# Generac ATS Control Adapter Installation Guide

#### 

Personal Injury. This product interfaces between the PWRcell Inverter and Generac transfer switch. Read and understand all instructions and precautions for those products prior to installing this adapter. Failure to do so could result in death, serious injury, and equipment or property damage. (000693)

### 

Personal Injury. Never connect the protected loads directly to the main service panel without use of an external transfer switch. Failure to do so could result in death, serious injury, and equipment or property damage.

(000694)

## 

Personal Injury. Never connect the protected loads terminals directly to the grid. Doing so could result in death, serious injury, and equipment or propety damage.

(000695)

#### **Product Overview**

The Generac ATS Control Adapter is used to control an approved automatic transfer switch (ATS) when paired with a Generac PWRcell<sup>™</sup> system to provide backup power to a protected loads panel and provide solutions for the following applications:

- Maximize solar production credits for metered incentive programs (ex. SREC). Refer to single-line diagram (SLD) ref code: SD-2318<sup>\*</sup> for CT placement and system design guidance.
- Simplify installation for homes with less than 8 kW of continuous and less than 10 kW of peak electrical load demand.<sup>\*\*</sup> Refer to SLD ref code: SD-2415<sup>\*</sup> for CT placement and system design guidance.

**NOTE:** Generac Smart Management Modules (SMM) and RXS series ATS Smart A/C Relays are not compatible for use with Generac PWRcell systems.

## Approved Automatic Transfer Switches (ATS)

The ATS Control Adapter simplifies installation by consolidating all the Inverter control signals to one CAT5 cable to run to the Generac PWRcell inverter (CAT5 cable not included). The ATS Control Adapter cannot support the use of any non-approved ATS.

#### **Approved Automatic Transfer Switches**

Generac RXS Series ATS 1ø, 120/240V

#### Generac ATS Control Adapter Installation

- 1. Verify the ATS to be controlled is de-energized.
- 2. Mount the ATS Control Adapter. There are two possible mounting methods, each with their own location.
  - Using the magnetic feet on the control adapter, mount to the ferrous backing plate inside of the ATS enclosure.
  - Using the optional adhesive locking mount (included in kit), mount the control adapter to a non-ferrous surface within the ATS enclosure, such as the enclosure side walls.
- **3.** Run and connect wires for L1, L2, 12V, and TRS terminals on the control adapter to the corresponding terminals on the ATS Smart A/C Module (SACM). Refer to the wiring diagram in Figure 1 for additional guidance.
- **4.** Run and connect a wire for N (Neutral) terminal on the control adapter to the ATS Neutral terminal. Refer to Figure 1 for additional guidance.
- **5.** Verify proper installation, location, and calibration of current transformers (CTs), provided with the inverter.

**NOTE:** For CT placement guidance, refer to the line diagram<sup>\*</sup> from (*Product Overview* section above) most closely matching the site configuration.

**NOTE:** For CT installation instructions, refer to the Generac PWRcell Inverter installation manual<sup>\*</sup>.

- **6.** Verify connection of CAT5 cable from CT adapter to CT RJ-45 port on the Inverter Accessory Board. Refer to Figure 1 for additional guidance.
- Connect CAT5 cable from ATS RJ-45 port on ATS Control Adapter to the TRANS RJ-45 port on the Inverter Accessory Board. Refer to Figure 1 for additional guidance.
- 8. Modify inverter setpoint EnaExtTransfer to "on". Inverter setpoints are accessible via the Inverter control panel. Go to the Inverter Device page and select Mod. Settings. Refer to the Generac PWRcell Inverter installation manual<sup>\*</sup> for additional information on control panel navigation.

\*For SLDs, go to www.generac.com/service-support/product-support-lookup and enter the part number APKE00001 For product manuals enter the model number.

\*\*Electrical system design must comply with NEC 702.4(B) in accordance with Part III of Sect. 220.



Figure 2-1. Wiring Diagram for Generac ATS Control Adapter

## **ATS Behavior and Inverter Setpoints**

In the event of a grid outage, the inverter will immediately toggle the transfer switch to provide power to the loads panel from the Protected Loads output. The switchover time is typically less than one second.

**NOTE:** The Protected Loads breaker must be ON for the switch to toggle. If the Protected Loads breaker is OFF, then the switch will not change positions.

Setpoint	Description	Default Value	Units
EnaExtTransfer	Enable use of external ATS. Set "on" to enable ATS control	off	
GridGoodTime	Minimum length of time that the grid must be stable before the inverter will toggle the ATS back to grid mode after an outage.	15	S
ExtTransVolt	Minimum single-line (phase) grid voltage below which the inverter will toggle the ATS. If either line of the grid drops below this setpoint value and there is a grid fault, as defined by UL1741SA trip settings, then the inverter will toggle the ATS to backup mode.	95.0	V

## **Questions & Support**

For help installing the Generac ATS Control Adapter, contact support at 1-888-GENERAC.