

# VPC88UKS

Canopied



ENGINE	ALTERNATOR	MODEL	POWER FACTOR	EMISSIONS
Cummins 4BTA3.9-G11	Stamford UC1224-G	VPC88UKS (Canopied)	Factor $\Phi = 0.8$	N/A
50Hz	1500rpm	3-Phase		

RATINGS	PRIME POWER	STANDBY POWER	RATED CURRENT	FUEL CONSUMPTION
Voltage	PRP	ESP	Amps	@100% load
(V)	kWe      kVA	kWe      kVA	(A)	L/h
400	64      80	72      88	86	20

## RATINGS

All three-phase generator sets are rated at 0.8 power factor.

All single-phase generator sets are rated at unity or 1.0 power factor.

## PRIME OUTPUT

This rating is applicable for supplying continuous electrical power at variable load.

There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

## STANDBY OUTPUT

This rating is applicable for supplying electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

The above ratings are in accordance with ISO8528-1 and ISO3046-1. Standard reference conditions: 25°C, 100m A.S.L., 30% relative humidity.



# ENGINE

## Cummins 4BTA3.9-G11

		Units		
General performance	Frequency	Hz	50	
	Engine Speed	r/min	1500	
	Number of cylinders / arrangement		4 cyl / vertical in-line	
	Displacement	Litres	3.9L	
	Aspiration		Turbocharged	
	Combustion system		Direct injection	
	Governor type		Electronic	
	Bore / stroke	mm	102 x 120	
	Starter Motor / charge Alternator (V dc)		24 v DC	
	Engine power (gross)	kWm	Prime: 70   Standby: 80	
	Cooling system		Water cooled	
	Rotation		Anti-clockwise viewed on flywheel	
	Fuel system	Fuel consumption at 110% prime power	Litres/hour	22
		Fuel consumption at 100% prime power	Litres/hour	20
Fuel consumption at 75% prime power		Litres/hour	15	
Fuel consumption at 50% prime power		Litres/hour	10	
12 hour fuel tank capacity		Litres	160	
Air system	Air inlet		Mounted air filter	
	Air filter type		Dry	
Fuel and fuel system	Electronically governed		YES	
	Rotary type pump		YES	
	Ecoplus fuel filter		YES	
Oil system	Total oil system capacity	Litres	16.4	
	Maximum sump capacity	Litres	N/A	
	We sump with filler and dipstick		YES	
	Spin-on oil filter		YES	
Cooling system	Total system capacity			
	• With radiator	Litres	N/A	
	• Without radiator	Litres	N/A	
	Thermostat operation range	°C	Up to 40°C	
	Maximum top tank temperature	°C	N/A	
Electric system	Electrical system voltage	V	24	
	Battery		Maintenance-free	
	Connecting cables		Included	
Available options	Battery charger		Included	
	Battery isolator switch		Included	
	125 AMP 5 Pin (IP67) Socket Outlet		Included	





# ALTERNATOR

Stamford UCI224G

		Units		
General data	Manufacturer / brand		Stamford	
	Model		UCI224G	
	Coupling / number of bearings		Flexible Disc / Single Bearing	
	Phase / poles		3-Phase / 4-Pole	
	Power factor		Cos $\Phi$ = 0.8	
	AVR regulation		YES	
	Voltage regulation		$\pm 1$ %	
	Insulation class		H	
	Drip proof		IP23	
	Excitation		Shunt	
	Altitude	m		$\leq 1000$
	Overspeed	min -1		2250





## DSE CONTROLLER SUMMARY

Deepsea (DSE) Controller

Controller model / Deepsea DSE	DSE4520 (Optional)	DSE6120 (Optional)	DSE7310/20 (Optional)	DSE8610/20 (Optional)
Controller photos				
Standard supply	●	○	○	○
Viewable parameters				
Phase voltage	X	3	3	3
Current	Instrumentation	●	●	●
Frequency	●	●	●	●
Active power	○	●	●	●
Reactive power	○	●	●	●
Apparent power	X	●	●	●
Power factor	○	●	●	●
Electric energy metering	X	●	●	●
Generator protection				
Abnormal voltage	●	●	●	●
Overcurrent warning		●	●	●
Overcurrent protection	●	●	●	●
Over frequency protection	●	●	●	●
Short circuit protection	MCCB / ●	MCCB / ●	MCCB / ●	MCCB / ●

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## Deepsea (DSE) Controller

Controller model / Deepsea DSE	DSE4520 (Optional)	DSE6120 (Optional)	DSE7310/20 (Optional)	DSE8610/20 (Optional)
Controller photos				
<b>Engine figure</b>				
Oil pressure	●	●	●	●
Water temperature	●	●	●	●
Fuel meter / fuel sensor	● / ○	● / ○	● / ○	● / ○
Speed	●	●	●	●
Battery voltage	●	●	●	●
Elapsed time	●	●	●	●
<b>Engine protection</b>				
Low oil pressure warning	X	●	●	●
Low oil pressure protection	●	●	●	●
High temperature warning	○	●	●	●
High temperature protection	●	●	●	●
Overspeed warning	X	●	●	●
Overspeed protection	○	●	●	●
Alternator charger	●	●	●	●
<b>Functions</b>				
Remote start	●	●	●	●
AMF (Auto Main Failure)	●	●	●	●
Programmable input	●	●	●	●
Programmable output	●	●	●	●
Expand module	X	○	○	○
Communication function	X	X	RS232 / 484	RS232 / 485
Communication port	USB	USB	RS232 / 484	RS232 / 485
CAN	●	○	●	●
Service indicate	○	○	●	●
Fault history	●	●	●	●
Gen-gen synchronising	X	X	X	●
Gen-mains synchronising (20)	X	X	X	●

**REMARK:** ● Standard supply ○ Available as optional X Not available

# ENCLOSURE / CANOPY

Sound-attenuated or open option

*"Ensures a quieter life with our sound attenuation system"*

## FEATURE

**Extremely rugged and highly corrosion resistant construction**

Unique appearance with high sound absorbing and thermal properties

8-12 hours built-in fuel tank integrated into the skid-mounted base

Excellent design and craftsmanship

Full weatherproof enclosure, suitable for operations in harsh conditions

Thermo-acoustic installation which can withstand fire, high temperature and severe conditions

Residential exhaust muffler manufactured from galvanised steel

High quality polyester powder paint

Designed on modular principles with interchangeable components permitting on-site repairs

**Easy commissioning and maintenance**

Control panel viewing window with lockable access door for quick, safe and easy monitoring

Side doors allowing 180° opening for easy accessibility

Lifting point for easy mobility

Lube oil drain and radiator drain

Internally mounted exhaust silences constructed to withstand rough conditions

**Extremely rugged and highly corrosion resistant construction**

Earth leakage protection

Secure and lockable access doors for fuel fill and battery

Fully guarded cooling fan and battery charging alternator

Emergency stop push button mounted on the enclosure exterior for urgent and safe shutdown

Efficient management of cooling air to avoid high water temperature

**Extremely rugged and highly corrosion resistant construction**

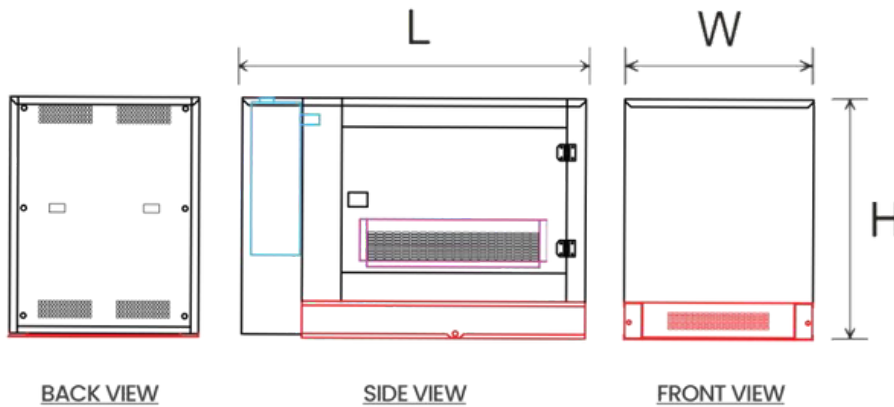
Top access lifting points for crane lifting

Fork lift pockets for easy moveability



# OVERALL DIMENSIONS, WEIGHT & NOISE

Frame type	Dimensions (L x W x H) mm	Weight kg	Base tank @ 100% load		Noise level dBA(A) at 7m
			Hours	Litres	
Canopied	2500 x 970 x 1400	TBC	8	160	70.5
Open					



## AUTOMATIC TRANSFER SWITCH

### A.T.S - 4 Poles

We offer as an optional accessory, not only a changeover switch but also an integrated mains detection and switch system for your 24 hour power protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of a mains automatic retransfer once it comes back.

#### System advantages

Automatically transfer and re-transfer load from main power to gen-power without operator intervention (both automatic and manual)

ATS Controller (AMF function)

Available from 32 - 4000A

Available in standard, bypass isolation and service-entrance configurations

Configurable in open, closed and programmed transition operating modes

Designed to interface seamlessly with all AMF generators and switchgear

Drip proof IP42 enclosure

Easy installation: wall-mounted and floor standing



## WARRANTY COVERAGE

Generators used with commercial utility source: One (1) year or 1000 hours (whichever occurs first) from date of shipment from the factory or registered start-up date.