

PWRcell[®] ATS Controller Installation Manual

This kit is compatible with all single-phase RXS and CXS series Generac automatic transfer switches between 100 A – 200 A, both service rated and non-service rated as well as model RXGW20SHA3.

PWRcell[®] ATS Controller Installation



Electrocution. Never touch terminals when inverter and PWRcell DC disconnects are ON. Doing so will result in death or serious injury.

(000686a)



Electrocution. Do not wear jewelry while working on this equipment. Doing so will result in death or serious injury.

(000188)

Automatic start-up. Disconnect utility power and render unit inoperable before working on unit. Failure to do so will result in death or serious injury.

(000191)



Electrocution. Potentially lethal voltages are generated by this equipment. Render the equipment safe before attempting repairs or maintenance. Failure to do so could result in death or serious injury.

(000187)

Instructions

NOTE: competent, qualified personnel should install, operate, and service this equipment. Strictly comply to local, state, and national electrical and building codes. When using this equipment, comply with regulations established by the National Electrical Code (NEC), CSA Standard; the Occupational Safety and Health Administration (OSHA), or the local agency for workplace health and safety.

NOTE: This kit includes a modified version of the PWRcell ATS controller (Part #: A0002532225). This modified controller must be installed in the Inverter ATS for dual ATS Whole Home Backup Generator Integration with a PWRcell ESS, but it may also be used for all other install configurations that require a PWRcell ATS.

Replace Fuses in PWRcell Inverter for Generator Integration

See *Figure 1*. When integrating a Generac Home Standby Generator with a PWRcell system, it is required to replace the 1 A fuses in the PWRcell Inverter with the 3.15 A fuses attached to the ATS Controller.

- Initiate an inverter shutdown. See 'Shutdown Mode' in the *PWRcell Inverter Installation and Owner's Manual* for more information.
- 2. Disconnect power from transfer switch.
- Open all PWRcell DC Disconnects. Verify DC voltage reported on LCD screen has dropped to below 10 VDC.
- 4. Disconnect all sources of AC and DC power.
- **5.** Locate and remove the two 3.15 A fuses attached to the front of the PWRcell ATS Controller.
- 6. Remove both 1 A fuses from the PWRcell Inverter.
- **7.** Install the two 3.15 A fuses into the PWRcell Inverter.
- **8.** Peel away Fuse Replacement Decal before installing the controller into the ATS.



Figure 1. Replace Fuses in PWRcell Inverter for Generator Integration

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Remove the existing Smart AC Management (SACM) from any 100 – 200 A, 1Ø Generac ATS

- 1. See *Figure* 2. Disconnect all wires from existing SACM board.
- **2.** Squeeze inward (toward the board) on the 7 snap fasteners (A) located on the perimeter of the board to release board from the ATS enclosure.



Figure 2. Remove SACM Board From Enclosure

Install the PWRcell ATS Controller

1. See *Figure* 3. Align the 5 snap fasteners on perimeter of the PWRcell ATS controller (B) with the snap inserts located in the ATS enclosure.



Figure 3. Installing the PWRcell ATS Controller

- **2.** Press controller into mounting position until snap fasteners have snapped into place.
- **3.** See *Figure 4* and *Figure 5*. Place zip tie mount (E) in the appropriate location depending on the ATS model.



Figure 4. Zip Tie Wiring 200 A ATS





See Figure 6. Replace the ATS Decals. Locate decal (A) inside ATS above N1 and N2 connections. Locate decal (B) inside ATS below E and T connections. Locate decal (C) on the interior component cover of the transfer switch. Locate decal (D) on the cover of the ATS.



Figure 6. Replace ATS Decals

 See Figure 7. Place provided "IMPORTANT NOTE" decal just below Operating decal labeled "AUTOMATIC TRANSFER SWITCH FOR USE ON STANDBY SYSTEM."



Figure 7. Important Note Decal

Wiring the PWRcell ATS Controller

 If not pre-wired, run the appropriate wire from the Auxiliary Contact terminal in PWRcell ATS controller (labeled (C) in *Figure 3*) to Auxiliary Contact (labeled (D) in *Figure 4* for the 200 A ATS and *Figure 5* for the 100 A ATS).

NOTE: The sequence in which the contact connections are made is unimportant.

- 1.1. Use zip-tie to fasten wire to the zip tie mount (labeled (E) in *Figure 4* for the 200 A ATS and *Figure 5* for the 100 A ATS).
- 1.2. Snip excess length from zip-tie after fastening.
- 1.3. In 200 A switches, the wire will need to be run beneath the ATS contact mechanisms (as shown in *Figure 4*).
- 2. Complete all other wiring requirements using the most current *PWRcell Automatic Transfer Switch Installation and Owner's Manual*.



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