The SmartStart™ is a unique device that smooths out startup power demand of the boat air conditioner's compressor instead of spiking it, reducing amp requirements by up to 65%. The technology uses dynamic feedback control to reduce the inrush of current by starting the compressor motor slowly. No other soft starter in the industry provides better performance.

Once running, an air conditioning compressor has a much lower, steady amp draw, but the initial locked-rotor amps needed to start the system can create high current surges that could adversely affect the operation of an overstrained power source.

In some situations, this gentler method of handling the power surge can mean the difference between keeping the generator you have or investing thousands of dollars in a larger generator.

For boats without a generator, the SmartStart™ may allow the option of powering an air conditioning system from an inverter.

When running on dock power, a SmartStart™ may resolve issues where the power source or connection may be weak.

Not only does the SmartStart™ ease strain on the power source, it’s also less stressful for the compressor itself since it starts more gently. Additionally, it provides valuable protection by shutting down the compressor if the power source or the connection to the compressor is briefly interrupted, then it reattempts a soft start after a three-minute delay.

All this power comes in a surprisingly small package. At only 5 x 3 x 2 in. (127 x 76 x 51 mm), the SmartStart™ takes up little space and weighs only 15 oz. (0.43 kg.). The SmartStart™ is wired directly into the air-conditioning system’s electrical box.

**SmartStart reduces compressor startup power demand by up to 65%.**

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**Key Benefits**

- Reduces strain on the power source.
- Reduces brown-out effects at compressor start-up.
- May enable an inverter to power the air conditioner.
- May eliminate the need to upgrade the generator.
- Inexpensive, small, and lightweight.

**Product Testimonial**

"The generator’s control circuit would trip and stop the generator due to the inrush of the Emiko’s heat pump. The SmartStart reduced that inrush of current so the generator would continue to run.

We started with an inrush of 77 amps and finished with an inrush of only 20 amps. [The SmartStart] is a great solution to our problem."

— Mr. John Poole, Poole Refrigeration Service, Alameda, CA, M/V Emiko (37 ft. Nordic Tug)
Specifications for SmartStart™ Soft Starter

<table>
<thead>
<tr>
<th>Model</th>
<th>4220040</th>
<th>4220041</th>
<th>4220044</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min./Max./Volts/Hz</td>
<td>115V/50/60Hz</td>
<td>208V/240V/50/60Hz</td>
<td>208V/240V/50/60Hz</td>
</tr>
<tr>
<td>Supported Comp. Capacity (BTU/h/kcal/h)</td>
<td>5000/1259.1 - 18000/4535.1</td>
<td>12000/3023.1 - 30000/7559.9</td>
<td>36000/9071.9 - 60000/15119.8</td>
</tr>
</tbody>
</table>

1. Typical start surge reduction as compared to compressor locked rotor amperage (LRA) is 65%.

Dimensions

```
5.52 in./139.7 mm
2.94 in./75 mm
```

Wiring Diagram

1. AC Input Power: 115-240V/50-60Hz
2. Contactor, relay or triac
3. Run capacitor
4. Make run winding connection inside electric box with butt splice provided.

Optional SmartStart Mounting Tray

Model #4220045 (pictured below)

Specifications and availability subject to change without notice.