

Cutler-Hammer Intelligent Technology (IT) S801N and S801R Soft Starter Models Quick Setup Guide

Introduction

The Intelligent Technology (IT) Soft Starter is an electronic, self-contained, panel or enclosure mounted motor soft-starting device. It is intended to provide 3-phase induction motors with a smooth start, both mechanically and electrically. The IT line of soft starters utilizes six thyristors connected in a full wave power bridge. The voltage and current applied to the motor is controlled by varying the thyristor conduction period. This, in turn, controls the torque supplied by the motor. After the motor reaches speed, single phase bypass contactors are energized to bypass the thyristors.

The Intelligent Technology (IT) Soft Starter is designed to fulfill the industrial service requirements for applications such as chiller starters, pump panels, and machine tools.

The Intelligent Technology (IT) Soft Starter meets all relevant specifications set forth by ICS-1, ICS-2, ICS-5, UL508, IEC 60947-4-2, CE, and CSA.

This leaflet is intended to cover basic installation and setup for Models S801N and S801R Soft Starters. For a copy of the S801 Soft Start User Manual (publication 49003), contact Cutler-Hammer.

No publication can take into account every possible situation. If you require further assistance with any aspect of this product or a particular application, feel free to contact us. You will find our address, phone number, and other contact information on the back cover of this instruction leaflet.

Inspection

General

Upon receipt of the unit, verify that the catalog number and unit options stated on the shipping container match those stated on the order/purchase form.

Inspect the equipment upon delivery. Report any carton damage to the carrier prior to accepting the delivery. Have this information noted on the freight bill. Cutler-Hammer is not responsible for damage incurred in shipping.

Unpacking

Remove all packing material from the unit. Be sure to remove all packing material from lug locations. Also, make sure no packing material blocks the air flow near the fans.

Check the unit for any signs of shipping damage. If further damage to the product is found after unpacking, report it to the freight company. Retain the packing materials for carrier to review.

Verify that the unit's catalog number and options match those stated on the order/purchase form.

Storage

It is recommended that the unit be stored in its original shipping box/crate until it is to be installed.

The unit should be stored in a location where:

- The ambient temperature is between -50°C and 70°C (-58°F and 158°F).
- The relative humidity is between 0% and 95%, non-condensing
- The environment is dry, clean, and non-corrosive
- The unit will not be subjected to high shock or vibration conditions

Mounting Dimensions

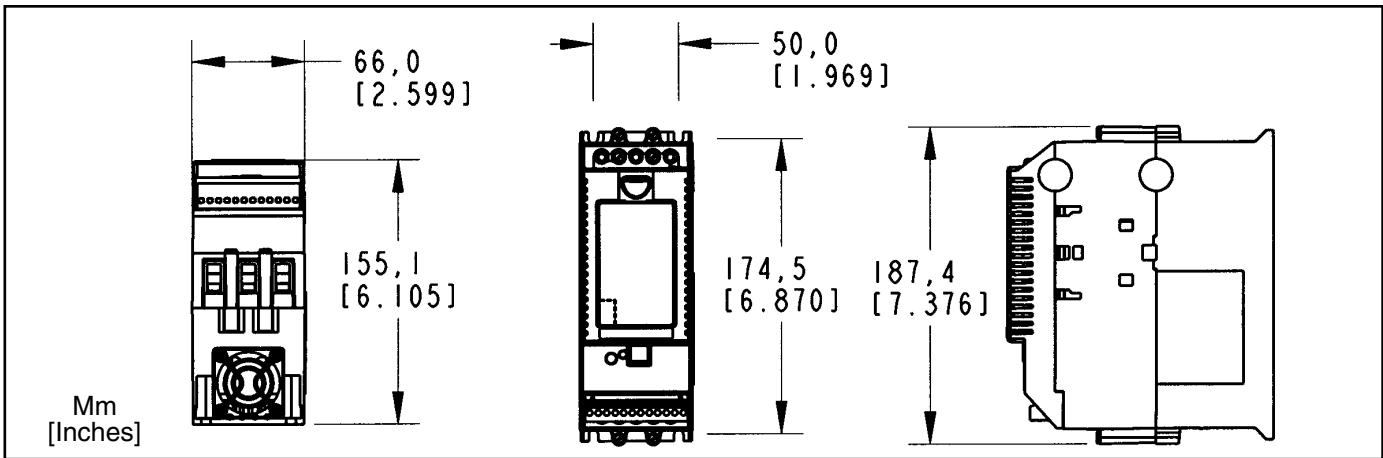


Fig. 1 Model S801N (65mm)

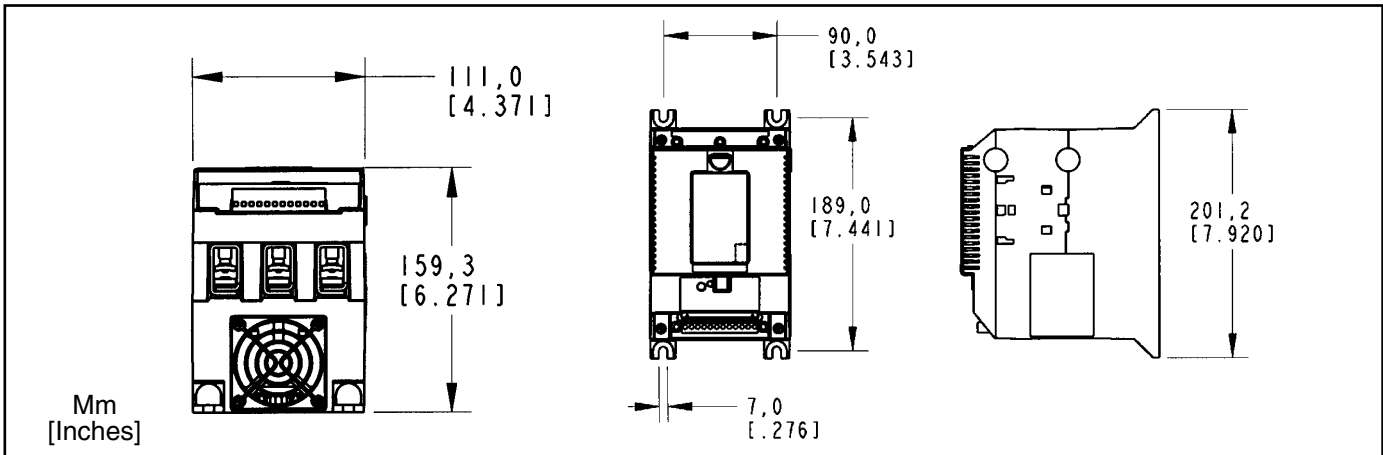


Fig. 2 Model S801R (110mm)

Table 1

Required Mounting Hardware				
Frame Size	Screw Size	Washer Size	Quantity Required	Torque Required
S801N 65mm (2.55 in)	#10 - 32 x 0.5	Standard #10 Lockwasher and Flat Washer	4	1.7 N-m (15 in-lb)
S801R 110mm (4.33 in)	1/4 - 20 x 0.625	Standard 1/4 Lockwasher and Flatwasher	4	2.8 N-m (25 in-lb)

Table 2

Weight Support Requirements	
Frame Size	Weight of Unit
65mm	2.6 Kg (5.8 pounds)
110mm	4.8 Kg (10.5 pounds)