# **ATS22C25S6U**

ATS22 - control 110 V - power 208 V (75hp)





#### 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	208600 V - 1510 %
Motor power hp	100 hp 230 V 200 hp 460 V 250 hp 575 V 75 hp 208 V
Factory setting current	240 A
Power dissipation in W	129 W for standard applications
Utilisation category	AC-53A
Type of start	Start with torque control (current limited to 3.5 ln)
IcL starter rating	250 A connection in the motor supply line for standard applications
IP degree of protection	IP00

#### Complementary

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	
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	Logic LI1, LI2, LI3 5 mA 20 kOhm	
Discrete input voltage	110 V <= 121 V	
Discrete input logic	Positive logic LI1, LI2, LI3 < 20 V and <= 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	Thermal protection motor	

	Thermal protection starter	
Marking	CE	
Type of cooling	Forced convection	
Operating position	Vertical +/- 10 degree	
Height	425 mm	
Width	206 mm	
Depth	299 mm	
Product weight	33 ka	

Phase failure line

# **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	EN/IEC 60947-4-2	
product certifications	CCC CSA C-Tick GOST UL	
vibration resistance	1 gn 13200 Hz EN/IEC 60068-2-6 1.5 mm 213 Hz EN/IEC 60068-2-6	
shock resistance	15 gn 11 ms EN/IEC 60068-2-27	
noise level	56 dB	
pollution degree	Level 2 IEC 60664-1	
relative humidity	095 % without condensation or dripping water EN/IEC 60068-2-3	
ambient air temperature for operation	-1040 °C without derating > 40< 60 °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	

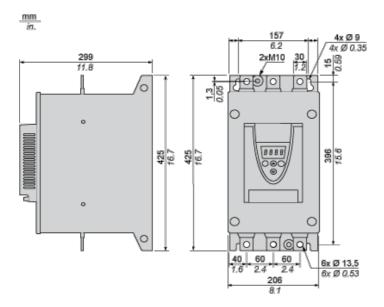
# Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0939 - Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
Product end of life instructions	Available	

# Frame Size D

**Dimensions** 





#### **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.

#### A DANGER

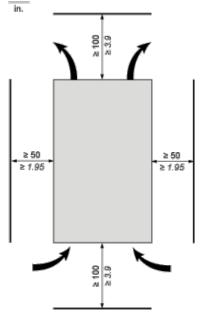
### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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.  $\frac{mm}{m}$ 



## 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.



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

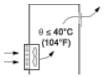
### Introduction

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

## **Ventilation Grilles**



## **Forced Ventilation Unit**



### **Power Terminal**

### **Bar Style**

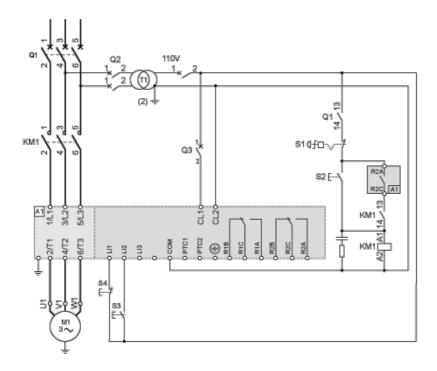


Power supply and output to motor	Bar	b	30 mm (1.18 in)
		a	5 mm (0.2 in)
		Bolt	M12 (0.47 in)
	Cable and protective cover	Size	2X150 mm²
		Gauge	2X250 MCM
		Protective cover	LA9F703
		Tightening torque	57 N.m
			498.75 lb.in

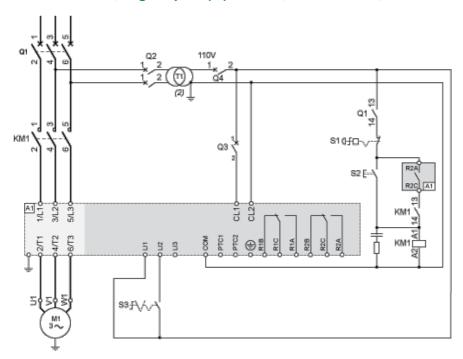
# Power connections, minimum required wiring section

IEC cable	UL cable
mm² (Cu 70°C/158°F) (1)	AWG (Cu 75°C/167°F) (1)
120	350 MCM

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

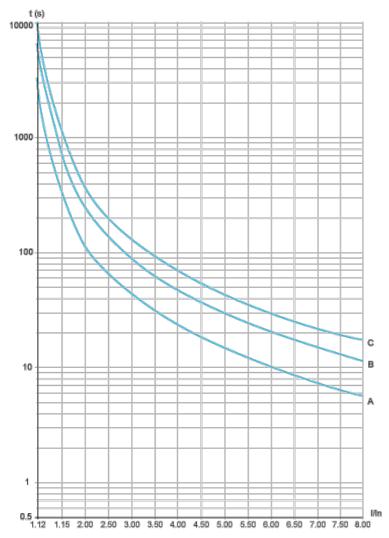


# 110 Vac control, Logic Inputs (LI) 110 Vac, 2-wire control, freewheelstop



# **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)

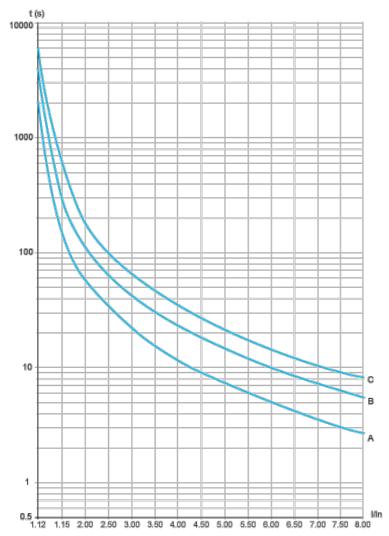
3.5 ln 63 s

## 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 32 s

# Trip time for a Severe Application (Class 30)

3.5 ln 48 s