total Product visual protection of the prote	Analogue output type	Current output AO: 0-20 mA or 4-20 mA, impedance <500 Ohm
Communication data link 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 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Communication port protocol	Modbus
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 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 \$\text{1525 kW at 200240 V 3 phases} \text{3440 V 3 phases} \text{345 kW at 380440 V 3 phases} \text{1525 kW at 380440 V 3 phases} 1525 k	Connector type	1 RJ45
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 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 \$\int_{025}^{\text{ kW}}\$ at \$200240 \ V 3 phases \\ 3050 \ kW at \$380440 \ V 3 phases \\ 1525 \ kW at \$3	Communication data link	Serial
Max nodes number31Protection typePhase failure: line Thermal protection: motor Thermal protection: starterMarkingCEType of coolingForced convectionOperating positionVertical +/- 10 degreeHeight275 mmWidth160 mmDepth190 mmProduct weight4.9 kgMotor power range AC-31525 kW at 200240 V 3 phases 711 kW at 200240 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Physical interface	RS485 multidrop
Protection type Phase failure: line Thermal protection: motor Thermal protection: starter Marking CE Type of cooling Forced convection Operating position Vertical +/- 10 degree Height 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Transmission rate	4800, 9600 or 19200 bps
Thermal protection: motor Thermal protection: starter Marking CE Type of cooling Forced convection Operating position Vertical +/- 10 degree Height 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Max nodes number	31
Type of cooling Forced convection Operating position Vertical +/- 10 degree Height 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Protection type	Thermal protection: motor
Operating position Vertical +/- 10 degree Height 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases	Marking	CE
Height 275 mm Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 380440 V 3 phases	Type of cooling	Forced convection
Width 160 mm Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases	Operating position	Vertical +/- 10 degree
Depth 190 mm Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases	Height	275 mm
Product weight 4.9 kg Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases	Width	160 mm
Motor power range AC-3 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases	Depth	190 mm
3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases	Product weight	4.9 kg
Motor starter type Soft starter	Motor power range AC-3	3050 kW at 380440 V 3 phases 711 kW at 200240 V 3 phases
	Motor starter type	Soft starter

Environment

Electromagnetic compatibility	Conducted and radiated emissions level A conforming to IEC 60947-4-2 Conducted and radiated emissions level B 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	UL TCF NOM 117 GOST CCC CSA

	DNV C-Tick SEPRO
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	52 dB
Pollution degree	Level 3 conforming to IEC 60664-1
Relative humidity	095 % 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)
Ambient air temperature for storage	-2570 °C
Operating altitude	<= 1000 m without > 10002000 m with current derating of 2.2 % per additional 100 m

Offer Sustainability

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

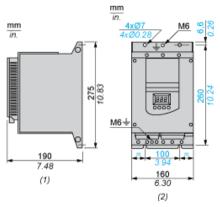
Contractual warranty

	Warranty	18 months	

Product datasheet Dimensions Drawings

ATS48D47Q

Dimensions



- (1) Right View
- (2) Front View

Product datasheet Mounting and Clearance

ATS48D47Q

Clearance

