Specifications



(!) Discontinued

## soft starter-ATS22-control 220Vpower 230V(132kW)/ 400...440V(250kW)/500V(315kW)

Local distributor code: 393438978

ATS22C48S6

Discontinued on: 9 Feb 2023

#### EAN Code: 3606480211355

### 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
Network Number Of Phases	3 phases
[Us] Rated Supply Voltage	230600 V - 1510 %
Motor Power Kw	132 kW 230 V 250 kW 400 V 250 kW 440 V 315 kW 500 V
Factory Setting Current	414 A
Power Dissipation In W	218 W for standard applications
Utilisation Category	AC-53A
Type Of Start	Start with torque control (current limited to 3.5 In)
Icl Starter Rating	480 A for 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	195660 V
Supply Frequency	5060 Hz - 1010 %
Network Frequency	4566 Hz
Device Connection	In the motor supply line
[Uc] Control Circuit Voltage	230 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 at 12 V DC (relay outputs)

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 4.3 kOhm
Discrete Input Voltage	24 V <= 30 V
Discrete Input Logic	Positive logic LI1, LI2, LI3 at State 0: < 5 V and <= 2 mA at State 1: > 11 V, >= 5 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	455 mm
Width	304 mm
Depth	339.7 mm
Net Weight	50 kg
Motor Power Range Ac-3	110220 kW at 200240 V 3 phases 250500 kW at 480500 V 3 phases 250500 kW at 380440 V 3 phases
Motor Starter Type	Soft starter

### 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	EN/IEC 60947-4-2
Product Certifications	C-Tick GOST CSA UL CCC
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	56 dB
Pollution Degree	Level 2 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	-1040 °C (without derating) 4060 °C (with current derating 2.2 % per °C)
Ambient Air Temperature For Storage	-2570 °C
Operating Altitude	<= 1000 m without derating > 1000< 2000 m with current derating of 2.2 % per additional 100 m

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	53.000 cm
Package 1 Width	40.000 cm
Package 1 Length	60.000 cm
Package 1 Weight	40.000 kg

## **Contractual warranty**

Warranty

18 months

### **Sustainability**

**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 >

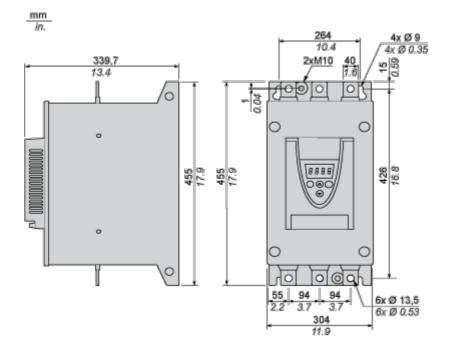
### Well-being performance

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

**Dimensions Drawings** 

#### Frame Size E

#### Dimensions



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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.

## **DANGER**

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

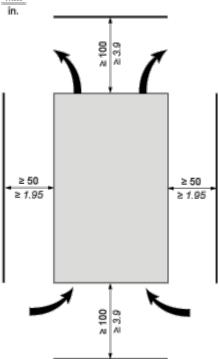
ATS22 soft starters are open devices and must be mounted in a suitable enclosure.

### 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.

mm



#### Overheating

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

- 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.

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

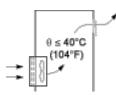
#### Introduction

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

#### **Ventilation Grilles**



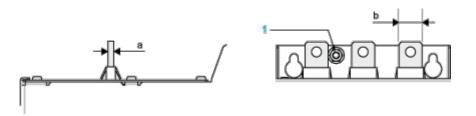
#### **Forced Ventilation Unit**



### Connections and Schema

#### **Power Terminal**

#### Bar Style



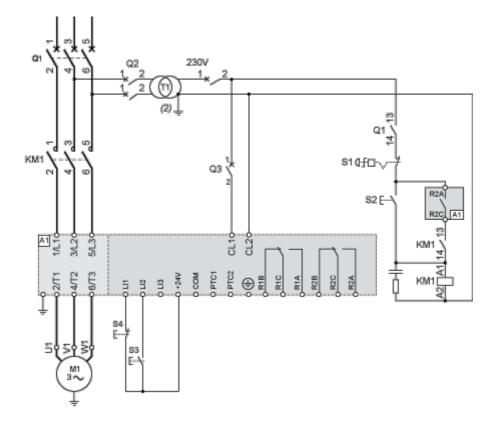
Power supply and output to motor	Bar	b	40 mm (1.18 in)
		а	5 mm (0.2 in)
		Bolt	M12 (0.47 in)
Dever supply and subsuit to mater	Cable and protective cover	Size	2X240 mm²
Power supply and output to motor		Gauge	2X500 MCM
		Protective cover	LA9F703
		Tightening torque	57 N.m
			498.75 lb.in

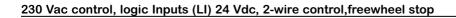
#### Power connections, minimum required wiring section

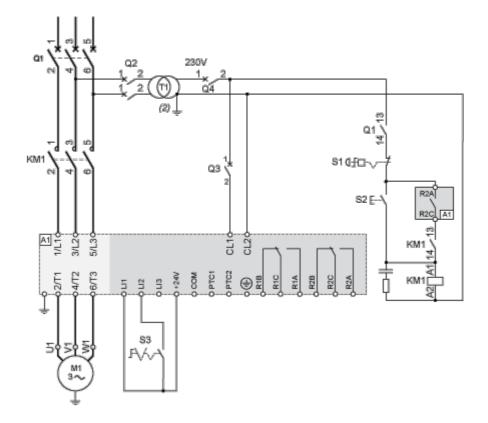
IEC cable	UL cable	
mm <sup>2</sup> (Cu 70°C/158°F) (1)	AWG (Cu 75°C/167°F) (1)	
2 X 150	3 X 350 MCM	

230 Vac control, logic Inputs (LI) 24 Vdc, 3-wire control

With Line Contactor, Freewheel or Controlled Stop



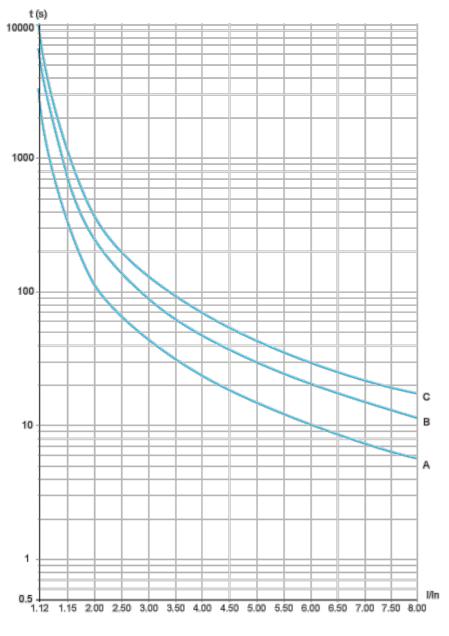




### Performance Curves

#### 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)

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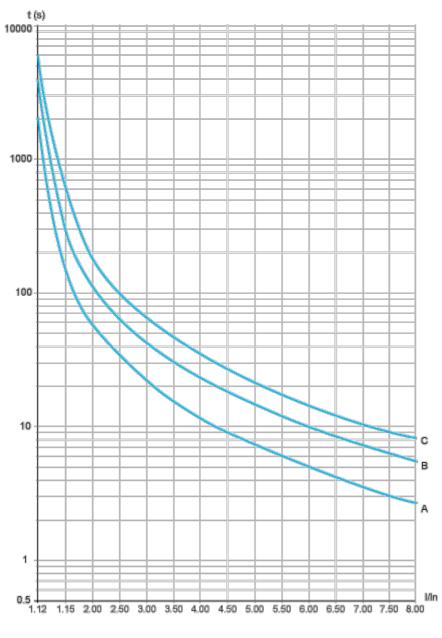
3.5 ln	
63 s	

### 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



## Trip time for a Severe Application (Class 30)

3.5 ln
48 s