

Cummins QSK 60 G8	CGT Stamford PI 734	Generator Model:	BCC 2200P-50
		Generator Model:	BCC 2360S-50

50 Hz

3-Phase

 Power Factor
 $\text{Cos } \Phi = 0.8$

RATINGS	PRIME POWER (PRP)		STANDBY POWER (LTP)		
	BCC 2200P-50		BCC 2360S-50		
Voltage	kVA	kWe	kVA	kWe	Amps
415/240	2200	1760	2360	1888	3283
400/230	2200	1760	2360	1888	3406
380/220	2140	1712	2300	1840	3494

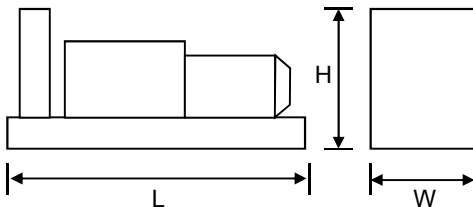
Definition of Ratings & Reference Conditions

This Generating set has a special rating definition.

Please contact Broadcrown Sales Department for further information.


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) = 6000mm
 Width (W) = 2325mm
 Height (H) = 2900mm

Dry Weight (inc oil) = 13575kg
 Operating Weight = 14225kg

Overall dBA	Typical Open Generator Sound Pressure Level at 1m, Free Field (dB)							
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
118	101	106	109	109	110	110	109	113

All specifications and design are subject to change without notice

ENGINE & COOLING SYSTEM
CUMMINS QSK 60 G8

	SI Units	PRIME	STANDBY	
Performance	Engine Speed	r/min	1500	
	Gross Power	kWm	1950	2145
	Fan Power	kWm	29	29
	Net Power	kWm	1921	2116
	Emissions Certification		—	
	Altitude Capability	m	800	800
General	Cylinders / Type	16 cyl / 60° Vee / 4-stroke		
	Aspiration / Charge Cooling	Turbocharged / Two Pump Two Loop		
	Governing / Engine Management	Electronic Governor / ECU		
	Bore / Stroke	mm	159 / 190	
	Cubic Capacity	litres	60.2	
	BMEP	kPa	2584	2843
Fuel	Fuel Consumption at 100% Power	litres/h	455	500
	Fuel Consumption at 75% Power	litres/h	335	368
	Fuel Consumption at 50% Power	litres/h	229	252
	Total fuel flow	litres/h	1515	
	Standard Fuel Tank Capacity	litres	TBA	
	Air	Engine Air Flow	m ³ /s	2.368
Maximum Air Intake Restriction (used filter)		kPa	6.23	
Exhaust	Exhaust Gas Flow	m ³ /s	5.741	6.32
	Exhaust Gas Temperature	°C	465	485
	Maximum Exhaust Back Pressure	kPa	6.8	
	Typical Exhaust Pipe Diameter	mm	400	
Cooling	Radiator Cooling Air Flow	m ³ /s	24.9	
	Max Restriction to Cooling Air Flow	Pa	190	
	Max Radiator Air-On Temperature	°C	38	
	Maximum Coolant Temperature	°C	104	
	Coolant Capacity - Engine Only	litres	159	
	Total Coolant Capacity	litres	543	
Oil	Total Oil Capacity incl Filters	litres	195	
	Typical Oil Pressure at Rated Speed	kPa	414	
	Typical Oil Consumption (>250hrs Operation)	litres/h	1.19	
Thermal	Heat Rejection to Engine Cooling Water	kW	564	620
	Heat Rejection to Charge Cooler	kW	495	545
	Heat Radiated From Engine (Typical)	kW	186	205
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 G	PI 734 G	
	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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