

Generator set options and accessories (continued)

Exhaust system

- Industrial grade silencer
- Residential grade silencer
- Critical grade silencer

Cooling system

- Enhanced high ambient temperature (50 °C)
- Low coolant level warning
- Coolant heater

Generator set

- Oil Sampling Valve
- 10A battery charger
- Set mounted circuit breakers up to 3200 Amps
- Circuit breaker Aux and Trip contacts
- Anti-vibration mounts
- Battery temperature sensor
- IBC Certification
- HCAI Certification

Miscellaneous

- Multilingual manuals
- 3-year extended warranty
- 5-year extended warranty
- 10-year extended warranty
- Witness testing
- Virtual witness test
- Tier 4 compliant aftertreatment kits shipped loose

Note: Some options may not be available on all models - consult factory for availability.

PowerCommand 3.3 – control system



An integrated microprocessor based generator set control system providing voltage regulation, engine protection, alternator protection, operator interface and isochronous governing. Refer to document S-1570 for more detailed information on the control.

AmpSentry – Includes integral AmpSentry protection, which provides a full range of alternator protection functions that are matched to the alternator provided.

Power management – Control function provides battery monitoring and testing features and smart starting control system.

Advanced control methodology – Three phase sensing, full wave rectified voltage regulation, with a PWM output for stable operation with all load types.

Communications interface – Control comes standard with PCCNet and Modbus interface.

Service - InPower™ PC-based service tool available for detailed diagnostics, setup, data logging and fault simulation.

Easily upgradeable – PowerCommand controls are designed with common control interfaces.

Reliable design – The control system is designed for reliable operation in harsh environment.

Multi-language support

Operator panel features

Operator/display functions

- Displays paralleling breaker status
- Provides direct control of the paralleling breaker
- 320 x 240 pixels graphic LED backlight LCD
- Auto, manual, start, stop, fault reset and lamp test/panel lamp switches
- Alpha-numeric display with pushbuttons
- LED lamps indicating genset running, remote start, not in auto, common shutdown, common warning, manual run mode, auto mode and stop

Paralleling control functions

• **First Start Sensor system** selects first genset to close to bus

• **Phase lock loop synchronizer** with voltage matching

• **Syncchec relay**

• **isochronous and load sharing**

• **load govern control** for utility paralleling

• **Extended paralleling (base load/pea shave) mode**

• **Digital power transfer control**, **fourse with a break repair** to provide open transition, closed transition, ramping closed transition, **pea ingnd base load functions.**

Alternator data

• **line-to-neutral and line-to-line AC volts**

• **3-phase AC current**

• **frequency**

• **Ar, powerfactor A (three phase and total)**

Engine data

• **DC voltage**

• **Enginespeed**

• **crankcase oil pressure and temperature**

• **Coolant temperature**

• **Comprehensive AED data (where applicable)**

Other data

• **Genset model data**

• **Start attempts, starts, running hours, hours**

• **load profile (operating hours at load in increments)**

• **fault history**

• **Data logging and fault simulation (requires nPower)**

Standard control functions

Digital governing

• **Integrated digital electronic isochronous governor**

• **Temperature dynamic governing**

Digital voltage regulation

• **Integrated digital electronic voltage regulator**

• **3-phase, 4-wire Line-to-Line sensing**

• **Configurable torque matching**

AmpSentry AC protection

• **AmpSentry protective relay**

• **Over current and short circuit shutdown**

• **Over current warning**

• **Single and three phase fault regulation**

• **Over and under voltage shutdown**

• **Over and under frequency shutdown**

• **Overload warning with alarm contact**

• **Reverse power and reverse Jar shutdown**

• **Field overload shutdown**

Standard control functions (continued)-

Engine protection

- Battery voltage monitoring, protection and testing
- Overspeed shutdown
- Low oil pressure warning and shutdown
- High coolant temperature warning and shutdown
- Low coolant level warning or shutdown
- Fail to start (overcrank) shutdown
- Fail to crank shutdown
- Cranking lockout
- Sensor failure indication
- Full authority electronic engine protection

Control functions

- Time delay start and cool down
- Real time clock for fault and event time stamping
- Exerciser clock and time of day start/stop
- Data logging
- Cycle cranking
- Load shed
- Configurable inputs and outputs (4)
- Remote emergency stop

Options

- Auxiliary output relays (2)

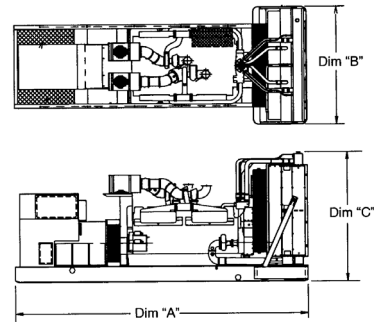
Ratings definitions

Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical loads for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, Data shown above represents gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550

Prime Power (PRP):

Applicable for supplying power to varying electrical loads for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, Data shown above represents gross engine performance and capabilities as per ISO 3046-1, obtained and corrected in accordance with ISO 15550



This outline drawing is for reference only. See respective model data sheet for specific model outline drawing number.





Do not use for installation design

Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Set weight* dry kg (lbs)	Set weight* wet kg (lbs)
C1250D6E	5085 (200)	2184(86)	2406(94.7)	9197 (20276)	9687 (21357)
C1500D6E	5085 (200)	2184(86)	2406(94.7)	9231 (20351)	9721 (21431)

*Note: Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and standards

Codes or standards compliance may not be available with all model configurations – consult factory for availability.

	This product was manufactured in a plant whose quality management system is registered as being in conformity with ISO 9001		UL Listing to UL 2200, "Stationary Engine Generator Assemblies" is available for this genset model
	The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.	U.S. EPA	Engine certified to Stationary Emergency U.S. EPA New Source Performance Standards, 40 CFR 60 subpart IIII Tier 2 exhaust emission levels. U.S. applications must be applied per this EPA regulation.
	All genset models are available as CSA certified to CSA C22.2 No. 100	International Building Code	The generator set package is available certified for seismic application in accordance with International Building Code

Warning: Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building's electrical system except through an approved device or after building main switch is open

For more information contact your local Cummins distributor or visit cummins.com

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