

soft starter for asynchronous motor, Altistart 22, control 110V, 208 to 575V, 50 to 150hp

ATS22C17S6U

Product availability: Stock - Normally stocked in distribution

Price*: 2,467.20 USD

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 | 125 hp 460 V 150 hp 575 V 50 hp 208 V 60 hp 230 V | |
| Factory Setting Current | 156 A | |
| Power Dissipation In W | 91 W for standard applications | |
| Utilisation Category | AC-53A | |
| Type Of Start | Start with torque control (current limited to 3.5 In) | |
| Icl Starter Rating | 170 A connection in the motor supply line for standard applications | |
| Ip Degree Of Protection | IP00 | |

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 lcl 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 | 14.02 in (356 mm) | |
| Width | 5.91 in (150 mm) | |
| Depth | 9.04 in (229.5 mm) | |
| Net Weight | 39.68 lb(US) (18 kg) | |

Environment

| Electromagnetic Compatibility | Conducted and radiated emissions level A IEC 60947-4-2 Damped oscillating waves level 3 IEC 61000-4-12 Electrostatic discharge level 3 IEC 61000-4-2 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 | |
|---------------------------------------|---|--|
| Standards | IEC 60947-4-2 | |
| Product Certifications | CSA GOST CCC C-tick UL | |
| Vibration Resistance | 1 gn 13200 Hz)IEC 60068-2-6 1.5 mm 213 Hz)IEC 60068-2-6 | |
| Shock Resistance | 15 gn 11 ms IEC 60068-2-27 | |
| Noise Level | 56 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 additional 100 m | |

Ordering and shipping details

| Category | US1CP1G22576 |
|-------------------|---------------|
| Discount Schedule | CP1G |
| Gtin | 3606480167454 |
| Returnability | Yes |
| Country Of Origin | US |

Packing Units

| r adming dimes | |
|------------------------------|---------------------------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 10.04 in (25.5 cm) |
| Package 1 Width | 13.19 in (33.5 cm) |
| Package 1 Length | 16.54 in (42.0 cm) |
| Package 1 Weight | 29.28 lb(US) (13.28 kg) |
| Unit Type Of Package 2 | P06 |
| Number Of Units In Package 2 | 4 |
| Package 2 Height | 28.94 in (73.5 cm) |
| Package 2 Width | 31.50 in (80.0 cm) |
| Package 2 Length | 23.62 in (60.0 cm) |
| Package 2 Weight | 142.37 lb(US) (64.576 kg) |

Contractual warranty

Warranty 18 months

Sustainability

Green PremiumTM 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-CO₂ 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 >

Well-being performance

| \bigcirc | Mercury Free |
|------------|--------------|
| | |

| ⊘ | Rohs Exemption Information | Yes |
|----------|----------------------------|-----|
| | | |

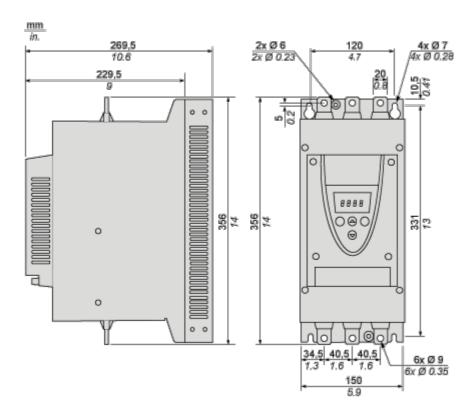
| Reach Regulation | REACh Declaration | |
|---------------------------|---|--|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) | |
| China Rohs Regulation | China RoHS declaration | |
| Weee | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. | |
| 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 | |

ATS22C17S6U

Dimensions Drawings

Frame Size C

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.



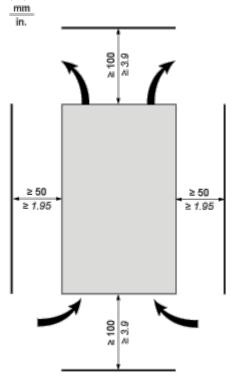
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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.



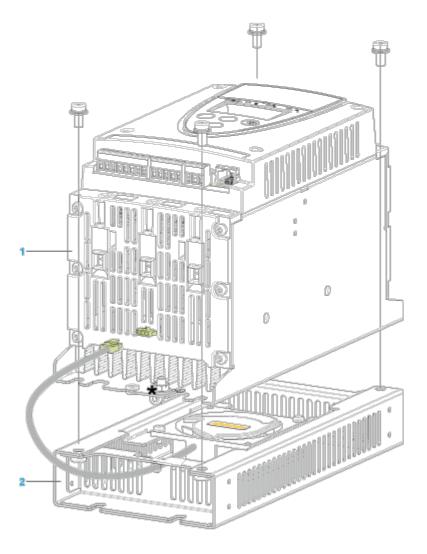
Overheating

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

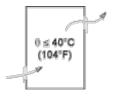
ATS22C17S6U

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

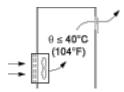
Introduction

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

Ventilation Grilles



Forced Ventilation Unit

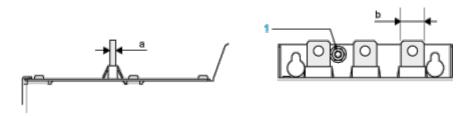


ATS22C17S6U

Connections and Schema

Power Terminal

Bar Style

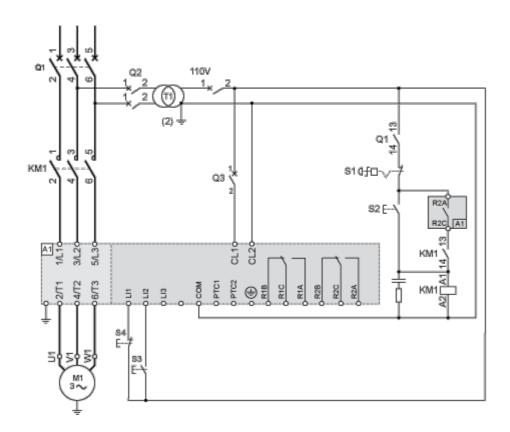


| Power supply and output to motor | Bar | b | 20 mm (0.79 in) |
|----------------------------------|----------------------------|-------------------|-----------------|
| | | а | 5 mm (0.2 in) |
| | | Bolt | M8 (0.31 in) |
| | Cable and protective cover | Size | 95 mm² |
| | | Gauge | 250 MCM |
| | | Protective cover | LA9F702 |
| | | Tightening torque | 18 N.m |
| | | | 157.5 lb.in |

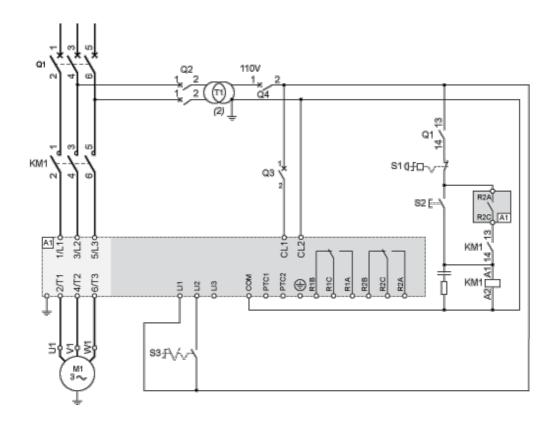
Power connections, minimum required wiring section

| IEC cable | UL cable |
|-------------------------|-------------------------|
| mm² (Cu 70°C/158°F) (1) | AWG (Cu 75°C/167°F) (1) |
| 70 | 4/0 |

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



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



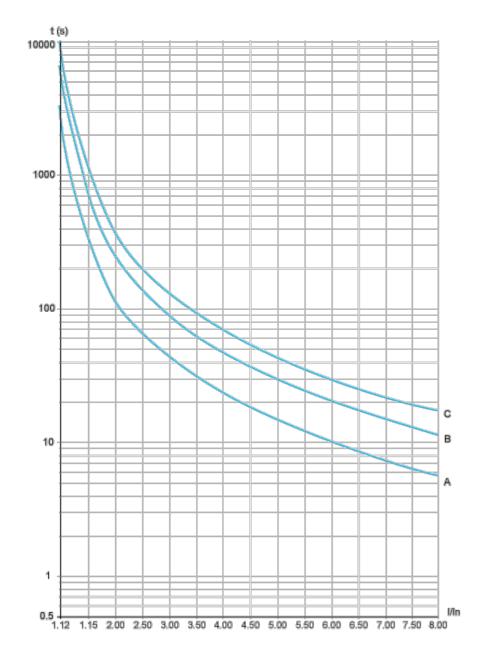
Product data sheet

ATS22C17S6U

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 ATS22C17S6U

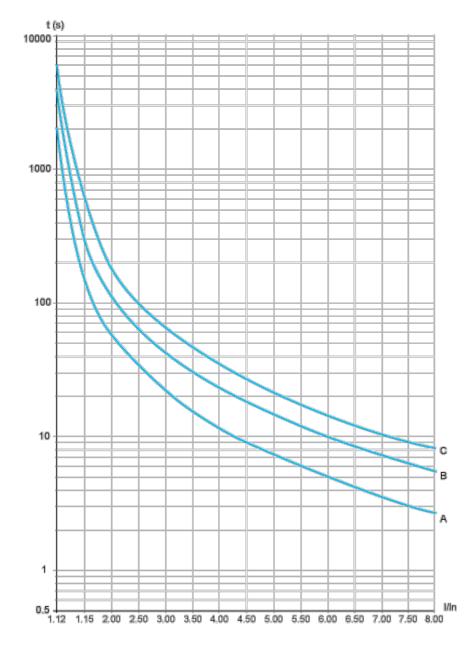
| 3.5 ln |
|--------|
| 63 s |

Trip time for a Severe Application (Class 30)

| 3.5 ln |
|--------|
| 95 s |

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 ATS22C17S6U

32 s

Trip time for a Severe Application (Class 30)

3.5 ln

48 s