

Let Northwest Rail Electric help you with all your passenger railcar systems needs. Starting with power generating, hotel services, power distributing and power management, our extensive experience in passenger car systems can solve the most difficult problems. Allow us to show you how you can accomplish more with less generating and distribution capacity, saving fuel and capital.

We also excel at heating, ventilation and air conditioning systems: HVAC control systems to keep your passengers comfortable from Alaska and Canada in the winter to Arizona and Florida in the summer. In addition to temperature comfort our systems can also maintain humidity to keep your dome windows clear and provide further comfort for your passengers.

Pictured at left is a custom version of a NW-25100 in a vertical form. For space reasons the 480 volt breakers have been moved to a different location. The top of the panel includes (from the top) various DC control circuits and battery voltage indication, including marker lights, generator starting battery, and emergency lighting. Below that is a generator control system, and below that is the HVAC control. This particular version of the HVAC control system is more compact than the control system shown on the front of this brochure, but also lacks a few of the features.

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NW25-100

Passenger Car Electrical Locker Package

HVAC Control and Circuit Breaker Panels in One Package



from **NW** Northwest
Rail
Electric Inc.

NW25-100 with Standard Features:

Package Size: Vertical Format (back photo): 18" x 74" for most versions. Addition of options require additional space. Horizontal Format with breaker panels beside HVAC control (cover photo): 36" x 48", Depth (panel closed): 5", backpan to face, knobs extend to 6 1/4" in places. Minimum width of locker door opening for vertical format is 15 1/2".

HVAC Control:

Blower Control - 2 Speed or 3 Speed, depending on requirements and space. High Speed is turned on at maximum AC capacity demand, but lower speed increase comfort when heating.
AC Control with Compressor Pump Down
2 Stage overhead heat control, plus option for baseboard heat control for either baseboard elements or electric boiler.
Digital temperature display
Programmable offsets and differentials - pre-set to standard settings.
Remote temperature sensor
Control Switches allow for manual operation if desired.

Power Distribution Control

480 volt circuit breaker panel with:

- Car Main Breaker
- Lighting Transformer Breaker
- Overhead Heat Breaker
- Condensing Unit Breaker
- Space for Two Additional 3 pole breakers

208/120 volt lighting breaker panel with:

- HVAC Control and Battery Charger Breaker
- 30A, 3 pole Baseboard Heat Left and Right Breakers (may be left off as an option)
- 6 single pole lighting breakers

Emergency Lighting Control

Single zone at 20 amp 12 volt or 13 amp 28 volt

Optional Additions:

(Require additional space. May be mounted on common backpan.)

Power Management:

Additional Features:

Control System for Multiple Power

Sources:

HEP allows the HEP trainline to supply the car;

Generator allows the car generator to supply the car.

Power supplies include power available indicators.

Power rated at 80 ampere at 480 volts AC

HEP Feed (addition to above, requires no additional space):

HEP Feed, allows on-car generator to supply the car and feed trainline; Loop Control for plug protection; Dead buss protection; Power Rated at 80 Ampere at 480 volts AC.

Yard Power (addition to above, some additional space):

Yard Power allows car to be powered from yard power side connection;
Power rated at 80 ampere at 480 volts AC

Optional NW-GC500:

Complete generator control system with the above power selection and HEP feed ability built in, for cars with an under-car generator. Allows automatic start of generator when HEP or Yard fail. Engine monitoring and status displays, indicator lights, and power indication (voltage, amperate, and frequency) on some models.

Optional DC Controls:

Battery voltage indicator, multiple circuit breakers, battery charging systems (single or multiple battery systems).

