# Product data sheet

Specifications





# Soft starter, Altistart 480, 62A, 208 to 690V AC, control supply 110 to 230V AC

ATS480D62Y

Product availability: Stock - Normally stocked in distribution facility

Price\*: 1,370.99 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	AT\$480	
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 62.0 A 104 °F (40 °C))	
Rated Current In Heavy Duty	47.0 A at 104 °F (40 °C) heavy duty	
Torque Control	True	
Ip Degree Of Protection	IP20	
Motor Power Kw	15.0 kW 230 V in the motor supply line normal duty 11.0 kW 230 V in the motor supply line heavy duty 30.0 kW 400 V in the motor supply line normal duty 22.0 kW 400 V in the motor supply line heavy duty 30.0 kW 440 V in the motor supply line heavy duty 30.0 kW 500 V in the motor supply line normal duty 22.0 kW 400 V in the motor supply line heavy duty 37.0 kW 500 V in the motor supply line heavy duty 30.0 kW 500 V in the motor supply line normal duty 30.0 kW 525 V in the motor supply line heavy duty 45.0 kW 660 V in the motor supply line heavy duty 45.0 kW 660 V in the motor supply line normal duty 37.0 kW 690 V in the motor supply line normal duty 45.0 kW 690 V in the motor supply line heavy duty 45.0 kW 690 V in the motor supply line heavy duty 30.0 kW 230 V to the motor delta terminals normal duty 55.0 kW 400 V to the motor delta terminals heavy duty	
Maximum Horse Power Rating	15.0 hp 208 V normal duty 20.0 hp 230 V normal duty	

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



Option Card	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

Complementary			
Device Connection	In the motor supply line To the motor delta terminals		
[Us] Control Circuit Voltage	110250 V AC 50/60 Hz - 1510 %		
Apparent Power	0.09 kVA		
Integrated Motor Overload Protection	True		
<b>Motor Thermal Protection Class</b>	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 Maximum)	150700 %		
[In] Rated Current Pwr Loss Specifctn	62.0 A		
Power Loss Static Current Independent	25.0 W		
Power Loss Per Device Current Dependent	181.0 W		
Standards	IEC 60947-4-2 UL 60947-4-2 IEC 60664-1		
Product Certifications	CE cULus CCC UKCA RCM EAC DNV ABS BV 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	AI1/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	11.42 in (290.0 mm)		
Width	7.48 in (190.0 mm)		
Depth	9.72 in (247.0 mm)		
Net Weight	18.30 lb(US) (8,3 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	3606481089045
Returnability	Yes
Country Of Origin	US

# Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	14.57 in (37.000 cm)
Package 1 Width	12.20 in (31.000 cm)
Package 1 Length	15.35 in (39.000 cm)
Package 1 Weight	21.30 lb(US) (9.662 kg)
Unit Type Of Package 2	P06

Number Of Units In Package 2	8	
Package 2 Height	33.86 in (86.000 cm)	
Package 2 Width	23.62 in (60.000 cm)	
Package 2 Length	31.50 in (80.000 cm)	\ /
Package 2 Weight	188 50 lb(US) (85 500 kg)	



# Sustainability Green 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.

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

Yes

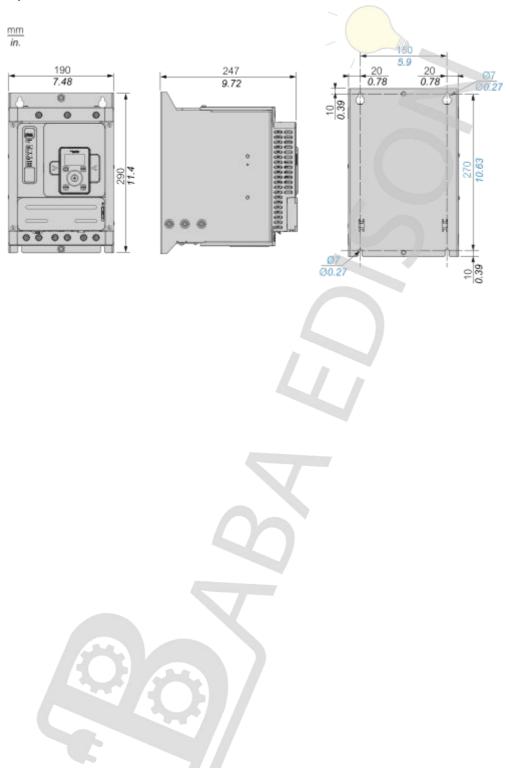
#### **Certifications & Standards**

Pro-active compliance (Product out of EU RoHS legal scope)	
Product Environmental Profile	
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	
End of Life Information	
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**

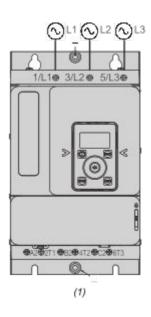
#### **Dimensions**

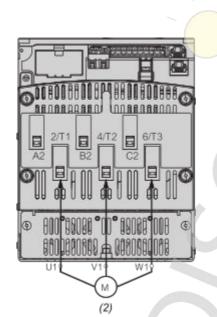
#### Front, Side and Rear View



#### Connections and Schema

#### **Power Connections**



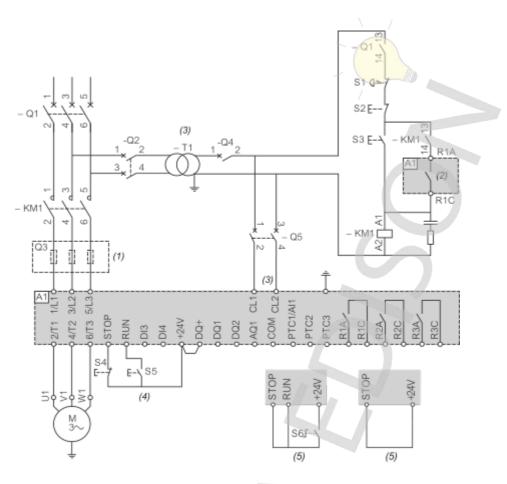


(1): Mains side(2): Motor side

1/L1, 3/L2, 5/L3 : Mains supply inputs 2/T1, 4/T2, 6/T3 : Outputs to motor A2, B2, C2 : Soft starter bypass

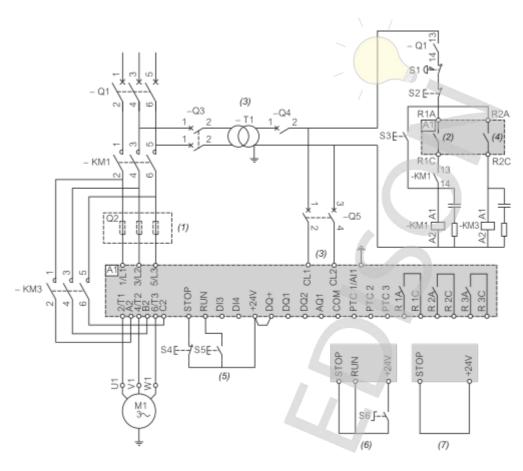


Connection in line, with line contactor, no bypass, type 1 or 2 coordination, non-reversing, 2-wire or 3-wire control



- (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).

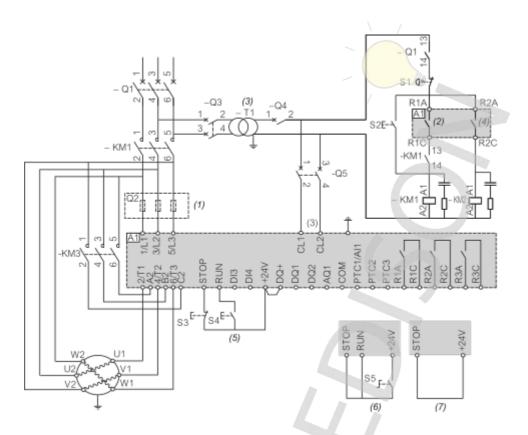
Connection in line, with line and bypass contactor, freewheel or controlled stop, type 1 or 2 coordination, non reversing, 2-wire or 3-wire



- (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



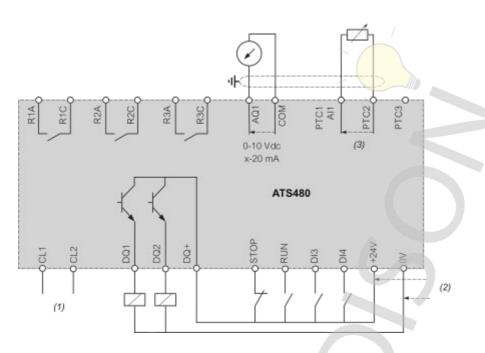
Connection inside the delta, with line and bypass contactor, type 1 and 2 coordination, non reversing, 2 wire or 3 wire



- (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**

