# Product datasheet

Specifications



Discontinued

## softstarter-ATS22-control110V-power208V(60hp)/230V(75hp)/460V(150hp)/575V(200hp)

Local distributor code:

393438868 ATS22C21S6U

Discontinued on: 29 Apr 2026

To be end-of-service on: 29 Jun 2035

**EAN Code: 3606480211195**

## 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 |
| **Network number of phases** | 3 phases |
| **[Us] rated supply voltage** | 208...600 V - 15...10 % |
| **Motor power hp** | 150 hp 460 V<br>200 hp 575 V<br>60 hp 208 V<br>75 hp 230 V |
| **Factory setting current** | 180 A |
| **Power dissipation in W** | 117 W for standard applications |
| **Utilisation category** | AC-53A |
| **Type of start** | Start with torque control (current limited to 3.5 In) |
| **IcL starter rating** | 210 A for 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** | 177…660 V |
| **Supply frequency** | 50...60 Hz - 10...10 % |
| **Network frequency** | 45...66 Hz |
| **Device connection** | In the motor supply line |
| **[Uc] control circuit voltage** | 110 V - 15...10 % 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<br>Relay outputs R2 230 V running, alarm, trip, stopped, not stopped, starting, ready C/O |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---|---|
| **Minimum switching current** | 100 mA at 12 V DC (relay outputs) |
| **Maximum switching current** | 5 A 250 V AC resistive 1 relay outputs<br>5 A 30 V DC resistive 1 relay outputs<br>2 A 250 V AC inductive 0.4 20 ms relay outputs<br>2 A 30 V DC inductive 7 ms relay outputs |
| **Discrete input number** | 3 |
| **Discrete input type** | (LI1, LI2, LI3) logic, 5 mA 20 kOhm |
| **Discrete input voltage** | 110 V <= 121 V |
| **Discrete input logic** | Positive logic LI1, LI2, LI3 at State 0: < 20 V and <= 15 mA at State 1: > 79 V, <= 2 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<br>Thermal protection: motor<br>Thermal protection: starter |
| **Marking** | CE |
| **Type of cooling** | Forced convection |
| **Operating position** | Vertical +/- 10 degree |
| **Height** | 425 mm |
| **Width** | 206 mm |
| **Depth** | 299 mm |
| **Net weight** | 33 kg |

# Environment

| | |
|---|---|
| **Electromagnetic compatibility** | Conducted and radiated emissions level A conforming to IEC 60947-4-2<br>Damped oscillating waves level 3 conforming to IEC 61000-4-12<br>Electrostatic discharge level 3 conforming to IEC 61000-4-2<br>Immunity to electrical transients level 4 conforming to IEC 61000-4-4<br>Immunity to radiated radio-electrical interference level 3 conforming to IEC 61000-4-3<br>Voltage/current impulse level 3 conforming to IEC 61000-4-5 |
| **Standards** | IEC 60947-4-2 |
| **Product certifications** | CSA<br>UL<br>CCC<br>C-Tick<br>GOST |
| **Vibration resistance** | 1 gn (f= 13…200 Hz) conforming to IEC 60068-2-6<br>1.5 mm (f= 2…13 Hz) conforming to IEC 60068-2-6 |
| **Shock resistance** | 15 gn for 11 ms conforming to IEC 60068-2-27 |
| **Noise level** | 56 dB |
| **Pollution degree** | Level 2 conforming to IEC 60664-1 |
| **Relative humidity** | 0…95 % without condensation or dripping water conforming to IEC 60068-2-3 |

| | |
|---|---|
| **Ambient air temperature for operation** | -10…40 °C (without derating)<br>40…60 °C (with current derating 2.2 % per °C) |
| **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 |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 53.000 cm |
| **Package 1 Width** | 37.000 cm |
| **Package 1 Length** | 56.000 cm |
| **Package 1 Weight** | 25.000 kg |

## Logistical informations

| | |
|---|---|
| **Country of origin** | CN |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Use Better

#### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **No** |
| Packaging without single use plastic | **No** |
| SCIP Number | **74d74380-6cb3-4414-bfb8-7b8212ccd88c** |
| EU RoHS Directive | **Compliant By Exemption** |
| REACh Regulation | **Reference contains Substances of Very High Concern above the threshold** |

### Use Again

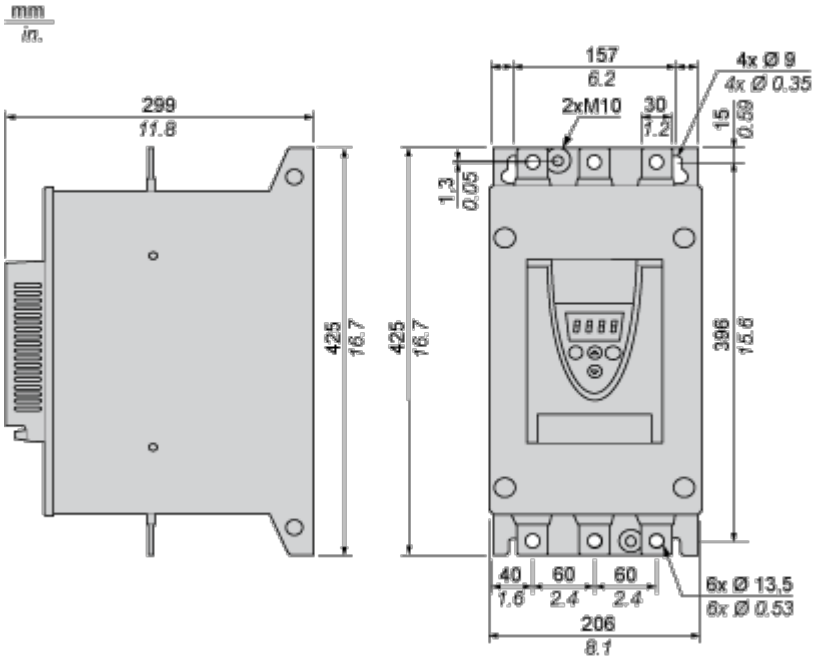
#### Repack and remanufacture

| | |
|---|---|
| Take-back | **No** |
| WEEE Label | **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins** |

Dimensions Drawings

## Frame Size D

### Dimensions



## Mounting and Clearance

### 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**

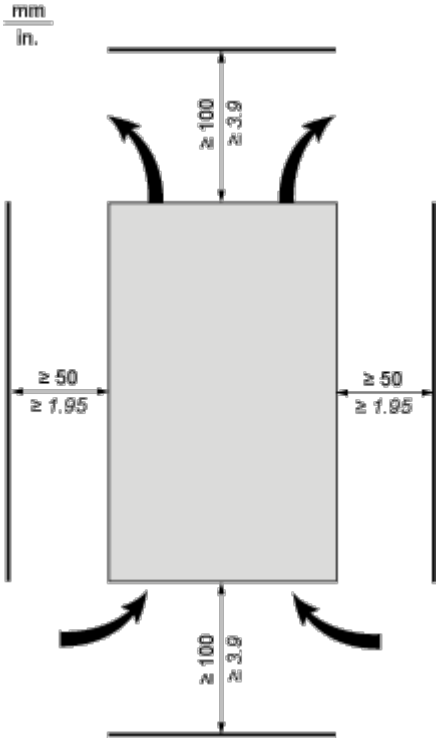
**HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

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:

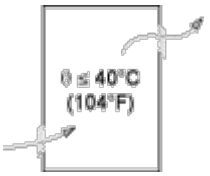
- Mount the Altistart 22 Soft Starter within ± 10° of vertical.
- Do not locate the Altistart 22 Soft Starter near heat radiating elements.
- Electrical current through the Altistart 22 Soft Starter will result in heat losses that must be dissipated into the ambient air immediately surrounding the soft starter. To help prevent a thermal fault, provide sufficient enclosure cooling and/or ventilation to limit the ambient temperature around 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 adversely affect the ambient temperature around the top soft starter.

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

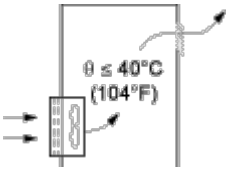
### Introduction

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

### Ventilation Grilles



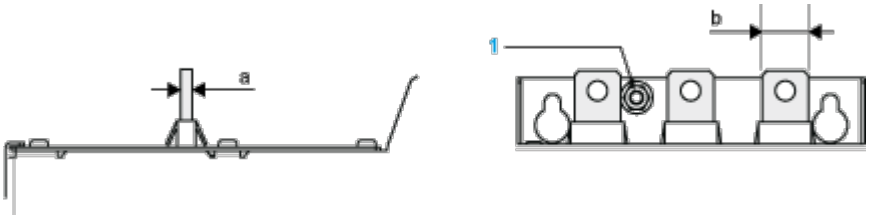

### Forced Ventilation Unit



## Connections and Schema

### Power Terminal

#### Bar Style

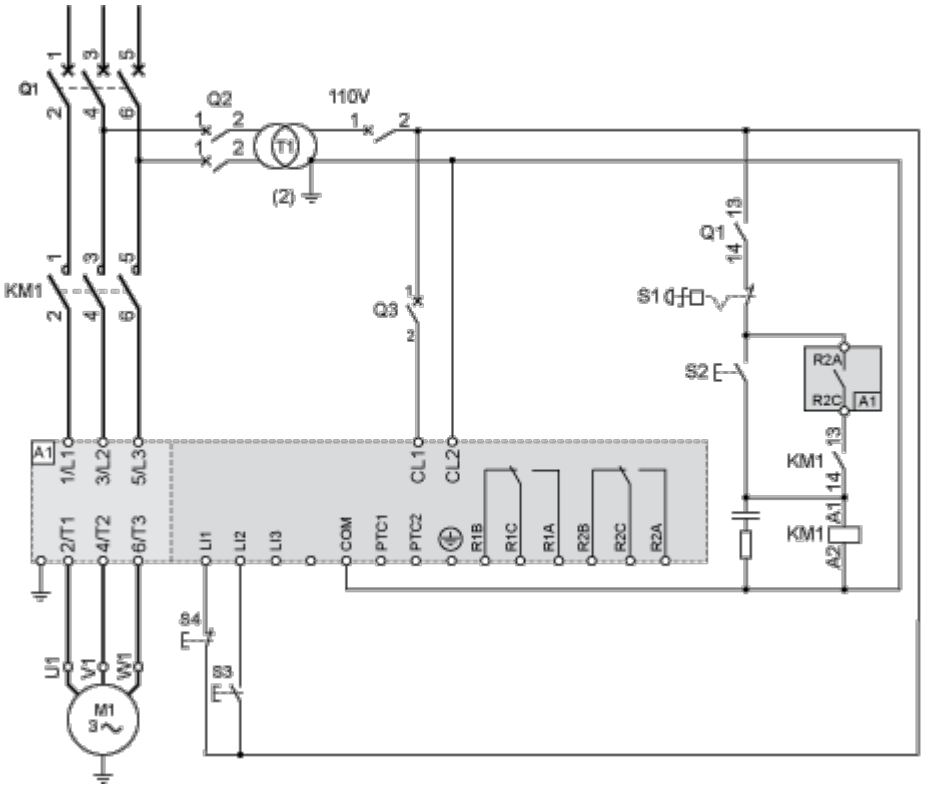



| | | | |
|---|---|---|---|
| Power supply and output to motor | Bar | b | 30 mm (1.18 in) |
| | | a | 5 mm (0.2 in) |
| | | Bolt | M12 (0.47 in) |
| | Cable and protective cover | Size | 2 X 150 mm² |
| | | Gauge | 2 X 250 MCM |
| | | Protective cover | LA9F703 |
| | | Tightening torque | 57 N.m |
| | | | 498.75 lb.in |

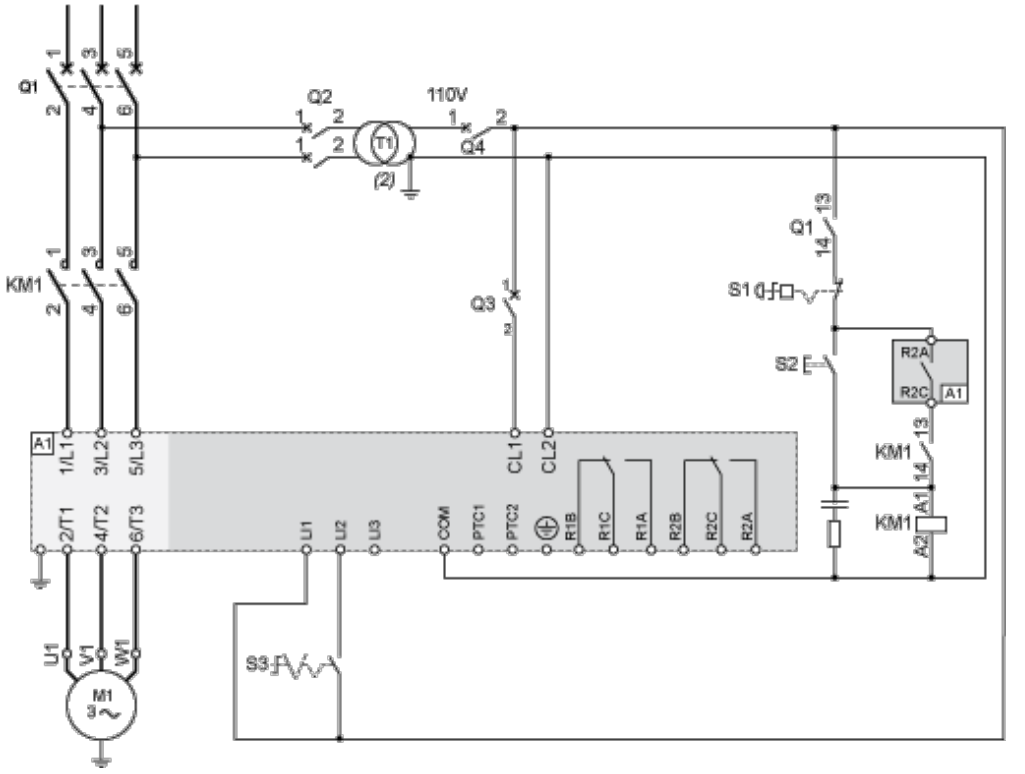
#### Power connections, minimum required wiring section

| IEC cable<br>mm² (Cu 70°C/158°F) (1) | UL cable<br>AWG (Cu 75°C/167°F) (1) |
|---|---|
| 95 | 300 MCM |

## 110 Vac control, Logic Inputs (LI) 110 Vac, 3-wire control



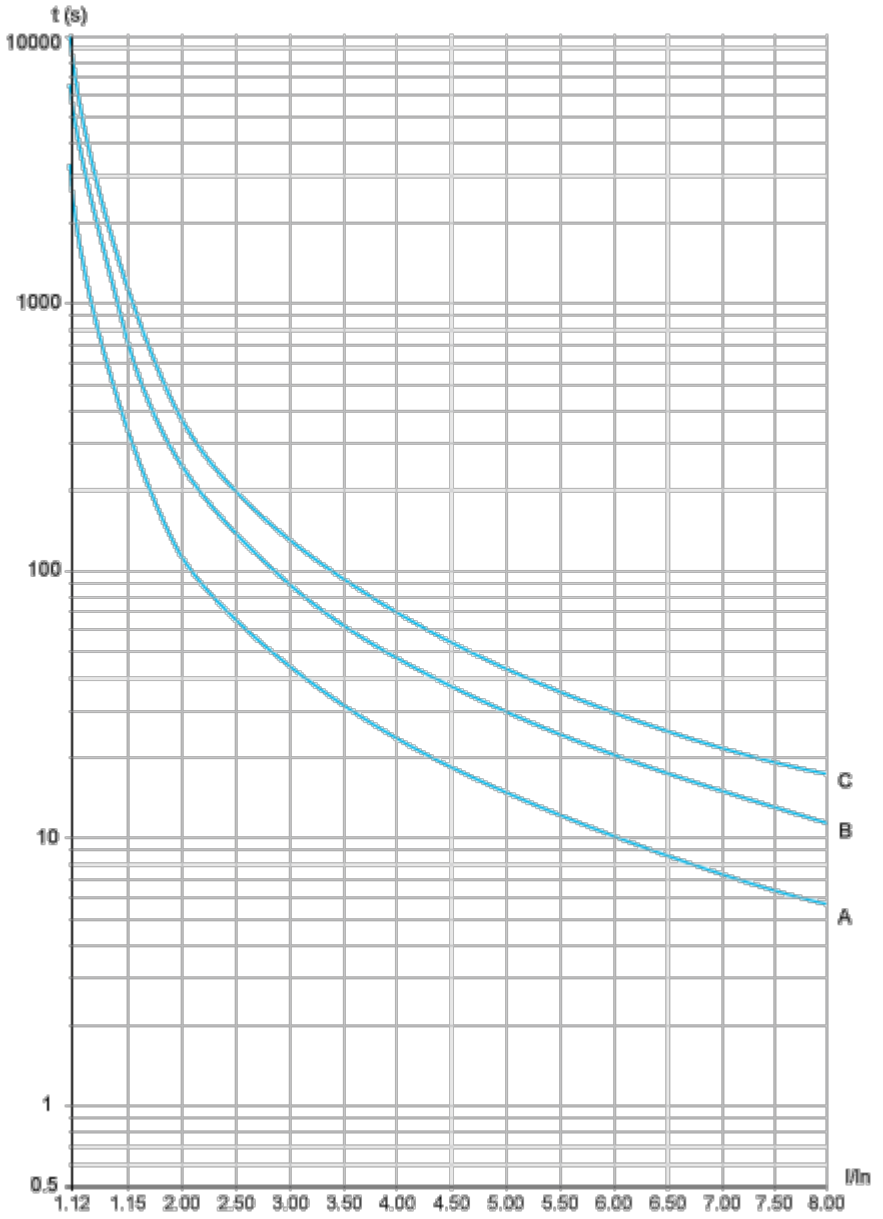
## 110 Vac control, Logic Inputs (LI) 110 Vac, 2-wire control, freewheelstop



Performance Curves

## 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 In |
| 32 s |

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

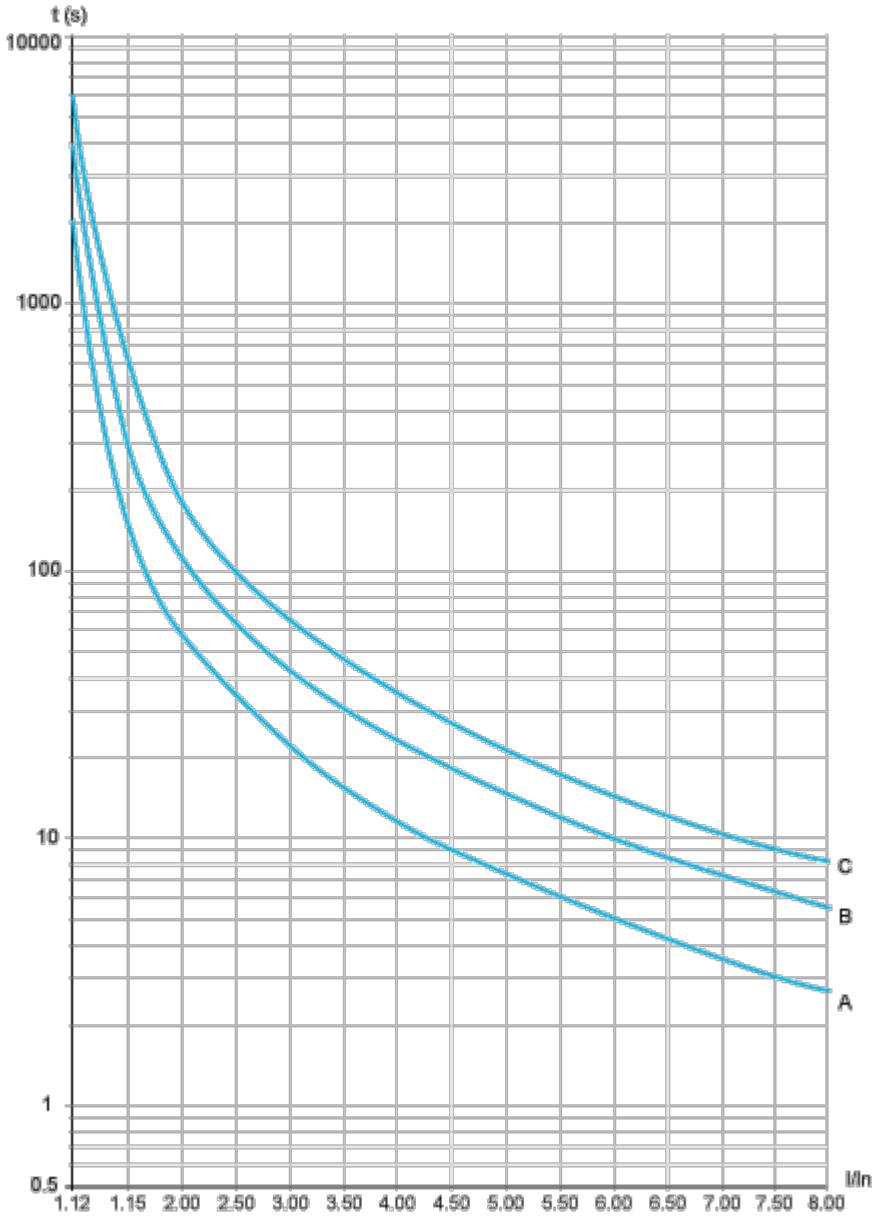
| |
|---|
| 3.5 In |
| 63 s |

**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 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 |

Image of product / Alternate images

**Alternative**



