

140kVA Diesel Engine Driven GPU Cummins QSB5.9 Diesel



Shown with optional TR-1528 Transformer-rectifier

HOBART: “A NAME YOU CAN TRUST”

Hobart offers the best combination of superior design, performance, proven reliability, and value to meet the critical needs of the airline industry with our series of modern ground power units. Integrating the *best in technology, customer influenced design* and Hobart’s years of *engineering expertise*, our Ground Power Units can be trusted to meet your aircraft’s needs for quality 400Hz power.

DESIGNED FOR DURABILITY:

Low profile, combined with standard 5th wheel (turntable) steering, provides superior visibility and maneuverability in congested ramp areas, while the durable bumper system protects the unit from damage caused by other GSE.

POWER FOR PEAK PERFORMANCE:

The Hobart Cummins diesel powered GPU’s feature the “QSB” series 5.9 liter, electronically controlled diesel engine, combined with a *Hobart designed and manufactured* generator, to maximize GPU performance while maintaining the traditional Hobart reputation for reliability.

CE and EMISSION CERTIFIED:

Hobart teamed with Cummins to specify the most technically advanced engine designed to meet both current and future Emission Standards. International labeling is an added feature of this GPU.

PERFORMANCE FEATURES

- Fully Emission Certified Engine
- Noise “Isonorized” design
- Large stainless steel fuel tank and low fuel warning are **standard**
- Delayed stop (for turbo protection) and emergency shutdown are **standard**
- Hobart-designed and manufactured generator offers long life and reliability
- Racor® fuel/water separator is **standard**
- Numbered, color-coded wiring remains traceable for the life of the unit
- 5th wheel (turntable) steering features maintenance-free nylon bushings
- Choice of drum type braking systems: tow bar activated or hand brake activated
- Superior regulation via electronic controlled engine
- Lift-off doors and pop-out panels provide easy access to engine, generator and control compartments

Hobart 140 kVA Cummins Engine Driven Ground Power Unit

Specifications

Engine

- Cummins QSB5.9 diesel operating at 2400 RPM (240 Horsepower)
- Electronically controlled, turbo charged 4-stroke, 6 cylinder, charge air cooled
- Full application approval by Cummins Engine Co., Inc.
- 12VDC battery system
- Low oil pressure shutdown
- Intake air restriction indication
- Cold weather grid heater

Environmental

- Operation temperature:
-25° F to +125° F
-31° C to +52° C
- Relative humidity 0-100% noncondensing
- No altitude derating required up to 10,000 feet, when running in normal operating range

Performance

- Rating: 140 kVA, 3 phase, 4 wire, 115/200 volt Wye, continuous
- Meets or exceeds MIL-STD-704E Electrical Power Quality Requirements

Overload

- 125% rated load for 5 minutes, 150% for 10 seconds
- Individual outputs: 324 amps, 5 minutes

Voltage

- Transient voltage recovery time: to within $\pm 1\%$ in 100 milliseconds (no load to rated load)
- Within $\pm 20\%$ deviation upon application/removal of 100% load rating
- Modulation: does not exceed 0.5% of steady state voltage
- Phase voltage displacement with balanced load: 120 ± 1.5
- Phase voltage balance (with unbalanced load) does not exceed 4% with 1/3 rated current on any single phase with other two phases disconnected

- Crest factor: 1.404 ± 0.07
- Individual Harmonic Distortion: $< 2\%$ of the fundamental (RMS) voltage
- Total Harmonic Distortion: $< 3\%$ of the fundamental (RMS) voltage

Frequency

- Regulation: $\pm 1\%$ steady state
- Transient recovery: to within $\pm 5\text{Hz}$ in < 2 seconds per ARP 5015A
- Modulation: $< 0.25\%$ (1Hz)

Regulation

- Voltage Regulation: $\pm 1\%$ no load to full load
- Voltage adjust: ± 15 volts
- IHD (individual harmonic content): $< 2\%$
- Three phase average sensing, built-in Automatic line drop compensation, up to 5%
- Line Drop compensation: Automatic up to 5%

Protection

- Meets MIL-STD-704E
- Overvoltage: instantaneous disconnect of load at 180 volts L-N, with inverse time delay down to 126 volts in 2 seconds
- Undervoltage: disconnects output below 100 volts L-N in 7 seconds
- Overfrequency: disconnects output above 420Hz in 5 seconds
- Underfrequency: disconnects output below 370Hz in 7 seconds

Finish

- Anti-corrosive Polyester powder provides excellent weather resistance, flexibility and adhesion, plus a strong resistance to chemical agents such as glycol and skydrol
- Standard colors are high gloss white over black frame and chassis
- Custom colors require a paint chip or swatch for accurate color match

Displays / Instrumentation

Engine Operation

- **Meters:** coolant temperature, ammeter, hour meter, oil pressure, fuel level
- **Indicator lights:** engine circuit on, air cleaner restriction, high coolant temperature, low oil pressure, engine stop delay action, low fuel
- **Switches:** Engine start, engine stop, panel lights
- Delayed shutdown for turbocharger protection

Generator Output

- **Meters:** frequency, ammeter, voltmeter
- **Indicator Lights:** contactors on, overfrequency, underfrequency, overload, overvoltage, undervoltage
- **Switches:** meter select, output contactors control, test/reset

Trailer

- Tire size: 20.5 x 8.00 - 10
- Ground clearance: 9" (.23m)
- Brakes: Tow bar activated, drum type

Available Options:

- Block heater kit (120V/60Hz or 240V/50Hz)
- ExternalTransformer-Rectifier pack for 28.5VDC
- Automatic towbar height stop
- Pintle or pin hitch
- Spot light
- Alternative mounting configuration: stationary/ fixed or truck mounted
- Special paint scheme
- Indicator beacons (low fuel, operating)
- Hand activated brakes
- Battery blanket (120V)
- Noise reduction kit

Specifications subject to change without notice.

	Length	Width	Height	Weight
140CU24P5	139.5"	77"	61"	6000 lbs
	354 cm	196 cm	155 cm	2722 kg