

# ATS22C41Q

soft starter-ATS22-control 220V-power  
230V(110kW)/400...440V(220kW)

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



Price\* : 3,573.00 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	230...440 V - 15...10 %
Motor power kW	110 kW 230 V 220 kW 400 V 220 kW 440 V
Factory setting current	388 A
Power dissipation in W	177 W for standard applications
Utilisation category	AC-53A
Type of start	Start with torque control (current limited to 3.5 In)
IcL starter rating	410 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	195...484 V
Supply frequency	50...60 Hz - 10...10 %
Network frequency	45...66 Hz
Device connection	To the motor delta terminals In the motor supply line
[Uc] control circuit voltage	230 V - 15...10 % 50/60 Hz

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

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	LI1, LI2, LI3) logic, 5 mA 4.3 kOhm
Discrete input voltage	24 V <= 30 V
Discrete input logic	Positive logic LI1, LI2, LI3 < 5 V <= 2 mA > 11 V, >= 5 mA
Output current	0.4...1 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	16.73 in (425 mm)
Width	8.11 in (206 mm)
Depth	11.77 in (299 mm)
Net Weight	72.75 lb(US) (33 kg)
Motor power range AC-3	110...220 kW 380...440 V 3 phase 110...220 kW 200...240 V 3 phase
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	GOST CCC CSA UL C-tick
Vibration resistance	1 gn 13...200 Hz)EN/IEC 60068-2-6 1.5 mm 2...13 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	0...95 % without condensation or dripping water EN/IEC 60068-2-3
Ambient air temperature for operation	14...104 °F (-10...40 °C) without derating) 104...140 °F (40...60 °C) with current derating 2.2 % per °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Operating altitude	<= 3280.84 ft (1000 m) without derating

## Ordering and shipping details

Category	22576 - ATS22 ALTISTART
Discount Schedule	CP1G
GTIN	03606480211287
Nbr. of units in pkg.	1
Package weight(Lbs)	59.08 lb(US) (26.8 kg)
Returnability	No
Country of origin	CN

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	19.29 in (49 cm)
Package 1 width	14.57 in (37 cm)
Package 1 Length	21.46 in (54.5 cm)

## Offer Sustainability

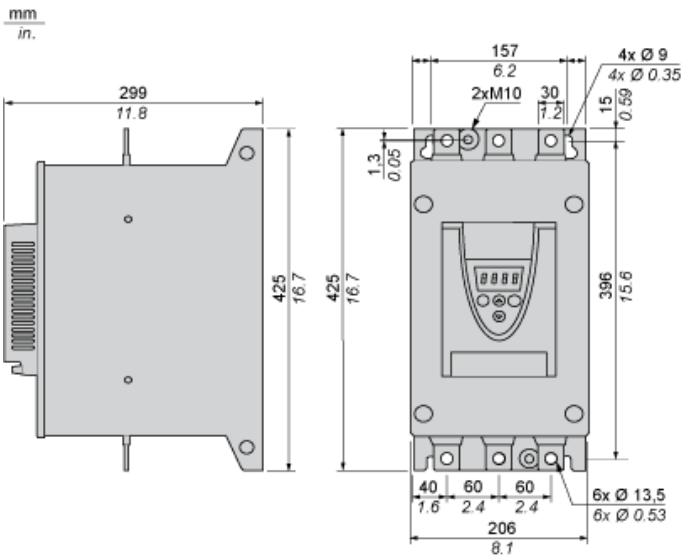
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

Warranty	18 months
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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.

### DANGER

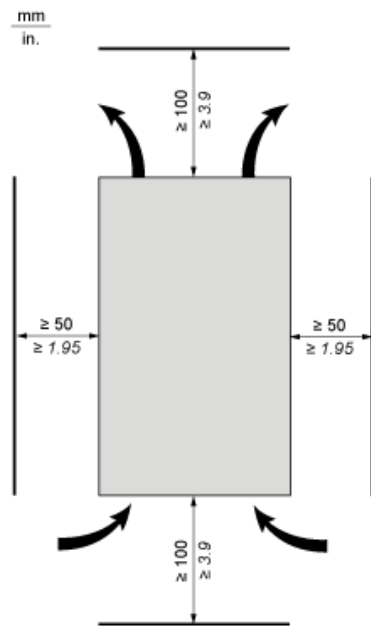
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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  $\pm 10^\circ$  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.
- 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 affect the top soft starter.

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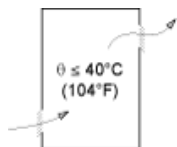
## Wall mounted or Floor-standing Enclosure with IP 23 Degree of protection

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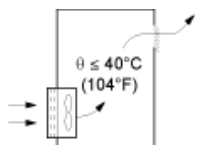
### Introduction

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

### Ventilation Grilles

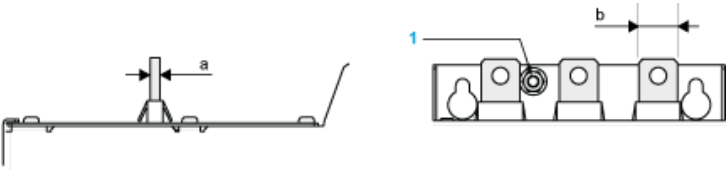


### Forced Ventilation Unit



Power Terminal

Bar Style



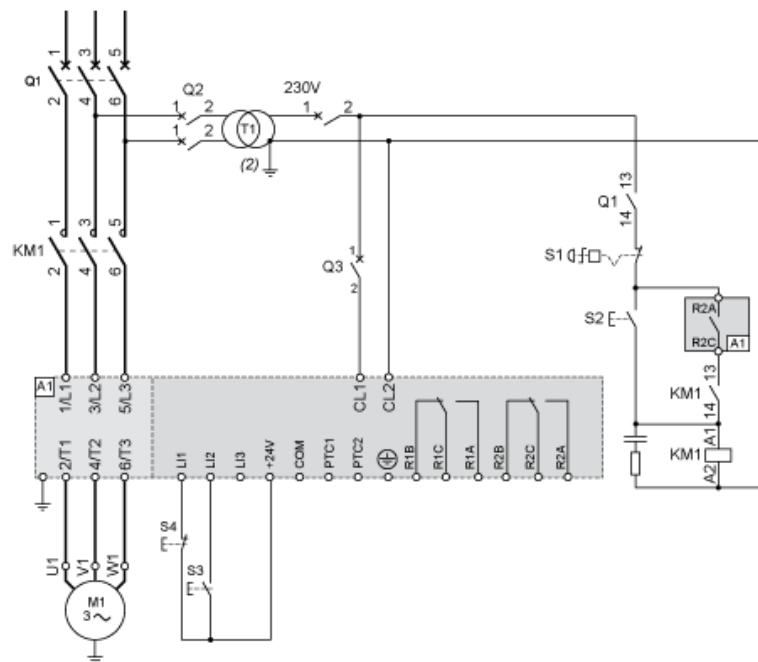
Power supply and output to motor	Bar	b	30 mm (1.18 in)
		a	5 mm (0.2 in)
		Bolt	M12 (0.47 in)
	Cable and protective cover	Size	2X150 mm²
		Gauge	2X250 MCM
		Protective cover	LA9F703
		Tightening torque	57 N.m 498.75 lb.in

Power connections, minimum required wiring section

IEC cable mm² (Cu 70°C/158°F) (1)	UL cable AWG (Cu 75°C/167°F) (1)
2 X 150	2 X 250 MCM

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

With Line Contactor, Freewheel or Controlled Stop





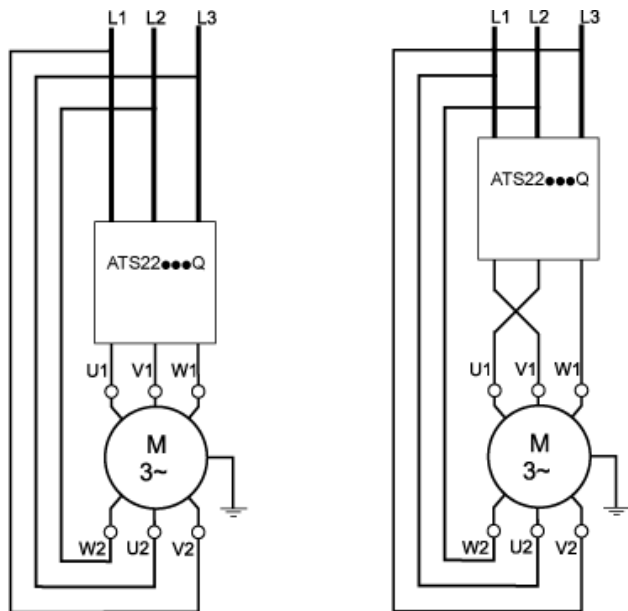


## Connection in the motor delta winding in series with each winding

### Wiring

ATS22 soft starters connected to motors with the delta connections can be inserted in series in the motor windings.

The following wiring requires particular attention. It is documented in the Altistart 22 Soft start - soft stop unit user manual. Please contact Schneider Electric commercial organisation for further informations.

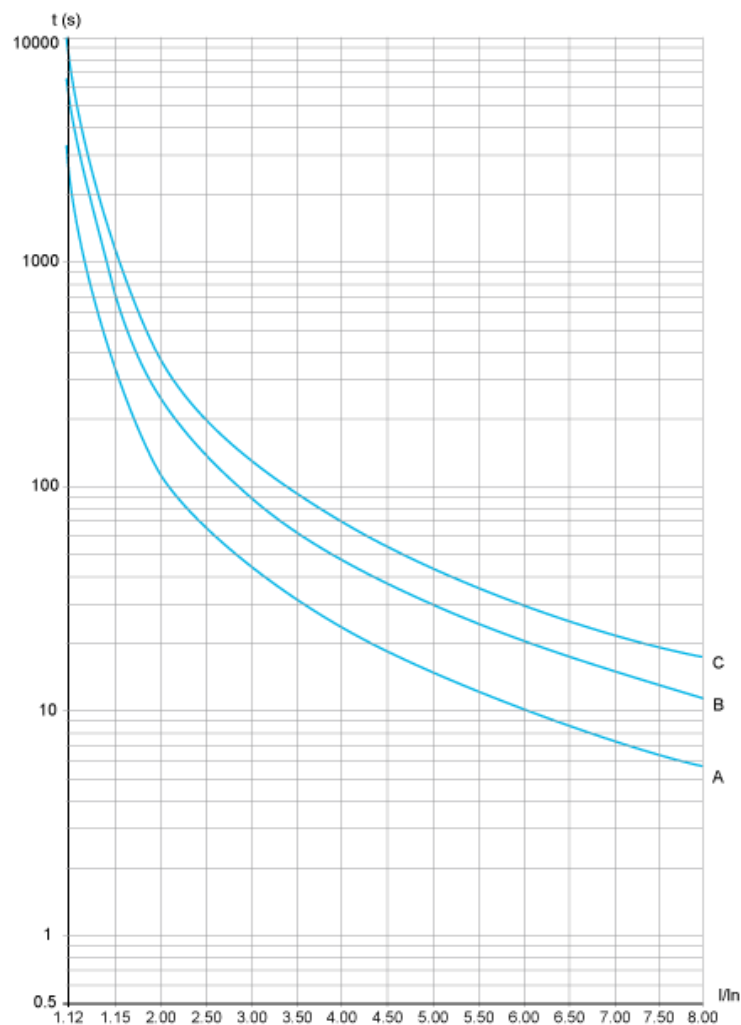


### Example

A 400 V - 110 kW motor with a line current of 195 A (nominal current for the delta connection). The current in each winding is equal to  $195/1.5$  or 130 A. The rating is determined by selecting the soft starter with a permanent nominal current (ICL) just above this current.

## 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 $I_n$
32 s

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

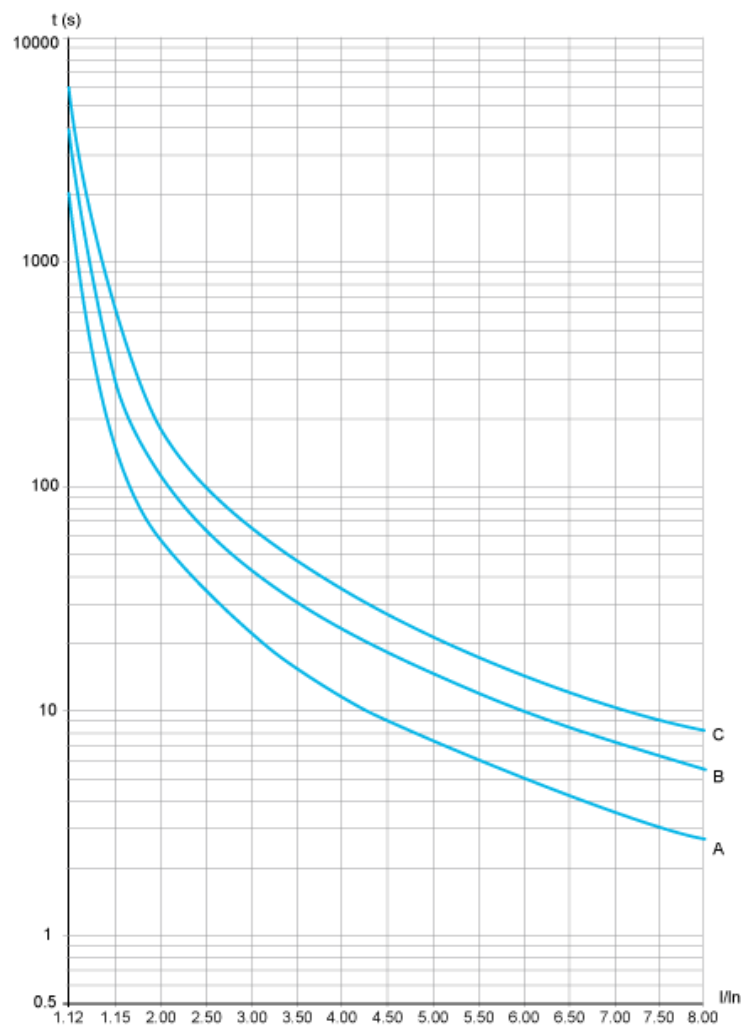
3.5 $I_n$
63 s

Trip time for a Severe Application (Class 30)

3.5 In
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 $I_n$
16 s

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

3.5 $I_n$
32 s

Trip time for a Severe Application (Class 30)

3.5 In
48 s