

Installation, Operation & Application Guide

For further information visit us at www.active-controlsllc.com.

Features

- ✓ Starting current reduction (80%)
- ✓ Built in start capacitor.
- ✓ Over/Under voltage monitoring.
- ✓ Over-current protection.
- ✓ Diagnostic in ActiveStart mobile app (Bluetooth enabled).

Important Safety Information



- Correctly connect all wires.
- Keep away from children and pets.
- Do not repair or modify.
- For use on approved equipment

Application

The ACS4W16 and ACS4W40 are intended for residential home systems, marine air conditioners or commercial units drawing less than 40 amps. These devices will monitor system health including current, voltage, frequency and internal temperature.

Upon a fault the system will turn off its output and start the delay timer and restart after a 3 minute delay. This feature is also referred as short cycle protection.

Specifications

- **Inputs:** L1 & L2.
- **Operational Voltage:** 103-240 VAC, 50-60 Hz
- **Over Voltage Limits:**
 - 120 VAC nominal=132 VAC
 - 230 VAC nominal=250 VAC
- **Under Voltage Limits:**
 - 120 VAC nominal=100 VAC
 - 230 VAC nominal=195 VAC
- **Over Current Limits:**
 - ACS4W16= 18A
 - ACS4W40= 44A
- **Operating Temperature:** -4°F to 176°F (-20°C to 80°C)
- **Storage Temperature:** -40°F to 149°F (-20°C to 65°C)
- **Humidity:** 5-95% Non-condensing
- **Weight:** 2.1 Lbs. (0.95kg).
- **Warranty:** One year limited warranty (standard)

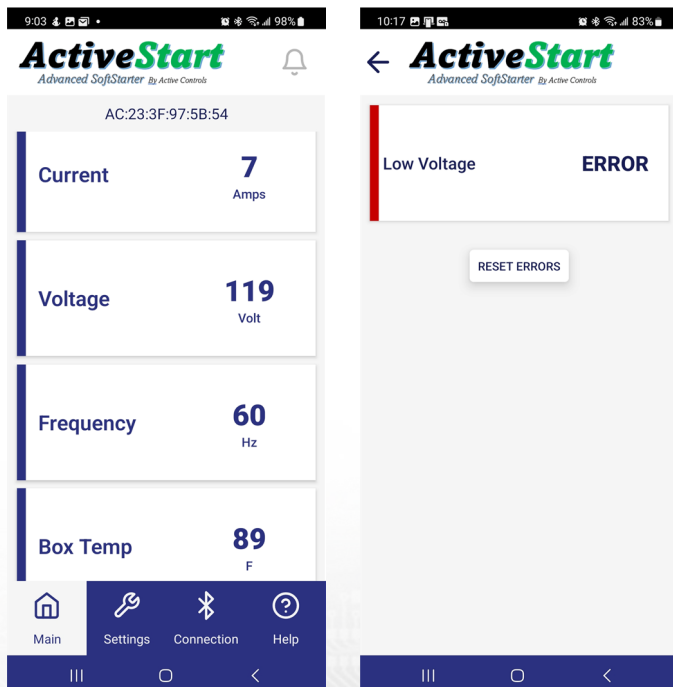
Performance

The ActiveStart is a unique device that is installed on the unit directly to the load. This product achieves a consistent 80% reduction to the surge in current seen by the electrical power source whether it is a utility connection, generator or inverter application. We are able to reduce the spike in current so that your air conditioner will startup smoothly and quietly.

This product also reduces the thump you hear when a compressor starts thus reducing the wear and tear on the mechanical aspect due to the strong vibration caused by the compressor start. Quiet startup and smooth operation when the compressor starts along with the added protection could increase the life expectancy of your equipment.

The ActiveStart doesn't learn with every start but instead has a very precise measurement algorithm that reduces the inrush up to 80% or more in some applications on every start including the first.

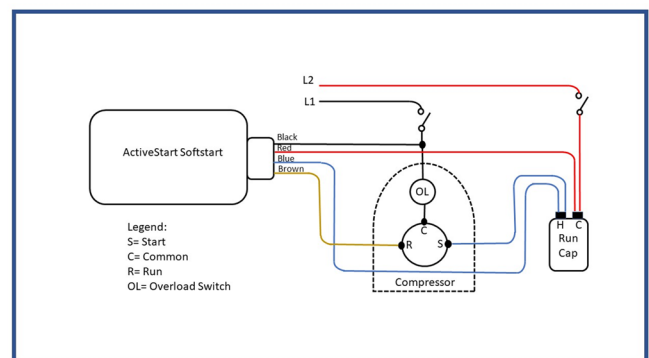
The app gives a complete picture of how the unit is functioning by displaying the operational values and displays clear messages if the unit has faulted.



Installation

1. Disconnect factory installed compressor run wire from the run capacitor or the contactor (N/L2) terminal.
2. Connect the Red wire to the capacitor or contactor where the run wire was removed (N/L2).
3. Connect the ACS4Wxx Brown wire > to the factory installed compressor run wire previously disconnected in step number 1 using butt connector supplied. **If there is a Start Capacitor and or PTCR already in place, additional steps will be required to disconnect them.**
4. Connect the ACS4Wxx blue wire > to the run capacitor (herm/start) terminal.
5. Splice the ACS4Wxx black wire > with the factory install compressor overload switch wire (ol/l1) or connect to the contactor where L1 is connected.

Wiring Diagram



Contact factory if additional support is needed for wiring unit to your system or RV AC Unit.