Product data sheet Characteristics

ATS22C11Q

soft starter-ATS22-control 220V-power 230V(39kW)/400...440V(55kW)

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



Price*: 1,468.00 USD



Main

Man		<u>i</u>
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	230440 V - 1510 %	<u>.</u>
Motor power kW	39 kW 230 V 55 kW 400 V 55 kW 440 V	444
Factory setting current	100 A	<u>.</u>
Power dissipation in W	73 W for standard applications	
Utilisation category	AC-53A	•
Type of start	Start with torque control (current limited to 3.5 ln)	
IcL starter rating	110 A connection in the motor supply line for standard applications	
IP degree of protection	IP20	<u> </u>

Complementary

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Assembly style	With heat sink	-
Function available	Internal bypass	
Supply voltage limits	195484 V	
Supply frequency	5060 Hz - 1010 %	
Network frequency	4566 Hz	
Device connection	In the motor supply line To the motor delta terminals	
[Uc] control circuit voltage	230 V - 1510 % 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	0.41 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)
Motor power range AC-3	3050 kW 200240 V 3 phase 55100 kW 380440 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	UL CSA GOST C-tick CCC
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	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

Ordering and shipping details

Category	22576 - ATS22 ALTISTART
Discount Schedule	CP1G
GTIN	03606480167249
Nbr. of units in pkg.	1
Package weight(Lbs)	28.37 lb(US) (12.868 kg)
Returnability	No
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	9.84 in (25 cm)
Package 1 width	12.99 in (33 cm)
Package 1 Length	16.14 in (41 cm)
Unit Type of Package 2	P06
Number of Units in Package 2	4
Package 2 Weight	142.14 lb(US) (64.472 kg)
Package 2 Height	28.94 in (73.5 cm)
Package 2 width	31.50 in (80 cm)
Package 2 Length	23.62 in (60 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 www.P65Warnings.ca.gov	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	

Contractual warranty

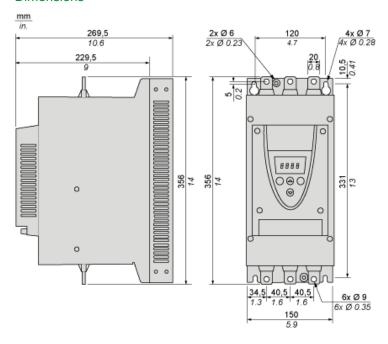
Contractadi Warranty	
Warranty	18 months

Product data sheet Dimensions Drawings

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Frame Size C

Dimensions



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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

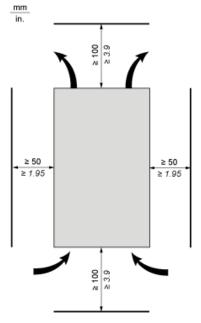
HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

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.



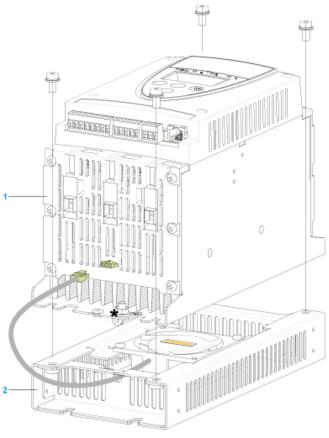
Overheating

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 are

Mounting

Connection Between the Fan and the Altistart 22 Soft Starter



- 1 2 Altistart 22 Soft Starter
- Fan

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

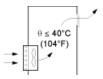
Introduction

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

Ventilation Grilles



Forced Ventilation Unit

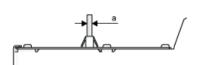


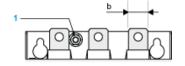
Product data sheet Connections and Schema

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Power Terminal

Bar Style





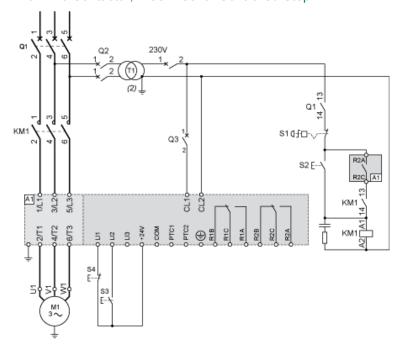
Power supply and output to motor	Bar	b	20 mm (0.79 in)
		а	5 mm (0.2 in)
		Bolt	M8 (0.31 in)
	Cable and protective cover	Size	95 mm²
		Gauge	250 MCM
		Protective cover	LA9F702
		Tightening torque	18 N.m
			157.5 lb.in

Power connections, minimum required wiring section

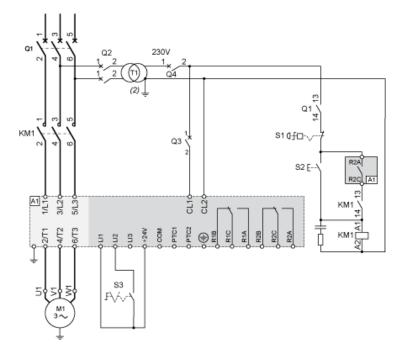
IEC cable	UL cable
mm² (Cu 70°C/158°F) (1)	AWG (Cu 75°C/167°F) (1)
35	1/0

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

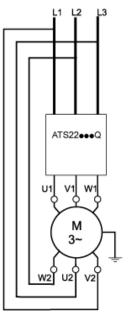


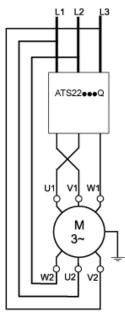
Connection in the motor delta winding in series with each winding

Wiring

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

The following wiring requieres 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

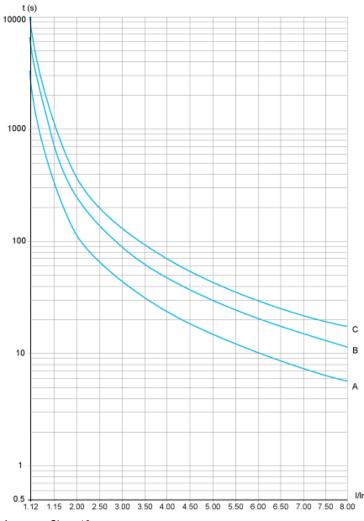
A 400 V - 110 kW motor with a line current of 195 A (nominal current for the delta connection). The current in each winding is equal to 195/1.5 or 130 A. The rating is determined by selecting the soft starter with a permanent nominal current (ICL) just above this current.

Product data sheet Performance Curves

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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)

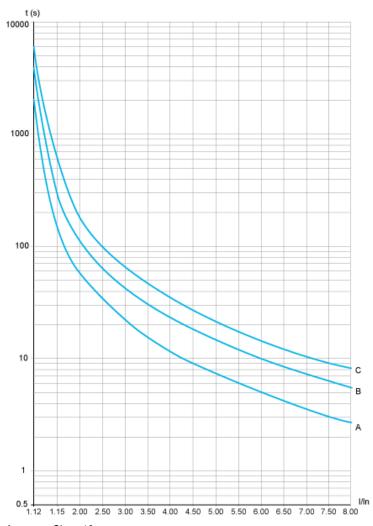
3.5 ln	
95 s	

Product data sheet Performance Curves

ATS22C11Q

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 In

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	