# Product data sheet Characteristics

# ATS22D17S6

soft starter-ATS22-control 220V-power 230V(4kW)/400...440V(7.5kW)/500V(9kW)

Product availability: Non-Stock - Not normally stocked in distribution facility





#### Main

Mairi				
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 phases			
[Us] rated supply voltage	230600 V - 1510 %			
Motor power kW	7.5 kW 400 V 4 kW 230 V 9 kW 500 V 7.5 kW 440 V			
Factory setting current	14 A			
Power dissipation in W	39 W for standard applications			
Utilisation category	AC-53A			
Type of start	Start with torque control (current limited to 3.5 In)			
IcL starter rating	17 A connection in the motor supply line for standard applications			
IP degree of protection	IP20			

#### Complementary

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Assembly style	With heat sink		
Function available	Internal bypass	s not	
Supply voltage limits	195660 V	fio	
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 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 4.3 kOhm		
Discrete input voltage	24 V <= 30 V		
Discrete input logic	Positive logic LI1, LI2, LI3 < 5 V and <= 2 mA > 11 V >= 5 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 starter Thermal protection motor		
Marking	CE		
Type of cooling	Forced convection		
Operating position	Vertical +/- 10 degree		
Height	10.43 in (265 mm)		
Width	5.12 in (130 mm)		
Depth	6.65 in (169 mm)		
Product weight	15.43 lb(US) (7 kg)		
Motor power range AC-3	711 kW at 380440 V 3 phases 46 kW at 200240 V 3 phases 711 kW at 480500 V 3 phases		
Motor starter type	Soft starter		

### 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	1.5 mm 213 Hz EN/IEC 60068-2-6 1 gn 13200 Hz EN/IEC 60068-2-6	
Shock resistance	15 gn 11 ms EN/IEC 60068-2-27	
Noise level	45 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	14104 °F (-1040 °C) without derating > 104< 140 °F (> 40< 60 °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	

# Ordering and shipping details

22576 - ATS22 ALTISTART			
CP1G			
00785901017363			
1			
12.1			
N			
ID			

# Offer Sustainability

Sustainable offer status	status Green Premium product			
RoHS (date code: YYWW)	Compliant			
	Schneider Electric declaration of conformity			
REACh	Reference not containing SVHC above the threshold			
	Reference not containing SVHC above the threshold			
Product environmental profile	Available			
Product end of life instructions	Available			
California proposition 65	WARNING: This product can expose you to chemicals including:			
Substance 1	Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.			
Substance 2	Bisphenol A (BPA), which is known to the State of California to cause birth defects or other reproductive harm.			
More information	For more information go to www.p65warnings.ca.gov			

#### Contractual warranty

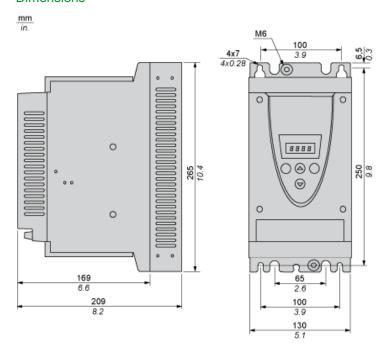
Warranty period	18 months		

# Product data sheet Dimensions Drawings

# ATS22D17S6

#### Frame Size A

#### 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.

#### **▲** DANGER

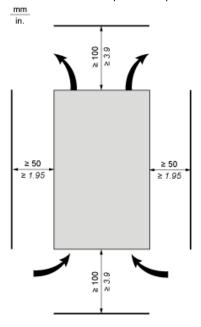
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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.



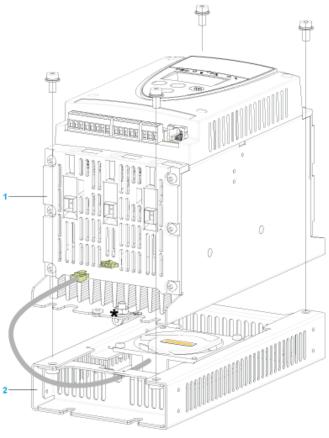
#### Overheating

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
- 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 as

# Mounting

# Connection Between the Fan and the Altistart 22 Soft Starter



- 1 2 Altistart 22 Soft Starter
- Fan

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

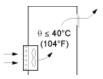
#### Introduction

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

#### Ventilation Grilles

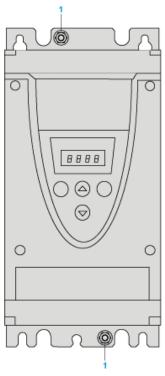


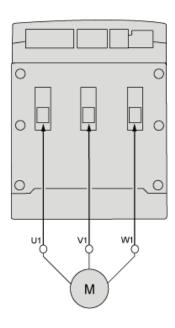
#### Forced Ventilation Unit



#### **Power Terminal**

#### Cage Style





1 Ground connection

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

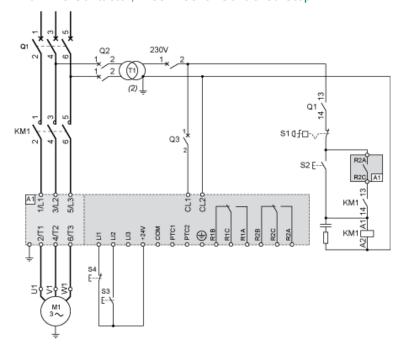
			IEC cable	UL cable
Power supply and output to motor	Size/gauge	min	2.5 mm	12 AWG
		max	16 mm	4 AWG
	Tightening torque	min	3 N.m	26.25 lb.in
		max	3 N.m	26.25 lb.in
	Strip length		10 mm	0.4 in.

#### Power connections, minimum required wiring section

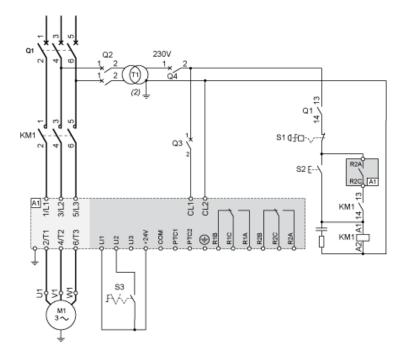
IEC cable	UL cable
mm² (Cu 70°C/158°F) (1)	AWG (Cu 75°C/167°F) (1)
2.5	10

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

# With Line Contactor, Freewheel or Controlled Stop

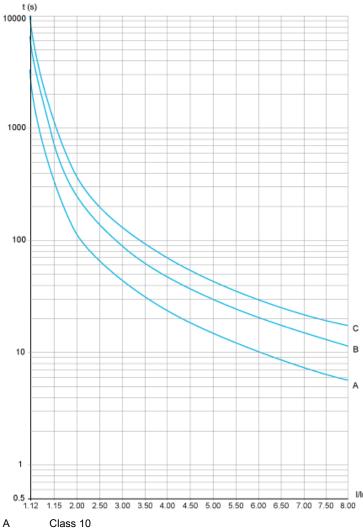


# 230 Vac control, logic Inputs (LI) 24 Vdc, 2-wire control,freewheel stop



#### 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

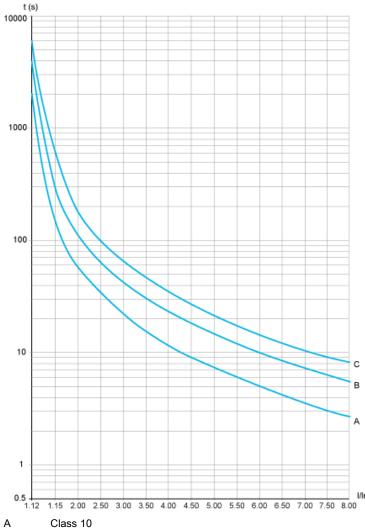
63 s

#### 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)

	 `	<u>′</u>
3.5 ln		
48 s		