



PowerLINE® Tier 4i RG15/UG15



FuelWise

An alternative where EPA Tier 4i emissions levels meet or exceed local country standards.



PowerLINE® Tier 4i generator sets. Rugged and reliable.

The Carrier Transcold PowerLINE® generator set models introduced in 2008 for compliance with the U.S. Environmental Protection Agency's Tier 4 interim standard have been industry workhorses from the start. While 2013 EPA standards have resulted in a new generation of PowerLINE units for the North American market,* the PowerLINE Tier 4i models continue to meet or exceed the diesel emission standards of many countries, making them an excellent choice to power container refrigeration units transported over land in virtually all parts of the world outside of North America.

The power to conserve.

PowerLINE Tier 4i models are available with the FuelWise™ option, which offers two modes: economy and power. In economy mode, the generator set starts in high speed and then automatically switches over to a fuel-conserving low speed for the duration of the trip. The two speeds correspond to 60Hz and 50Hz operations, compliant with the ISO 1496-2 specifications for container refrigeration units. While fuel consumption and commensurate greenhouse gas reductions will depend on actual conditions, such as cargo, setpoint, ambient temperature and the refrigeration unit model, the option can deliver fuel savings of up to 26% to 28%. For applications such as hot loads through tropical environments where pulldown times are critical, using power mode allows the unit to run in continuous high-

speed operation until the desired setpoint is reached, to help ensure fastest pulldown time.

Power you'll get attached to.

PowerLINE RG15 clip and UG15 undermount generator sets from Carrier Transcold are designed and built for one purpose: continuous, unattended operation for all refrigerated containers transported by road or rail. PowerLINE generator sets offer the ideal combination of horsepower, torque, and motor-starting capability.

Power to start any reefer, anywhere.

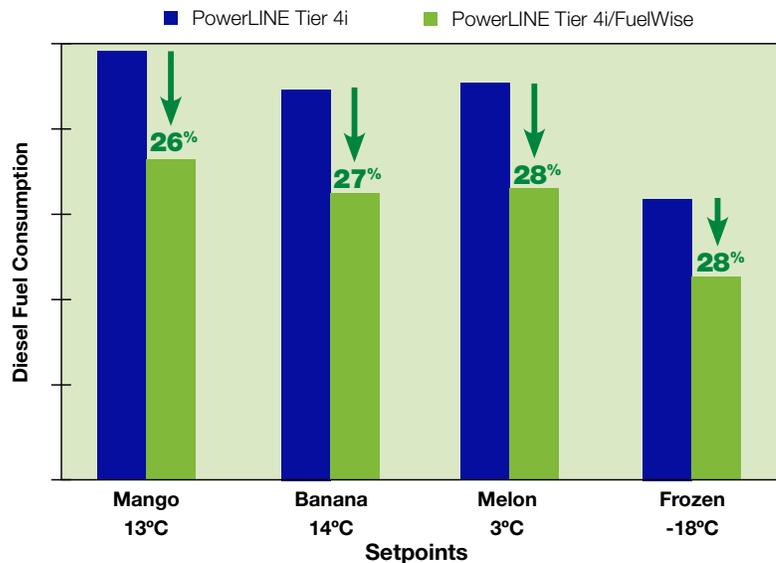
The V2203-DI direct-injection engine is built specially to handle rugged generator set applications and drives particulate emissions down to 0.214 g/kWh, which

meets or exceeds the diesel emission requirements of many regions and countries for its engine class. Rated at 23.9kW (32 hp), the V2203-DI includes an electronic governor system that provides near-constant engine speed, resulting in more stable voltage output. The need for field speed adjustment is eliminated, and startup capability is improved in high ambient conditions.



V2203-DI delivers dependable power.

Savings with FuelWise



All test conditions at 38°C (100°F) ambient using ThinLINE container refrigeration unit.

Source: Carrier Corporation

*For North American applications, customers should consider the PowerLINE Tier 4 RG15/UG15 units, which meet the U.S. EPA Tier 4 Final requirement for engines rated less than 25 horsepower. See Form 62-11875 for details.

SAFE AND SECURE MOUNTING: CLIP



Clamp-style



Header pin

UNDERMOUNT



Standard clamp



QuickMount™ bracket

One powerful generator.

Carrier's powerful, reliable, low-maintenance PowerLINE generator produces 460 volts of continuous power for uninterrupted protection. Designed for high inductive loads



Brushless, self-regulated design produces 460 volts, 18kVA, 15kW @ 0.8 pf.

and superior motor-starting capability, Carrier's direct-drive brushless generator features an internally excited, self-regulated design. All electrical components are enclosed within the generator package. Wet-wound, thermo-setting epoxy is applied to each copper winding turn, significantly reducing air gaps. Polystator coating offers superior resistance to moisture and salt.

Reliable, global support.

Experienced people and dependable worldwide support have made Carrier generator power the first choice of more shipping lines and major generator set equipment users supplying the world market.



Large service opening improves access, reduces service time while on chassis.

CE option.

CE marking is increasingly required by many regions and areas. The PowerLINE Tier 4i CE option includes features for conformity to Machinery Directive: 2006/42/EC, EMC directive 2004/108/EC, and Low Voltage Directive 2006/95/EC. Customers should specify CE option if CE marking is required in the region where the PowerLINE Tier 4i generator sets will be operated.

So easy to start.

Fast, sure starting puts your operator in complete control. The PowerLINE Start/Stop switch is mounted low in front, within easy reach. Analog instrumentation is easy to read to confirm output. The in-air intake manifold heater allows for fast starting and trouble-free operation even at low ambient temperatures.



Safe, easy power cord connection.

So easy to operate.

Outstanding convenience and safety make PowerLINE number one for operating control. Upfront analog instrumentation is easy to read and gives you immediate access to key operating parameters. The control system is uncomplicated, and easy to access and troubleshoot. And the

electrical receptacle is located within easy reach on the front panel (25-amp main safety switch cuts power when connecting or disconnecting the power cord).



Control box with easy-to-read gauges.

So easy to attach.

Whether you choose clip or undermount, PowerLINE gives you more mounting flexibility. Attaching and disconnecting the generator set takes just minutes.

- For clip mounting, our pin-mounting bracket design saves time.
- For clamp mounting, our self-aligning ratcheted clamp locks allow safe, secure attachment to corner castings.
- For undermount, you can choose standard four-point mounting or our exclusive QuickMount™ design.

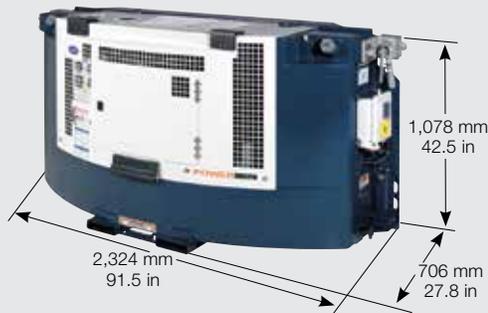


PERFORMANCE SPECIFICATIONS

PowerLINE Tier 4i

RG15 Clip

Specifications are subject to change without notice.



Standard Features:

V2203L-DI-E3B 4-cylinder, water-cooled, 2.2-liter direct-injection diesel engine
 Nominal 15 kW brushless, self-regulated generator, 460V output
 130-gallon (492-liter) fuel tank
 Pin-mount system
 High-efficiency air cleaner (standard dry element, optional oil bath)
 Full-flow spin-on oil filter with internal bypass
 Integral fuel filter with water separator
 Fuel Heater/Warmer
 Stainless steel hardware
 Low-mounted controls
 Large aluminum service access door with self-locking/quick-release latch
 Enclosed forklift pockets
 12V DC maintenance-free battery
 Safety stop controls for low oil pressure, high water temperature
 Frame and sheet metal components powder-coated for durability
 Patented E-coat tube and fin radiator
 Large oil pan capacity extends running hours between oil changes

Fuel gauge, color-coded for easy level identification from a distance
 Oil pressure and water temperature gauges
 DC ammeter
 Shipping bumpers
 Power output circuit breaker
 Preheat and Start/Run/Off switches
 Coolant overflow bottle
 Engine hourmeter
 Solid-state battery charger
 Operating instruction labels (English and Spanish)
 Maintenance and schematic labels
 460V receptacle with spring-loaded cap

Accessories and Options:

FuelWise
 Auto Restart
 Clamp-mount system or provision for clamp mount
 CE certification
 TIR seals for detecting unauthorized access

Approximate Weight:

830 kg (1,830 lb.), less fuel

UG15 Undermount

Specifications are subject to change without notice.



Fuel tank lengths:

50 gal (189 L) = 1,143 mm (45.0 in)
 68 gal (257.5 L) = 1,485 mm (58.5 in)
 80 gal (303 L) = 1,632 mm (64.3 in)

Standard Features:

V2203L-DI-E3B 4-cylinder, water-cooled, 2.2-liter direct-injection diesel engine
 Nominal 15 kW brushless, self-regulated generator, 460V output
 All-steel fabricated frame construction with four-point PlateMount system
 High-efficiency air cleaner (standard dry element, optional oil bath)
 Full-flow spin-on oil filter with internal bypass
 Integral fuel filter with water separator
 Fuel Heater/Warmer
 External in-line fuel strainer with clear bowl
 Stainless steel exhaust
 Stainless steel hinges and hardware
 Driver-side controls
 Large aluminum service access door with quick-release latch
 Battery access door
 Forklift pockets allow mounting from either side
 12V DC maintenance-free battery
 Safety stop controls for low oil pressure, high water temperature
 Frame and sheet metal components powder-coated for durability
 Patented E-coat tube and fin radiator
 Large oil pan capacity extends running hours between oil changes
 Fuel gauge, color-coded for easy level identification from a distance
 DC ammeter
 Power output circuit breaker

Preheat and Start/Run/Off switches
 Coolant overflow bottle
 Engine hourmeter
 68-gallon (257-liter) integral fuel tank
 Operating instruction labels (English and Spanish)
 Maintenance and schematic labels
 Oil pressure and water temperature gauges
 Solid-state battery charger

Accessories and Options:

FuelWise
 Auto Restart
 Four-point QuickMount™ installation system (with single captive bolts)
 Low coolant sensor
 50-gallon (189-liter) integral fuel tank, available in aluminum or steel
 80-gallon (303-liter) integral fuel tank
 CE certification
 TIR seals for detecting unauthorized access
 Outside mounted control box and additional unit service access door

Approximate Weights:

705 Kg (1,555 lb.) with 50-gallon integral steel tank, less fuel
 674 Kg (1,485 lb.) with 50-gallon integral aluminum tank, less fuel
 717 Kg (1,580 lb.) with 68-gallon integral steel tank, less fuel
 710 Kg (1,545 lb.) with 80-gallon aluminum tank, less fuel

Note: The PowerLINE Tier 4i generator sets discussed in this brochure are no longer offered for sale in the United States or countries, such as Canada, where emissions standards for this equipment are the same as the U.S. EPA Tier 4 Final standard, which became effective in 2013. These products are marked "for export only," and will be sold for use in countries where they remain compliant with local standards. In addition, these generator sets cannot be imported back into the U.S. for use.

RG and UG Warranty:

Within two years after the date of shipment from the manufacturer's plant or 27 months from the manufactured date, whichever comes first, Carrier Transicold Division, through designated Container Service Centers, will, at Carrier Transicold's option, repair or replace, with a new or remanufactured part, any parts or components of the products identified above which UNDER NORMAL USE AND SERVICE malfunction as a result of defects in material or workmanship. The warranty terms and limitations are listed in Form 62-10185. Consult your Carrier Transicold representative for complete warranty details.

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