

Yanmar 3TNM 68 GA	CGT PI 044D/06	Generator Model: AC BCY 5.5-60SP
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60 Hz	1-Phase	Power Factor Cos Φ = 1.0	Emissions Certification Export Only
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RATINGS	PRIME POWER (PRP)		STANDBY POWER (LTP)		
	kVA	kWe	kVA	kWe	Amps
220/110	4.8	4.8	5.3	5.3	24.1
240/120	4.8	4.8	5.3	5.3	22.1

Definition of Ratings & Reference Conditions

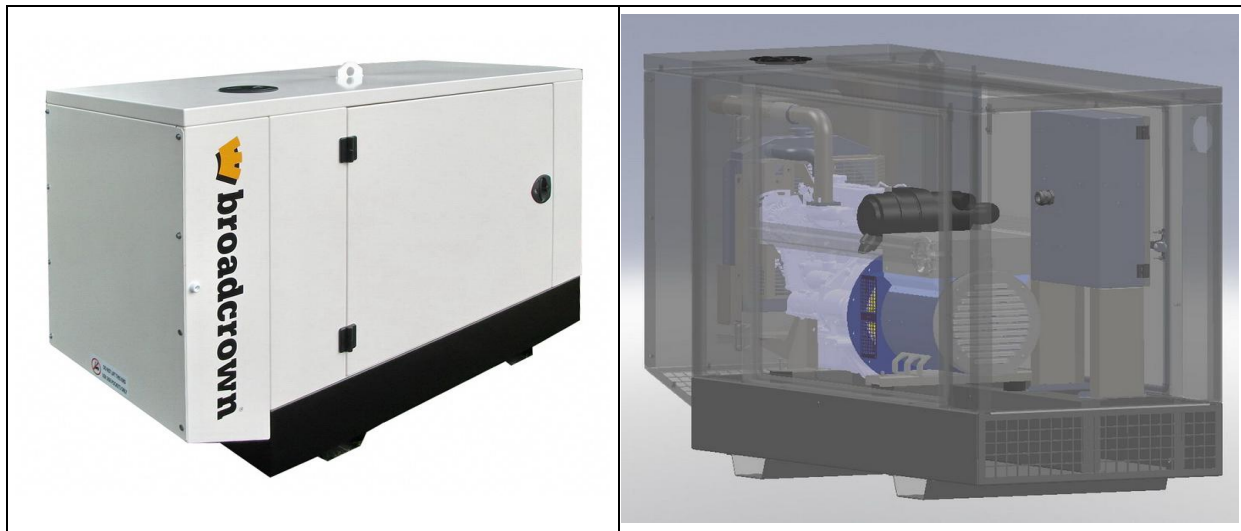
Prime Power (PRP) is the nominal output continuously available, where the average load (variable) does not exceed 70% of the prime power rating. No overload is available.

Standby Power (LTP) is the maximum output available (at variable load), for up to 100 hours per year. No overload is available.

Standard Reference Conditions: air inlet temperature 25°C (77°F), 100m (330ft) above sea level and 30% relative humidity.

Note: The above ratings may be subject to derate at different operating conditions. Please see the Ratings Conditions Supplement attached.

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


Key Features:

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| <ul style="list-style-type: none"> • Efficient water cooled Diesel engine. • Single bearing Newage alternator • Radiator with pressure cap and drain point • Radiator fill access hatch on canopy roof • Fully guarded engine-driven fan • 12V starter battery and connecting cables • Separate engine-driven battery charging alternator | <ul style="list-style-type: none"> • Fabricated steel skid base with feet/fork lift pockets • Heavy duty acoustic canopy • Single point lift integral with canopy frame • Heavy duty rubber anti-vibration mountings • Spin on oil and fuel filters • Medium duty air filter with restriction indicator • Automatic pre-heat system for easy starting |
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ENGINE & COOLING SYSTEM
Yanmar 3TNM68 GA

	SI Units	PRIME	STANDBY	
Performance	Engine Speed	r/min	1800	
	Gross Power	kWm	6.8	7.5
	Fan Power	kWm	0.2	0.2
	Net Power	kWm	6.6	7.3
	Emissions Certification		-	
General	Cylinders / Type		3 cyl / in-line / 4-stroke	
	Aspiration / Charge Cooling		Natural / None	
	Governing / Engine Management		Mechanical Governor, IDI	
	Bore / Stroke	mm	68 / 72	
	Cubic Capacity	litres	0.784	
Fuel	Fuel Consumption at 100% Power	litres/h	2.07	2.28
	Fuel Consumption at 75% Power	litres/h	1.63	1.79
	Fuel Consumption at 50% Power	litres/h	1.28	1.40
	Total fuel flow	litres/h	18	
Air	Engine Air Flow	m ³ /s	0.011	0.011
	Maximum Air Intake Restriction (used filter)	kPa	6.2	
Exhaust	Exhaust Gas Flow	m ³ /s	0.025	0.025
	Exhaust Gas Temperature	°C	400	410
	Maximum Exhaust Back Pressure	kPa	6.6	
	Typical Exhaust Pipe Diameter	mm	32	
Cooling	Radiator Cooling Air Flow	m ³ /s	0.32	
	Max Restriction to Cooling Air Flow (canopy)	Pa	90	
	Max Ambient Temperature	°C	40	
	Maximum Coolant Temperature	°C	105	
	Coolant Capacity - Engine Only	litres	1.6	
	Total Coolant Capacity	litres	3.9	
Oil	Total Oil Capacity incl Filters	litres	3.8	
	Typical Oil Pressure at Rated Speed	kPa	300	
	Typical Oil Consumption (>250hrs Operation)	litres/h	0.008	
Thermal	Heat Rejection to Engine Cooling Water	kW	4.6	5.5
	Heat Rejection to Charge Cooler	kW	n/a	
	Heat Radiated From Engine (Typical)	kW	1.5	
Elec	Electrical System Voltage	V	12	
	Battery Type		1 X SAE 069 (66Ah)	
	Battery Capacity SAE CCA	A	520	

ALTERNATOR
CGT STAMFORD PI 044

	SI Units	PRIME	STANDBY	
General Data	Manufacturer	Cummins Generator Technologies - STAMFORD		
	Model	PI 044 D		
	Rating at 415V	kVA	7.5	8.3
	Operating Temperature	°C	40	27
	Coupling / No. of Bearings		Direct / Single Bearing	
	Phase / Poles / Winding Type		1-Phase Dedicated / 4-Pole / Winding 06	
	Power Factor		Cos Φ = 1.0	
	Excitation		Self Excited	
	Insulation System		Class H	
	AVR Type		SX 460	
Voltage Regulation		± 1.0%		

All designs and specifications subject to change without notice

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STANDARD CONTROL SYSTEM

BC 7210 Digital Auto Start

The standard control system for this special product is BC 7210, based on the Deep Sea Electronics DSE 7210 Digital Auto Start controller.

This provides for the manual and automatic remote start of the generator with an LCD digital display of :

- Volts, Amps and Frequency
- Engine operating hours

Protections features:

- Automatic remote start
- Overspeed protection
- Underspeed protection
- Low oil pressure protection
- High Coolant Temperature protection
- Fail to start indication
- Automatic cool-down timer function
- Optional - Common Alarm & System in Auto volt-free contacts
- Charge Alternator Fail alarm
- Fail to Start
- Emergency Stop



The panel is constructed in 1.5mm steel, powder coated to RAL9001 for a high quality, durable finish and mounted on a rigid stand. The generator circuit breaker is included within the box, together with all terminals for site inter-connections.

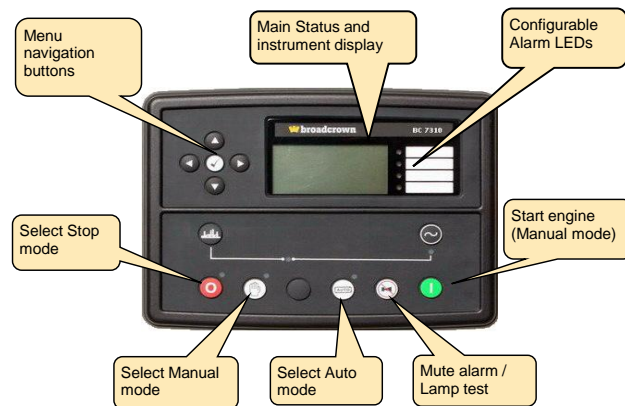
Control panel dimensions: 500mm High x 380mm Wide x 160mm Deep.

Note: Oil pressure display, High Oil Temperature protection and Low Coolant Level protection are not available on this engine range.
Note: Fuel pump switch and Battery charger switch are not standard and only available as upgrades

METHOD OF OPERATION

The module is operated using the front **STOP**, **MANUAL**, **AUTO** and **START** push buttons.

An additional push Button allows the user to scroll through the LCD instrument display.



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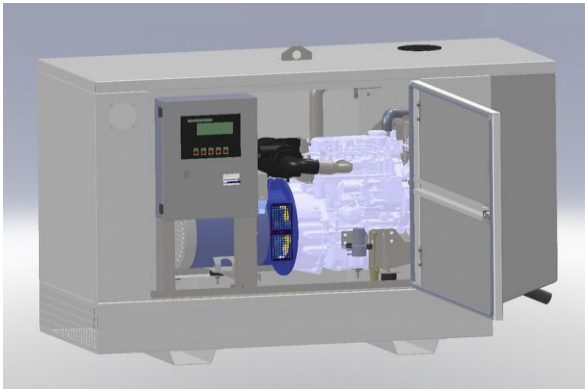
ACOUSTIC ENCLOSURE
Midi Canopy M1-S

The acoustic enclosure for this model is the **Midi 1-S Canopy**, suitable for operation in harsh outdoor environments whilst providing excellent security and acoustic performance. All steel canopy components are pre-treated and polyester powder coated (to a typical thickness of 70-80µm) in RAL9001 white and the baseframe is finished in RAL9005 black.

Acoustically, the canopy is designed to meet the requirements of EU Legislation 2000/14/EC and, in particular, to provide excellent performance in a semi-reverberant environment. This is achieved by extensive use of fire-retardant polyurethane foam together with efficient management of cooling air. Exhaust noise is minimised by an internally mounted high performance exhaust silencer.

Other key features include :

- Side swing doors for good service access
- Heavy duty locks on all doors for total security
- Low level exhaust discharge for safety
- Emergency Stop button located on canopy exterior
- Lifting and holding down points
- Fork Lift pockets
- Single roof lifting point
- Self-grip grommets in side of baseframe for power & site inter-connecting cables



Nominal Dimensions (mm)				Approx Weight (kg) *	Typical Sound Pressure Level at 75% of Prime Power		Single Point Lift	
L	x	W	x		H	dB(A) at 1m		dB(A) at 7m
1850	x	760	x	1200	600	68	58	Standard

Weight subject to confirmation

* Indicative weight of complete generator with oil and coolant

Typical SPL is a mean level, measured in accordance with the requirements of ISO 8528 Part 10, in free field conditions and with no contributory background noise.

OTHER MECHANICAL FEATURES
Engine & Cooling :

- Coolant drain valve with umbilical hose within the canopy base
- Sump drain valve and manual oil drain pump with umbilical hose within the canopy base

Fuel System :

- Fuel feed and return connections on outside of baseframe 3/8"BSP
- Fuel pre-filter/separator
- Electric fuel lift pump with panel mounted priming switch

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