

# soft starter for asynchronous motor, Altistart 22, control 110V, 208 to 575V, 15 to 50hp

ATS22D62S6U

Product availability: Stock - Normally stocked in distribution facility

## Main

Range of Product	Altistart 22	
Product or Component Type	Soft starter	
Product destination	Asynchronous motors	
Product Specific Application	Pumps and fans	
Component name	ATS22	
Phase	3 phase	
[Us] rated supply voltage	208600 V - 1510 %	
Maximum Horse Power Rating	15 hp 208 V 20 hp 230 V 40 hp 460 V 50 hp 575 V	
Factory setting current	52 A	
Power dissipation in W	59 W for standard applications	
Utilisation category	AC-53A	
Type of start	Start with torque control (current limited to 3.5 ln)	
IcL starter rating	62 A connection in the motor supply line for standard applications	
IP Degree of Protection	IP20	

## Complementary

Assembly style	With heat sink	
Function Available	Internal bypass	
Supply voltage limits	177660 V	
Supply frequency	5060 Hz - 1010 %	
Network Frequency	4566 Hz	
Device connection	In the motor supply line	
[Uc] control circuit voltage	110 V - 1510 % 50/60 Hz	
Control circuit consumption	20 W	
Discrete output number	2	
Discrete output type	Relay outputs R1 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O Relay outputs R2 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O	
Minimum switching current	100 mA 12 V DC relay outputs)	

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

Maximum switching current	5 A 250 V AC resistive 1 relay outputs 5 A 30 V DC resistive 1 relay outputs 2 A 250 V AC inductive 0.4 20 ms relay outputs 2 A 30 V DC inductive 7 ms relay outputs
Discrete input number	3
Discrete input type	LI1, LI2, LI3) logic, 5 mA 20 kOhm
Discrete input voltage	110 V <= 121 V
Discrete input logic	Positive logic LI1, LI2, LI3 < 20 V <= 15 mA > 79 V, <= 2 mA
Output current	0.41 Icl adjustable
PTC probe input	750 Ohm
Communication Port Protocol	Modbus
Connector Type	1 RJ45
Communication data link	Serial
Physical interface	RS485 multidrop
Transmission Rate	4800, 9600 or 19200 bps
Installed device	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	11.6 in (295 mm)
Width	5.7 in (145 mm)
Depth	8.1 in (207 mm)
Product Weight	26.5 lb(US) (12 kg)

## **Environment**

Electromagnetic compatibility	Conducted and radiated emissions level A 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	IEC 60947-4-2	
Product Certifications	C-tick GOST CCC UL CSA	
Vibration resistance	1 gn (f= 13200 Hz) conforming to IEC 60068-2-6 1.5 mm (f= 213 Hz) conforming to IEC 60068-2-6	
Shock resistance	15 gn 11 ms IEC 60068-2-27	
Noise level	45 dB	
Pollution degree	Level 2 IEC 60664-1	
Relative humidity	095 % without condensation or dripping water IEC 60068-2-3	
Ambient air temperature for operation	14104 °F (-1040 °C) (without derating) 104140 °F (4060 °C) (with current derating 2.2 % per °C)	

Ambient Air Temperature for Storage	-13158 °F (-2570 °C)
Operating altitude	<= 3280.84 ft (1000 m) without derating > 3280.84< 6561.68 ft (> 1000< 2000 m) with current derating of 2.2 % per

# Ordering and shipping details

Category	US1CP1G22576
Discount Schedule	CP1G
GTIN	3606480167409
Returnability	Yes
Country of origin	ID

# **Packing Units**

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Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	9.25 in (23.5 cm)
Package 1 Width	14.17 in (36 cm)
Package 1 Length	12.20 in (31 cm)
Package weight(Lbs)	18.61 lb(US) (8.44 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	6
Package 2 Height	28.94 in (73.5 cm)
Package 2 Width	31.50 in (80 cm)
Package 2 Length	23.62 in (60 cm)
Package 2 Weight	141.916 lb(US) (64.372 kg)

# **Contractual warranty**

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

#### **Use Better**

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	7f28cbce-306d-4c94-ba04-b506c5522d63
REACh Regulation	REACh Declaration
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

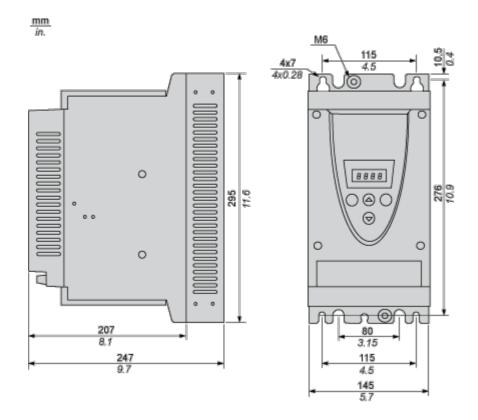
#### **Use Again**

○ Repack and remanufacture	
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## **Dimensions Drawings**

## Frame Size B

#### **Dimensions**



Mounting and Clearance

#### **Precautions**

#### Standards

The Altistart 22 soft starter is compliant with pollution Degree 2 as defined in NEMA ICS1-1 or IEC 60664-1. For environment pollution degree 3, install the Altistart 22 soft starter inside a cabinet type 12 or IP54.



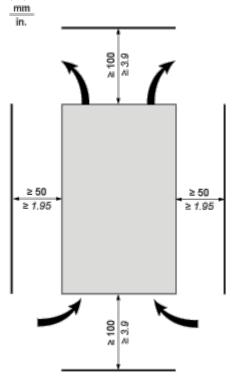
## HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

ATS22 soft starters are open devices and must be mounted in a suitable enclosure.

Failure to follow these instructions will result in death or serious injury.

#### **Air Circulation**

Leave sufficient free space to help the air required for cooling purposes to circulate from the bottom to the top of the unit.



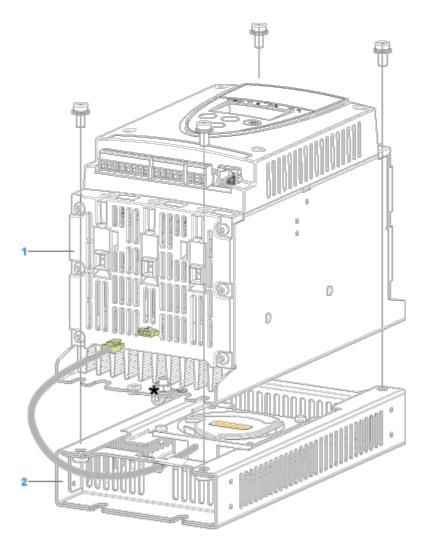
#### Overheating

To avoid the soft starter to overheat, respect the following recommendations:

- $_{\bullet}$  Mount the Altistart 22 Soft Starter within ± 10° of vertical.
- Do not locate the Altistart 22 Soft Starter near heat radiating elements.
- Electrical current through the Altistart 22 Soft Starter will result in heat losses that must be dissipated into the
  ambient air immediately surrounding the soft starter. To help prevent a thermal fault, provide sufficient
  enclosure cooling and/or ventilation to limit the ambient temperature around the soft starter.
- If several soft starters are installed in a control panel, arrange them in a row. Do not stack soft starters. Heat
  generated from the bottom soft starter can adversely affect the ambient temperature around the top soft
  starter.

## Mounting

#### Connection Between the Fan and the Altistart 22 Soft Starter



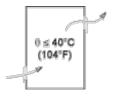
- 1 Altistart 22 Soft Starter
- 2 Fan

## Wall mounted or Floor-standing Enclosure with IP 23 Degree of protection

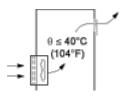
#### Introduction

To help proper air circulation in the soft starter, grilles and forced ventilation can be installed.

#### **Ventilation Grilles**



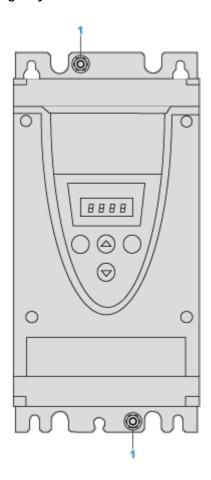
#### **Forced Ventilation Unit**

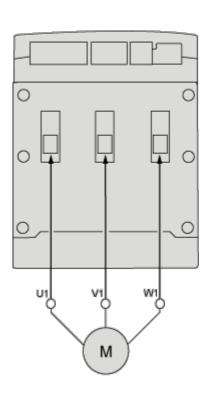


#### Connections and Schema

## Power Terminal

## Cage Style





1 Ground connection

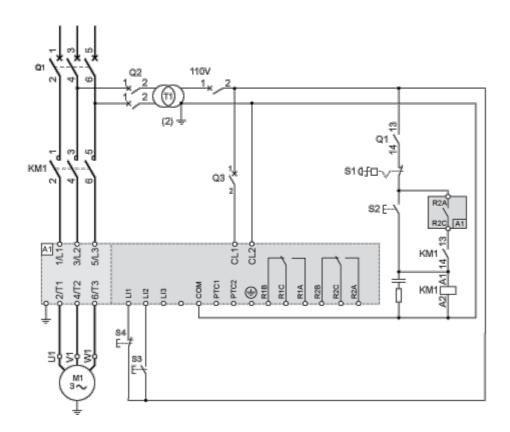
## Power connections, minimum and maximum wiring capabilities, tightening torque

			IEC cable	UL cable
Power supply and output to motor	Size/gauge	min	4 mm (a)	10 AWG (a)
		max	50 mm	1/0 AWG
	Tightening torque	min	8 N.m	70 lb.in
		max	8 N.m	70 lb.in
	Strip length		15 mm	0.6 in.

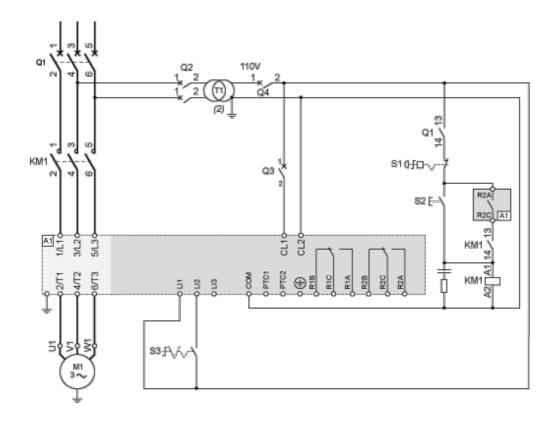
## Power connections, minimum required wiring section

IEC cable	UL cable
mm² (Cu 70°C/158°F) (1)	AWG (Cu 75°C/167°F) (1)
16	4

## 110 Vac control, Logic Inputs (LI) 110 Vac, 3-wire control



## 110 Vac control, Logic Inputs (LI) 110 Vac, 2-wire control, freewheelstop



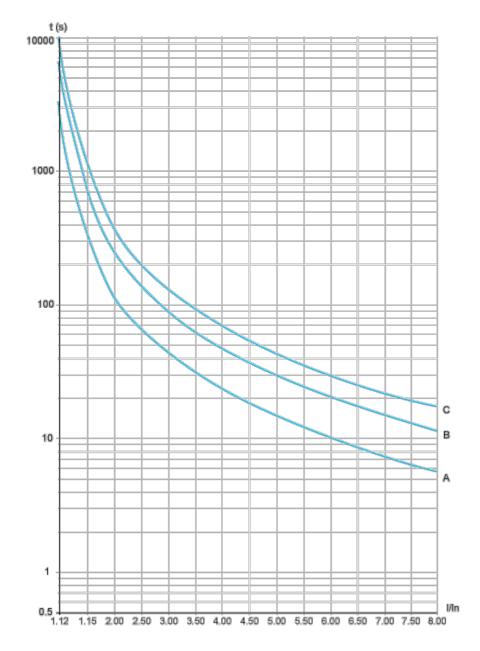
## Product data sheet

# ATS22D62S6U

#### Performance Curves

#### **Motor Thermal Protection - Cold Curves**

#### Curves



- A Class 10
- B Class 20
- C Class 30

#### Trip time for a Standard Application (Class 10)

3.5 ln
32 s

Trip time for a Severe Application (Class 20)

# Product data sheet ATS22D62S6U

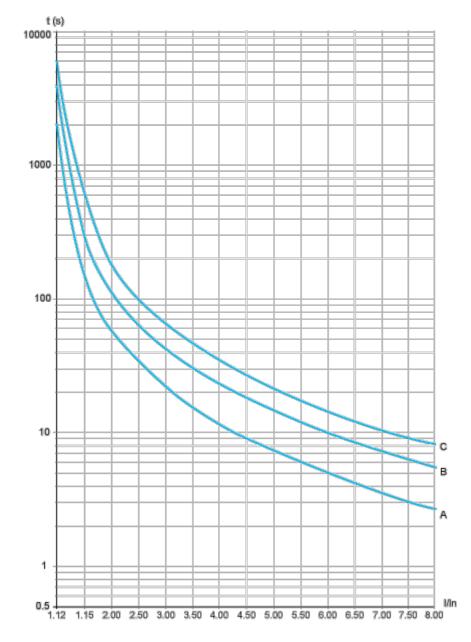
3.5 In 63 s

Trip time for a Severe Application (Class 30)

3.5 ln

## **Motor Thermal Protection - Warm Curves**

#### Curves



A Class 10

B Class 20

C Class 30

#### Trip time for a Standard Application (Class 10)

3.5 ln 16 s

#### Trip time for a Severe Application (Class 20)

3.5 ln

# Product data sheet ATS22D62S6U

32 s

Trip time for a Severe Application (Class 30)

3.5 ln

48 s

Image of product / Alternate images

## **Alternative**





