

Cummins QSK 60 G12	CGT Stamford PI 734	Generator Model:	BCC 1825P-50 L
		Generator Model:	BCC 2000S-50 L

50 Hz	3-Phase	Power Factor Cos Φ = 0.8	Emissions Certification TAL-2g
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RATINGS	PRIME POWER (PRP)		STANDBY POWER (LTP)		
	BCC 1825P-50 L		BCC 2000S-50 L		
	kVA	kWe	kVA	kWe	Amps
415/240	1825	1460	2000	1600	2782
400/230	1825	1460	2000	1600	2887
380/220	1825	1460	2000	1600	3039

Definition of Ratings & Reference Conditions

Prime Power (PRP) is the nominal output continuously available, where the average load (variable) does not exceed 70% of the prime power rating during an operating period of 250 hours. The total operating time at 100% prime power must not exceed 500 hours per year. A 10% overload is available for a maximum of 1 hour in 12 hours of operation and must not exceed a total of 25 hours per year.

Standby Power (LTP) is the maximum output available (at variable load), for up to 200 hours per year. The average load (variable) must not exceed 80% of the standby power rating, with less than 25 hours per year at the full standby rating. No overload is available. The genset must not operate, at standby rating, in parallel with the public utility under any circumstances.

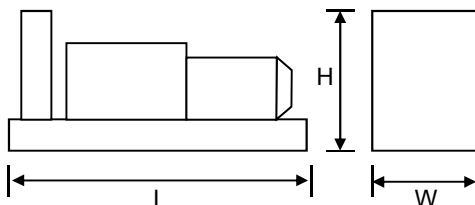
Standard Reference Conditions: air temperature 25°C (77°F), barometric pressure 100kPa [110m (361ft) altitude], 30% relative humidity.

Note: The above ratings may be subject to derate at different operating conditions. Please see the Derate Guidelines on the Broadcrown website.

All power ratings and reference conditions in accordance with ISO 8528-1 and ISO 3046-1.


Key Features:

- Efficient water cooled diesel engine.
- Single bearing CGT Stamford alternator
- Radiator with pressure cap and drain point
- Fully guarded engine-driven fan
- Fully welded steel baseframe with lifting / jacking points
- Various fuel system options
- Heavy duty rubber anti-vibration mountings
- 24V starter batteries and connecting cables
- Separate engine-driven battery charging alternator
- Spin on oil and fuel filters and dry type air filter element
- Industrial silencer(s) supplied loose
- Auto Start control system with digital instrumentation
- Main line circuit breaker
- Factory Test Certificate
- Operation & Maintenance Manual
- Wide range of optional extra features available


Overall Dimensions & Weights - Open Set

Length (L) = 6200mm
Width (W) = 2540mm
Height (H) = 3240mm

Dry Weight (inc oil) = 14685kg
Operating Weight = 15000kg

	Typical Open Generator Sound Pressure Level at 1m, Free Field (dB)							
Overall dBA	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
111	99	102	103	105	105	104	100	103

All specifications and design are subject to change without notice

ENGINE & COOLING SYSTEM
CUMMINS QSK 60 G12

	SI Units	PRIME	STANDBY	
Performance	Engine Speed	r/min	1500	
	Gross Power	kWm	1575	1740
	Fan Power	kWm	50	50
	Net Power	kWm	1525	1690
	Emissions Certification		TAL-2g	
	Altitude Capability	m	2400	2400
General	Cylinders / Type	16 cyl / 60° Vee / 4-stroke		
	Aspiration / Charge Cooling	Turbocharged / 2 Pump 2 Loop		
	Governing / Engine Management	TBA		
	Bore / Stroke	mm	159/190	
	Cubic Capacity	litres	60.2	
	BMEP	kPa	2087	2306
Fuel	Fuel Consumption at 100% Power	litres/h	387.0	424.0
	Fuel Consumption at 75% Power	litres/h	291.0	318.4
	Fuel Consumption at 50% Power	litres/h	205.0	224.3
	Total fuel flow	litres/h	946	
	Standard Fuel Tank Capacity	litres	TBA	
	Air	Engine Air Flow	m ³ /s	2.211
Maximum Air Intake Restriction (used filter)		kPa	6.23	
Exhaust	Exhaust Gas Flow	m ³ /s	5.321	5.508
	Exhaust Gas Temperature	°C	475	485
	Maximum Exhaust Back Pressure	kPa	6.8	
	Typical Exhaust Pipe Diameter	mm	400	
Cooling	Radiator Cooling Air Flow	m ³ /s	TBA	
	Max Restriction to Cooling Air Flow	Pa	TBA	
	Max Radiator Air-On Temperature	°C	50	
	Maximum Coolant Temperature	°C	104	
	Coolant Capacity - Engine Only	litres	193	
	Total Coolant Capacity	litres	574	
Oil	Total Oil Capacity incl Filters	litres	280	
	Typical Oil Pressure at Rated Speed	kPa	414	
	Typical Oil Consumption (>250hrs Operation)	litres/h	1.01	
Thermal	Heat Rejection to Engine Cooling Water	kW	475	435
	Heat Rejection to Charge Cooler	kW	n/a	
	Heat Radiated From Engine (Typical)	kW	160	175
Elec	Electrical System Voltage	V	24	
	Battery Type		4 (Series-Parallel) 624	
	Battery Capacity SAE CCA	A	2020	

ALTERNATOR
CGT STAMFORD PI 734

	SI Units	PRIME	STANDBY	
General Data	Manufacturer	Cummins Generator Technologies - STAMFORD		
	Model (may vary with voltage)	PI 734 E	PI 734 E	
	Operating Temperature	°C	40	27
	Coupling / No. of Bearings		Direct / Single Bearing	
	Phase / Poles / Winding Type		3-Phase / 4-Pole / Winding 311	
	Power Factor		Cos Φ = 0.8	
	Excitation		Separately excited by PMG	
	Insulation System		Class H	
	AVR Type		MX 321	
	Voltage Regulation		± 0.5%	

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STANDARD CONTROL SYSTEM
BC 7310 Digital Auto Start

The standard control system for this model is **BC 7310** (photo), based on the Deep Sea Electronics DSE7310 Digital Auto Start controller.

This provides for the manual and automatic remote start of the generator, together with full MODBUS implementation for the control and protection of the engine via the ECU. LCD digital display of :

- Coolant temperature with high temperature alarm and shutdown
- Oil pressure with low pressure alarm and shutdown
- Oil temperature, engine operating hours, battery charge volts and amps
- Volts, with Under/Over Volts protection
- Amps, with Over Current protection
- Frequency, kW, kVA, Power Factor

Also featuring :

- Full RS485 Telemetry implementation
- Automatic cool-down timer function
- Emergency Stop button
- Ample auxiliary inputs/outputs for optional features
- Optional (shown) - battery charger and door mounted illuminated switch.


CONTROL SYSTEM OPTIONS

The **BC 7320** control system (just the DSE7320 module is shown here) has an identical feature set to the BC 7310 but with the addition of full AMF functionality with integrated mains monitoring.



Finally, **BC 7510 & BC 7520** control systems provide the same features as BC 7310 & BC 7320 respectively, plus :

- BC 7510 - Set-to-Set Synchronisation
- BC 7520 - Single Set-to-Mains Supply Synchronisation with integrated mains monitoring

For Multi Set-to-Mains synchronisation, each set requires BC 7510 with the addition of one mains monitoring panel **BC 7560** (not illustrated). See the Synchronisation Guidelines for further details.

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