Specifications





# Soft starter, Altistart 480, 32A, 208 to 690V AC, control supply 110 to 230V AC

ATS480D32Y

Product availability: Stock - Normally stocked in distribution facility

#### Price\*: 960.99 USD

## Main

Range of Product	Altivar Soft Starter ATS480
Product or Component Type	Soft starter
product destination	Asynchronous motors
Product Specific Application	Process and infrastructures
Device short name	ATS480
Phase	3 phase
Utilisation category	AC-3A AC-53A
Ue power supply voltage	208690 V - 1510 %
power supply frequency	5060 Hz - 2020 %
[le] rated operational current	Normal duty 32.0 A 104 °F (40 °C))
rated current in heavy duty	22.0 A at 104 °F (40 °C) heavy duty
Torque control	True
IP Degree of Protection	IP20
Motor power kW	<ul> <li>7.5 kW 230 V in the motor supply line normal duty</li> <li>5.5 kW 230 V in the motor supply line heavy duty</li> <li>15.0 kW 400 V in the motor supply line normal duty</li> <li>11.0 kW 400 V in the motor supply line heavy duty</li> <li>15.0 kW 440 V in the motor supply line heavy duty</li> <li>11.0 kW 440 V in the motor supply line heavy duty</li> <li>11.0 kW 440 V in the motor supply line heavy duty</li> <li>11.0 kW 500 V in the motor supply line heavy duty</li> <li>11.0 kW 500 V in the motor supply line heavy duty</li> <li>11.0 kW 500 V in the motor supply line heavy duty</li> <li>12.0 kW 500 V in the motor supply line heavy duty</li> <li>13.5 kW 525 V in the motor supply line heavy duty</li> <li>22.0 kW 660 V in the motor supply line heavy duty</li> <li>22.0 kW 660 V in the motor supply line heavy duty</li> <li>22.0 kW 690 V in the motor supply line heavy duty</li> <li>23.0 kW 690 V in the motor supply line heavy duty</li> <li>23.0 kW 690 V in the motor supply line heavy duty</li> <li>23.0 kW 690 V in the motor supply line heavy duty</li> <li>23.0 kW 690 V in the motor delta terminals normal duty</li> <li>15.0 kW 230 V to the motor delta terminals heavy duty</li> <li>22.0 kW 400 V to the motor delta terminals heavy duty</li> </ul>
Maximum Horse Power Rating	<ul> <li>7.5 hp 208 V normal duty</li> <li>5.0 hp 208 V heavy duty</li> <li>10.0 hp 230 V normal duty</li> <li>7.5 hp 230 V heavy duty</li> <li>20.0 hp 460 V normal duty</li> <li>15.0 hp 460 V heavy duty</li> <li>25.0 hp 575 V normal duty</li> <li>20.0 hp 575 V heavy duty</li> </ul>

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Price is "List Price" and may be subject to a trade discount - check with your local distributor or retailer for actual price.

Communication module Profibus DP V1 Communication module PROFINET Communication module Modbus TCP/EtherNet/IP Communication module CANopen daisy chain Communication module CANopen Sub-D Communication module CANopen open style

#### Complementary **Device connection** In the motor supply line To the motor delta terminals [Us] control circuit voltage 110...250 V AC 50/60 Hz - 15...10 % Apparent power 0.09 kVA Integrated motor overload True protection motor thermal protection class Class 10E Protection type Phase failure line Integrated thermal protection motor Thermal protection starter Current overload motor Underload motor Excessive starting time, locked rotor motor Motor phase loss motor Line supply phase loss line Line supply phase loss motor Thermal protection motor current limiting %In (5 x le 150...700 % maximum) [In] Rated current pwr loss 32 0 A specifctn Power loss static current 25 0 W independent Power loss per device current 84.0 W dependent Standards IEC 60947-4-2 UL 60947-4-2 IEC 60664-1 **Product Certifications** CE cULus CCC UKCA RCM EAC DNV ABS ΒV CCS marking CE CCC UKCA EAC RCM CULus [Uc] control circuit voltage 24 V DC Discrete input number 4 Discrete input type STOP) logic inputs, 3500 Ohm RUN) logic inputs, 3500 Ohm DI3) programmable as logic input, 3500 Ohm DI4) programmable as logic input, 3500 Ohm Input compatibility STOP discrete input level 1 PLC IEC 61131-2 RUN discrete input level 1 PLC IEC 61131-2 DI3 discrete input level 1 PLC IEC 61131-2 DI4 discrete input level 1 PLC IEC 61131-2 **Discrete input logic** Programmable digital input < 5 V

Relay output number	3
Relay output type	Relay outputs R1A 1 NO
	Relay outputs R1B 1 NO Relay outputs RIC NO/NC programmable
Minimum switching current	100 mA 12 V DC relay outputs
Maximum switching current	Relay outputs 2 A 250 V AC
	Relay outputs 2 A 30 V DC
Discrete output number	2
Discrete output type	DQ1) programmable digital output <= 30 V DQ2) programmable digital output <= 30 V
Output compatibility	Open collector level 1 PLC IEC 65A-68
Analogue input number	1
Analogue input type	Al1/PTC PTC/Pt 100 temperature probe
	PTC2 PTC/Pt 100 temperature probe PTC3 PTC/Pt 100 temperature probe
Analogue output number	1
Analogue output type	Current output AQ1 020 mA or 010 V 500 Ohm
Communication Port Protocol	Modbus serial
Connector Type	1 RJ45
Communication data link	Serial
Physical interface	2-wire RS 485
Transmission Rate	1200256000 bit/s
Transmission frame	RTU
Data format	8 bits, configurable odd, even or no parity
Type of polarization	No impedance Modbus serial
Number of addresses	0227 Modbus serial
Method of access	Slave Modbus serial
Function Available	External bypass control
	Pre-heating Smoke extraction
	Multi-motor cascade
	Second motor set
	User management
	Ports and services hardening
	Security event logging Cybersecure firmware update
	Single direction
Display screen available	True
Operating position	Vertical +/- 10 degree
Height	10.8 in (275.0 mm)
Width	6.3 in (160.0 mm)
Depth	8.0 in (203.0 mm)
Net Weight	10.8 lb(US) (4.9 kg)

## Environment

Electromagnetic compatibility	Conducted and radiated emissions level A IEC 60947-4-2 Conducted and radiated emissions with bypass level B IEC 60947-4-2 Damped oscillating waves level 3 IEC 61000-4-12 Electrostatic discharge level 3 IEC 61000-4-11 Immunity to electrical transients level 4 IEC 61000-4-4 Immunity to radiated radio-electrical interference level 3 IEC 61000-4-3 Voltage/current impulse level 3 IEC 61000-4-5
Pollution degree	Level 3
[Uimp] rated impulse withstand voltage	6 kV
[Ui] Rated Insulation Voltage	690 V
Environmental class (during operation)	Class 3C3 according to IEC 60721-3-3 Class 3S2 according to IEC 60721-3-3
Relative humidity	095 % without condensation or dripping water IEC 60068-2-3
Ambient air temperature for operation	104140 °F (4060 °C) with current derating of 2 % per °C) 5104 °F (-1540 °C) without derating)
Ambient Air Temperature for Storage	-13158 °F (-2570 °C)
Operating altitude	<= 3280.84 ft (1000 m) without derating > 3280.8413123.36 ft (> 10004000 m) with current derating 1 % per 100 m
Maximum deflection under vibratory load (during operation)	1.5 mm at 213 Hz
Maximum deflection under vibratory load (during storage)	1.75 mm at 29 Hz
Maximum deflection under vibratory load (during transport)	1.75 mm at 29 Hz
Maximum acceleration under vibrational stress (during operation)	10 m/s² at 13200 Hz
Maximum acceleration under vibratory load (during storage)	15 m/s² at 200500 Hz 10 m/s² at 9200 Hz
Maximum acceleration under vibratory load (during transport)	15 m/s² at 200500 Hz 10 m/s² at 9200 Hz
Maximum acceleration under shock impact (during operation)	150 m/s² at 11 ms
Maximum acceleration under shock load (during storage)	100 m/s² at 11 ms
Maximum acceleration under shock load (during transport)	100 m/s² at 11 ms

## Ordering and shipping details

Category	US1CP1G22588
Discount Schedule	CP1G
GTIN	3606481089014
Returnability	Yes
Country of origin	US

## **Packing Units**

-	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.811 in (30.000 cm)
Package 1 Width	10.630 in (27.000 cm)
Package 1 Length	14.567 in (37.000 cm)
Package 1 Weight	13.697 lb(US) (6.213 kg)
Unit Type of Package 2	S06

Number of Units in Package 2	8
Package 2 Height	29.528 in (75.000 cm)
Package 2 Width	23.622 in (60.000 cm)
Package 2 Length	31.496 in (80.000 cm)
Package 2 Weight	143.080 lb(US) (64.900 kg)

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Yes

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

#### **Resource performance**

Upgraded Components Available

#### Well-being performance

Mercury Free

Rohs Exemption Information

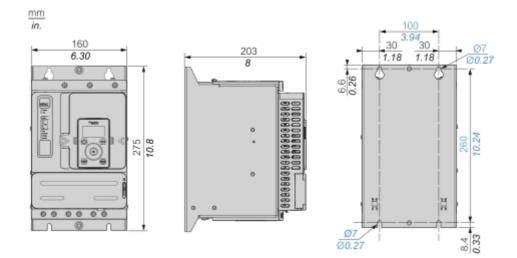
## **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	End of Life Information
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

**Dimensions Drawings** 

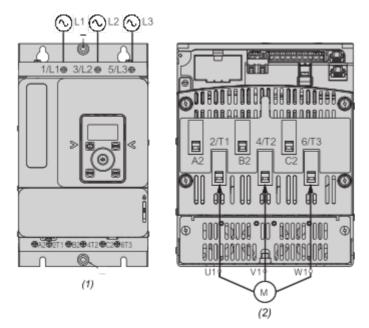
#### Dimensions

#### Front, Side and Rear View



Connections and Schema

#### **Power Connections**

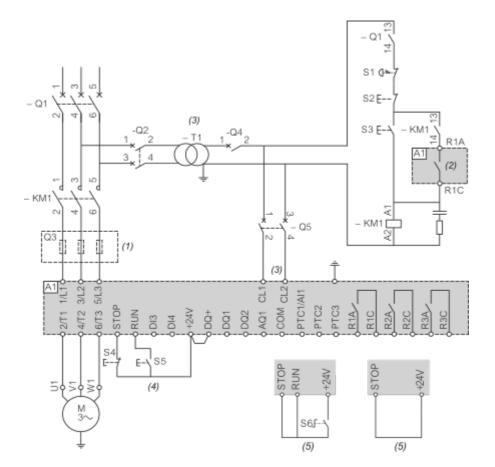


(1) : Mains side

(2) : Motor side

1/L1, 3/L2, 5/L3 : Mains supply inputs 2/T1, 4/T2, 6/T3 : Outputs to motor

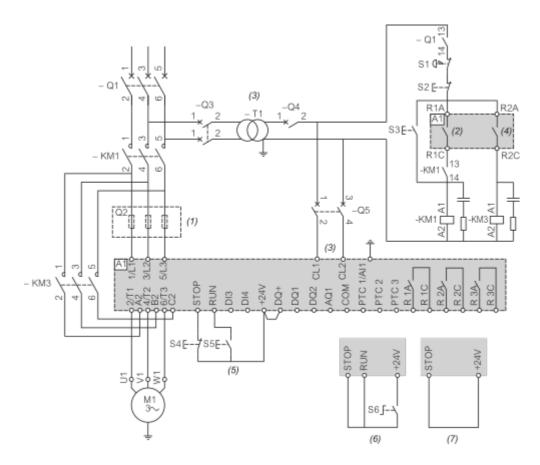
A2, B2, C2 : Soft starter bypass



Connection in line, with line contactor, no bypass, type 1 or 2 coordination, non - reversing, 2-wire or 3-wire control

- (1) : Installation of additional fast-acting fuses to upgrade to type 2 coordination according to IEC 60947-4-2.
- (2) : Take into account the electrical characteristics of the relays (Control Terminal Characteristics).
- (3) : The transformer must supply 110...230 VAC +10% 15%, 50/60Hz.
- (4) : RUN and STOP Management (3-wire control).
- (5) : RUN and STOP Management (2-wire control).

Connection in line, with line and bypass contactor, freewheel or controlled stop, type 1 or 2 coordination, non reversing, 2-wire or 3-wire



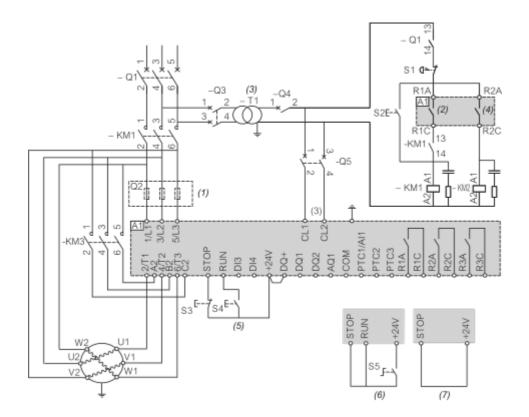
(1) : Installation of additional fast-acting fuses to upgrade to type 2 coordination according to IEC 60947-4-2.

(2) : Take into account the electrical characteristics of the relays (Control Terminal Characteristics).

(3) : The transformer must supply 110...230 VAC +10% - 15%, 50/60Hz.

(4) : Take into account the electrical characteristics of the relays, especially when connecting to high rating contactor (Control Terminal Characteristics).

- (5) : RUN and STOP Management (3-wire control).
- (6) : RUN and STOP Management (2-wire control).
- (7) : PC or PLC control



Connection inside the delta, with line and bypass contactor, type 1 and 2 coordination, non reversing, 2 wire or 3 wire

(1) : Installation of additional fast-acting fuses to upgrade to type 2 coordination according to IEC 60947-4-2.

(2) : Take into account the electrical characteristics of the relays (Control Terminal Characteristics).

(3) : The transformer must supply 110...230 VAC +10% - 15%, 50/60Hz.

(4) : Take into account the electrical characteristics of the relays, especially when connecting to high rating contactor

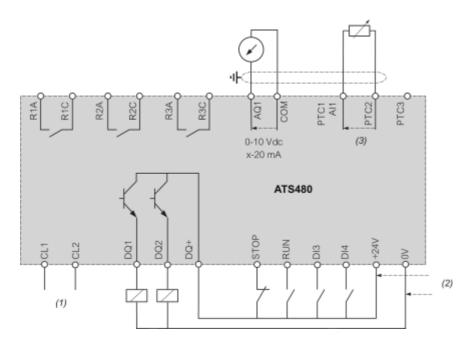
(Control Terminal Characteristics).

(5) : RUN and STOP Management (3-wire control).

(6) : RUN and STOP Management (2-wire control).

(7) : PC or PLC control

#### Control block wiring diagram



- (1) : Control power supply 110-230 VAC
- (2) : External supply 24 VDC
- (3): 2 Wires PTC/PT100
- R1A, R1C, R3A, R3C : Sequence relay
- R2A, R2C : End of start STOP, RUN, DI3, DI4 : Digital inputs
- AQ1 : Analogue output
- PTC1/AI1, PTC2, PTC3 : PTC or PT100 connection
- DQ1, DQ2, DQ+ : Digital outputs

#### Mounting and Clearance

#### **Mounting Position**

mm in.

