

ATS22D88Q

soft starter-ATS22-control 220V-power
230V(22kW)/400...440V(45kW)



Main

Range of product	Altistart 22
Product or component type	Soft starter
Product destination	Asynchronous motors
Product specific application	Severe and standard applications
Component name	ATS22
Network number of phases	3 phases
[Us] rated supply voltage	230...440 V (- 15...10 %)
Motor power kW	22 kW at 230 V 45 kW at 440 V 45 kW at 400 V
Factory setting current	81 A
Power dissipation in W	66 W for standard applications
Utilisation category	AC-53A
Type of start	Start with torque control (current limited to 3.5 In)
IcL starter rating	88 A (connection in the motor supply line) for standard applications
IP degree of protection	IP20

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	In the motor supply line To the motor delta terminals
Control circuit voltage	220...230 V -15...10 % at 50/60 Hz
Control circuit consumption	20 W
Discrete output number	2

Discrete output type	(R2)Relay outputs 230 V running, alarm, trip, stopped, not stopped, starting, ready, C/O (R1)Relay outputs 230 V running, alarm, trip, stopped, not stopped, starting, ready, C/O
Minimum switching current	Relay outputs 100 mA at 12 V, DC
Maximum switching current	Relay outputs 2 A at 30 V, DC inductive load, L/R = 7 ms Relay outputs 5 A at 30 V, DC resistive load, cos phi = 1 Relay outputs 2 A at 250 V, AC inductive load, cos phi = 0.4, L/R = 20 ms Relay outputs 5 A at 250 V, AC resistive load, cos phi = 1
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	(LI1, LI2, LI3) positive logic state 0 < 5 V and < 2 mA state 1 > 11 V and > 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 on line Thermal protection on starter Thermal protection on motor
Marking	CE
Type of cooling	Forced convection
Operating position	Vertical +/- 10 degree
Height	295 mm
Width	145 mm
Depth	207 mm
Product weight	12 kg

Environment

Electromagnetic compatibility	Voltage/Current impulse conforming to IEC 61000-4-5 level 3 Electrostatic discharge conforming to IEC 61000-4-2 level 3 Conducted and radiated emissions conforming to IEC 60947-4-2 level A Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3 Damped oscillating waves conforming to IEC 61000-4-12 level 3 Immunity to electrical transients conforming to IEC 61000-4-4 level 4
Standards	EN/IEC 60947-4-2
Product certifications	UL GOST C-Tick CSA CCC
Vibration resistance	1 gn (f = 13...200 Hz) conforming to EN/IEC 60068-2-6 1.5 mm (f = 2...13 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Noise level	45 dB
Pollution degree	Level 2 conforming to IEC 60664-1
Relative humidity	<= 95 % without condensation or dripping water conforming to EN/IEC 60068-2-3
Ambient air temperature for operation	> 40...< 60 °C with current derating 2.2 % per °C -10...40 °C without derating
Ambient air temperature for storage	-25...70 °C
Operating altitude	> 1000...< 2000 m with current derating of 2.2 % per additional 100 m <= 1000 m without derating

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0938 - Schneider Electric declaration of conformity

[Schneider Electric declaration of conformity](#)

REACH

Reference contains SVHC above the threshold - Go to CaP for more details

[Go to CaP for more details](#)

Product environmental profile

Available

[Product environmental](#)

Product end of life instructions

Available

[End of life manual](#)

Contractual warranty

Warranty period

18 months

Presentation

The Altistart 22 soft start - soft stop unit supports the controlled starting and stopping, via voltage and torque, of three-phase squirrel cage asynchronous motors for power ratings between 4 and 400 kW.

It comes ready to use for standard applications with class 10 motor protection.

Displaying the firmware version

This function displays the firmware versions for the purpose of managing the installed equipment base.

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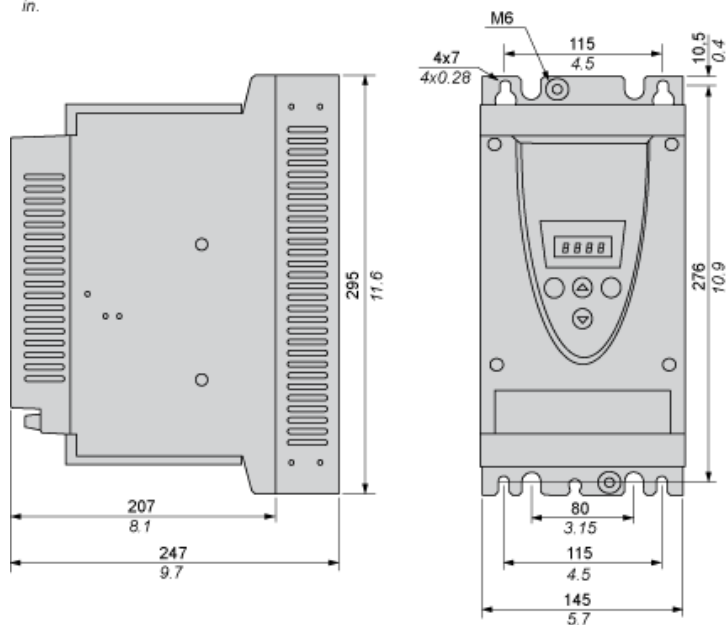
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Dimensions and Weights

Dimensions

Frame Size B

mm
in.

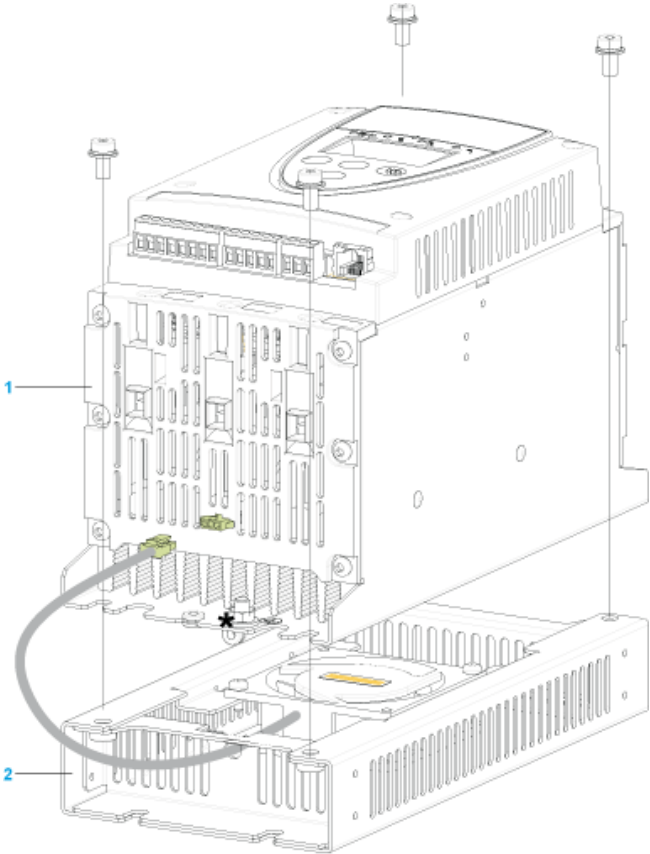


Weights

Starter	kg	lb
Without fan	8.5	18.9
With fan (1)	9.9	22
Gross weight	12	26.7

Mounting

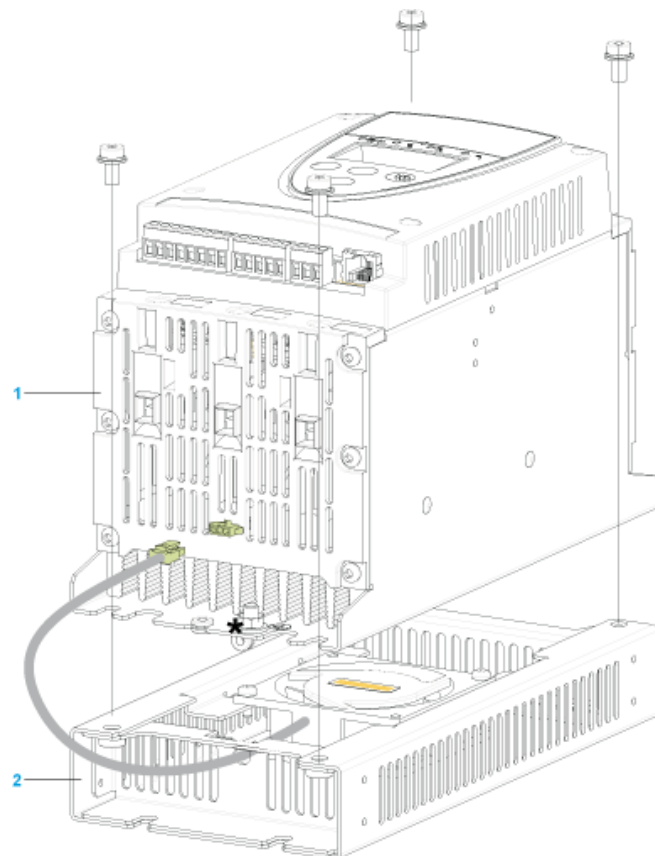
Connection Between the Fan and the Altistart 22 Soft Starter



- 1 Altistart 22 Soft Starter
- 2 Fan

Mounting

Connection Between the Fan and the Altistart 22 Soft Starter



- 1 Altistart 22 Soft Starter
- 2 Fan

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.

Connection in the motor delta winding in series with each winding

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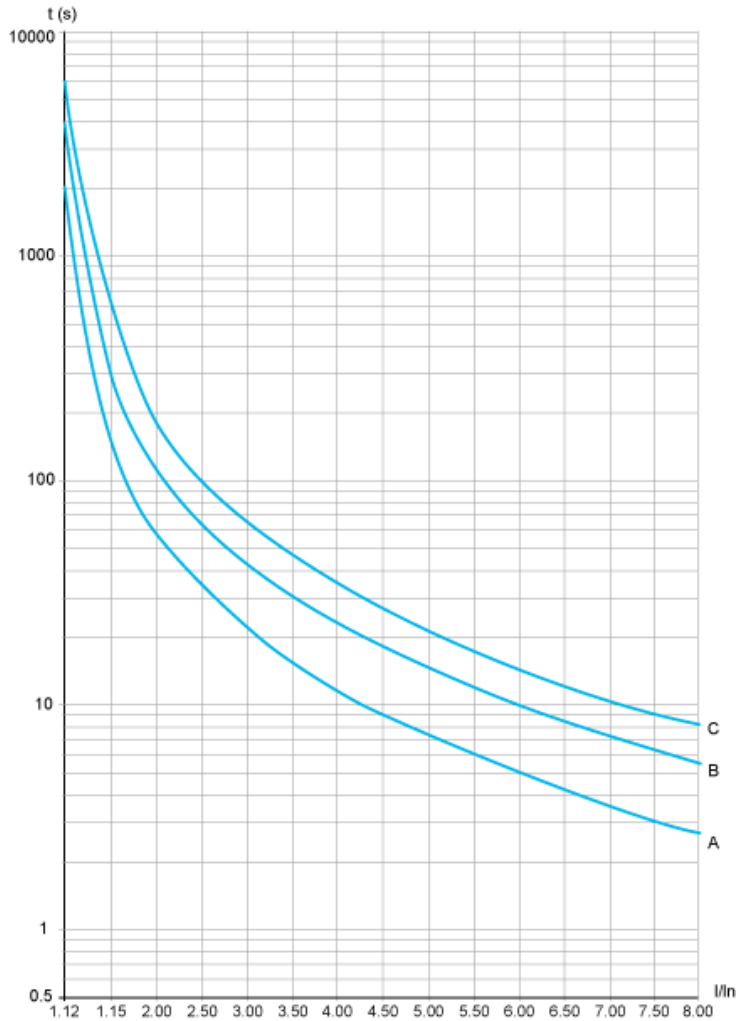
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Motor Thermal Protection - Warm Curves

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)

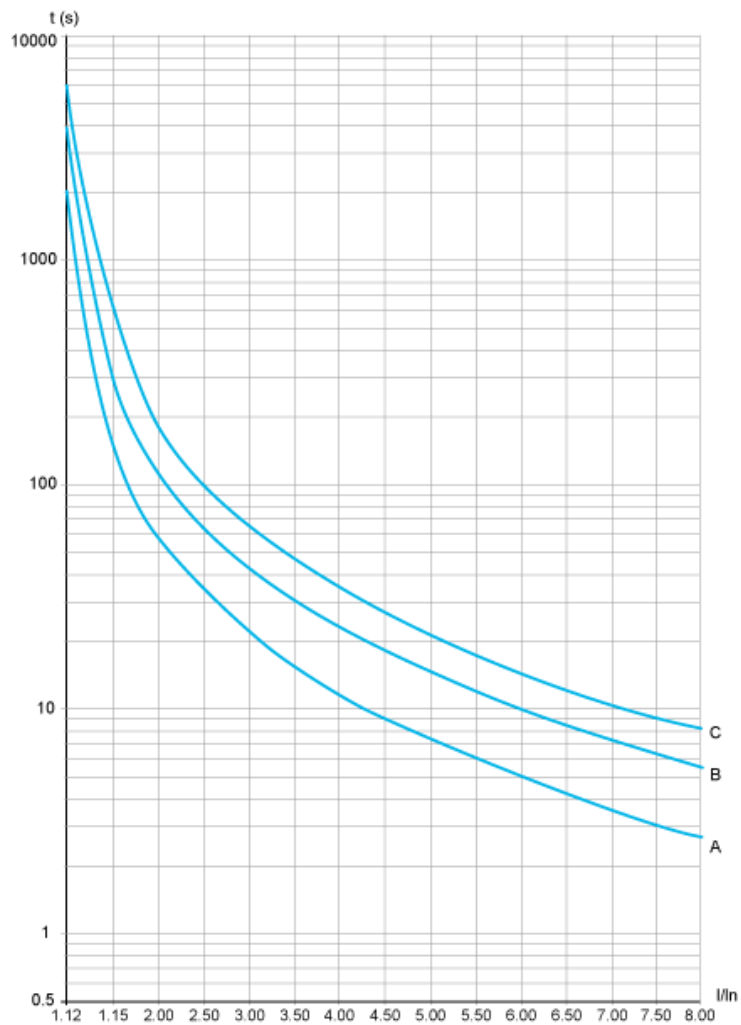
3.5 In
32 s

Trip time for a Severe Application (Class 30)

3.5 In
48 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 In
16 s

Trip time for a Severe Application (Class 20)

3.5 In
32 s

Trip time for a Severe Application (Class 30)

3.5 In
48 s