



### Main

|                              |  |
|------------------------------|--|
| Range of product             | Altistar 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               | 15 kW at 440 V<br>15 kW at 400 V<br>7.5 kW at 230 V                  |
| Factory setting current      | 28.5 A   |
| Power dissipation in W       | 44 W for standard applications                                       |
| Utilisation category         | AC-53A   |
| Type of start                | Start with torque control (current limited to 3.5 In)                |
| IcL starter rating           | 32 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           | To the motor delta terminals<br>In the motor supply line |
| 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<br>(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 5 A at 30 V, DC resistive load, cos phi = 1<br>Relay outputs 2 A at 250 V, AC inductive load, cos phi = 0.4, L/R = 20 ms<br>Relay outputs 5 A at 250 V, AC resistive load, cos phi = 1<br>Relay outputs 2 A at 30 V, DC inductive load, L/R = 7 ms |
| 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             | Thermal protection on motor<br>Phase failure on line<br>Thermal protection on starter  |
| Marking                     | CE   |
| Type of cooling             | Forced convection  |
| Operating position          | Vertical +/- 10 degree   |
| Height                      | 265 mm   |
| Width                       | 130 mm   |
| Depth                       | 169 mm   |
| Product weight              | 7 kg   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Electromagnetic compatibility         | Conducted and radiated emissions conforming to IEC 60947-4-2 level A<br>Voltage/Current impulse conforming to IEC 61000-4-5 level 3<br>Immunity to radiated radio-electrical interference conforming to IEC 61000-4-3 level 3<br>Immunity to electrical transients conforming to IEC 61000-4-4 level 4<br>Damped oscillating waves conforming to IEC 61000-4-12 level 3<br>Electrostatic discharge conforming to IEC 61000-4-2 level 3 |
| Standards                             | EN/IEC 60947-4-2   |
| Product certifications                | GOST<br>UL<br>C-Tick<br>CSA<br>CCC   |
| Vibration resistance                  | 1 gn (f = 13...200 Hz) conforming to EN/IEC 60068-2-6<br>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<br>-10...40 °C without derating  |
| Ambient air temperature for storage   | -25...70 °C  |
| Operating altitude                    | <= 1000 m without derating<br>> 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 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

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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.

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Displaying the firmware version

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

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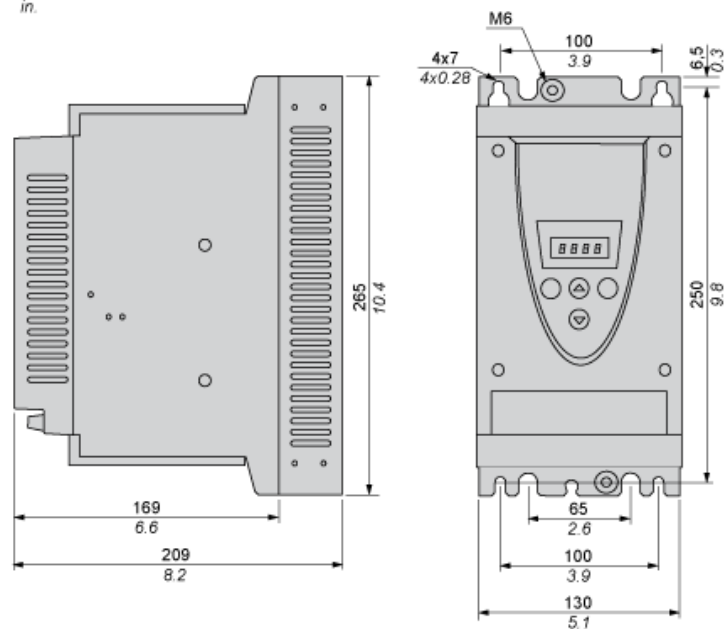


Dimensions and Weights

Dimensions

Frame Size A

$\frac{\text{mm}}{\text{in.}}$



Weights

| Starter      | kg  | lb   |
|--------------|-----|------|
| Without fan  | 5   | 11.1 |
| With fan (1) | 6.2 | 13.8 |
| Gross weight | 7   | 15.8 |

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Mounting

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Connection Between the Fan and the Altistart 22 Soft Starter

- 1 Altistart 22 Soft Starter
- 2 Fan

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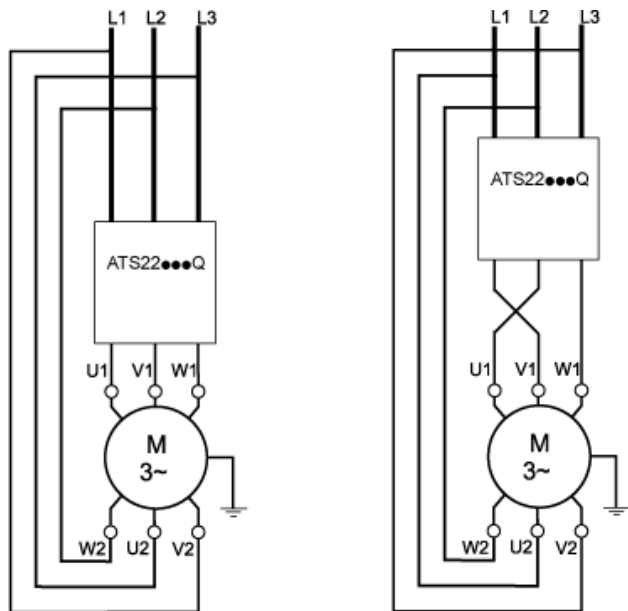
- 1 Altistart 22 Soft Starter
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## Connection in the motor delta winding in series with each winding

### 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

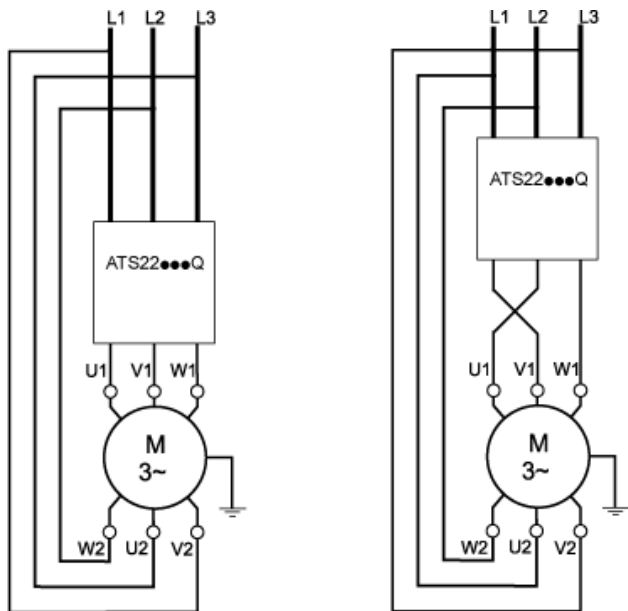
A 400 V - 110 kW motor with a line current of 195 A (nominal current for the delta connection). The current in each winding is equal to  $195/1.5$  or 130 A. The rating is determined by selecting the soft starter with a permanent nominal current (ICL) just above this current.

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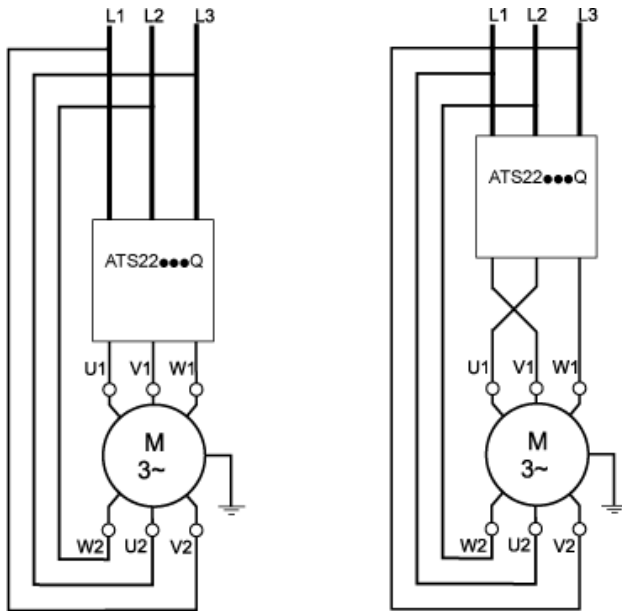
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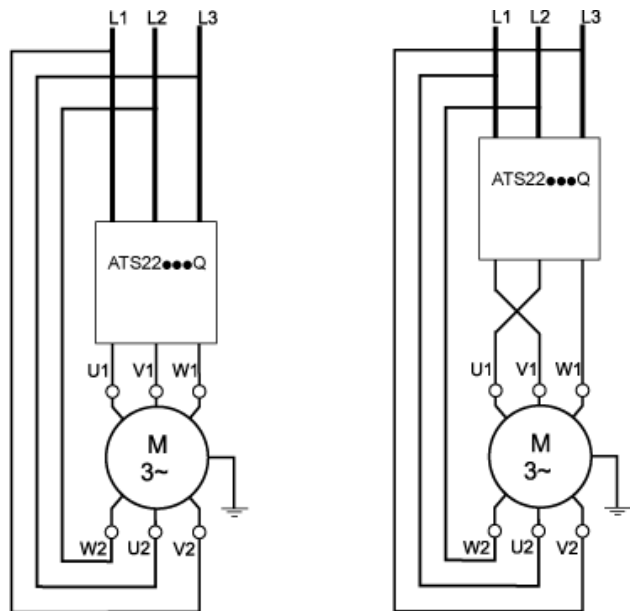
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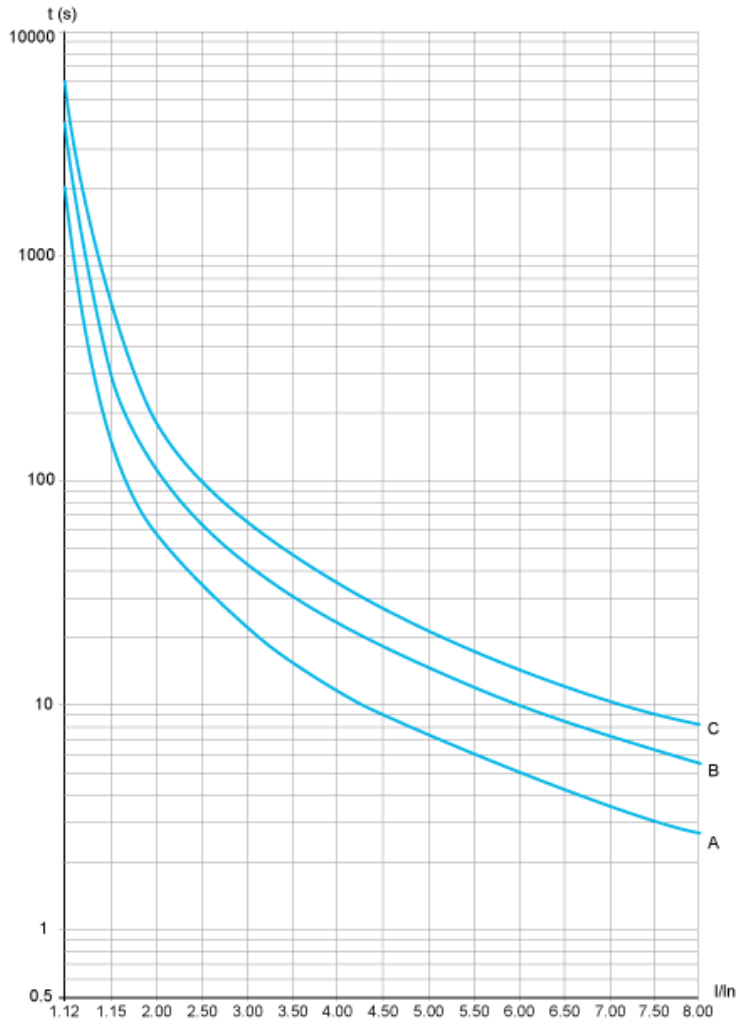


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Motor Thermal Protection - Warm Curves

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   |

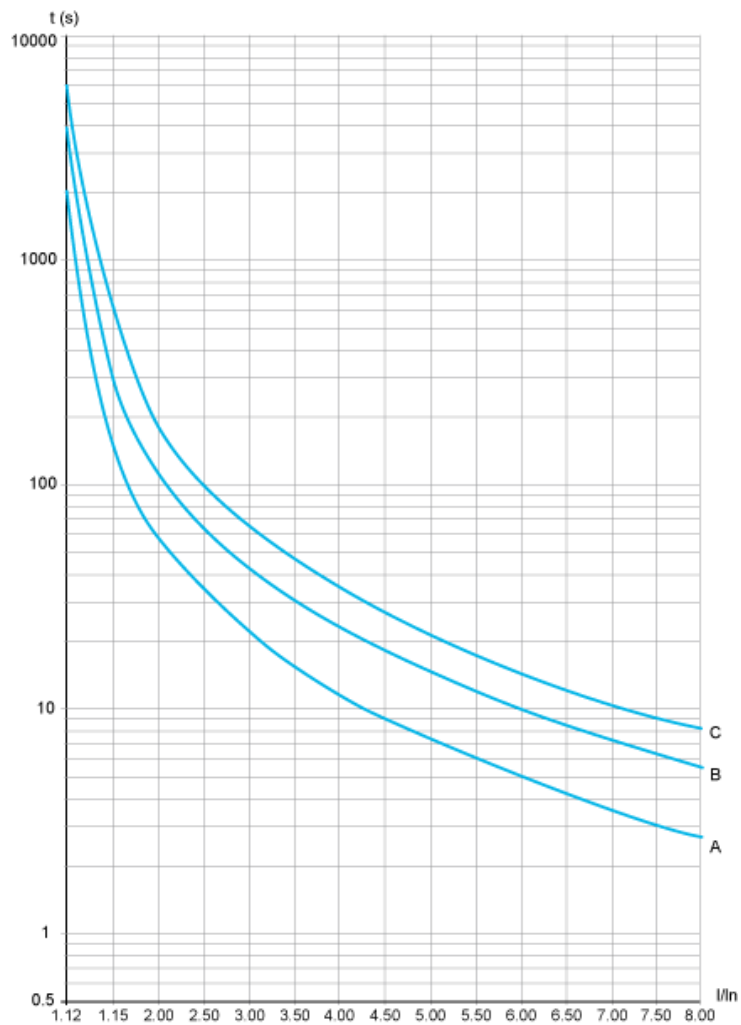


### Trip time for a Severe Application (Class 30)

|        |
|--------|
| 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   |