



Natural Gas Generators for Coles

60 kVA / 48 kW Prime Rated
NG RANGE



Model: **JEG60CS-NG**

Cummins 6BT5.9	Alternator UCI224E	Phase Three	Type Enclosed	Model Number JEG60CS-NG
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RATINGS	PRIME POWER (PRP)			STANDBY POWER (ESP)		
	Voltage	kVA	kWe	Amps	kVA	kWe
380/220	60	48	91	66	52	100
400/230	60	48	86	66	52	95
415/240	60	48	83	66	52	91
440/254	n/a	n/a	n/a	n/a	n/a	n/a

Power Definition

Prime Power (PRP) is the power continuously available at variable load in lieu of mains power. An overload of 10% is permitted for one hour in every 12 hours of operation.

Standby Power (ESP) is the maximum output available for up to a maximum of 500 hours per year. No overload is permitted.

Standard Conditions: air inlet temperature of 40°C, barometric pressure of 100 kPA (110 m.a.s.l.) relative humidity of 30%.

Note: All ratings data based on operation under ISO 8528-1 and ISO 3046-1. The above ratings may be subject to deration at different ambient temperatures or site altitude conditions.



Scope of Supply

- Water cooled Cummins engine at 1500rpm
- Single bearing Stamford alternator
- Set mounted Radiator with coolant expansion bottle
- Fully guarded engine-driven fan
- Gas Train with AGA approved componentry
- Heavy duty rubber anti-vibration mounts
- 24V starter batteries, tray and connecting cables
- Battery Charger and Battery Isolator switch
- Spin on Oil filters and dry type Air filter
- Automatic Mains Failure controller with protections
- Main line circuit breaker
- Emergency Stop button
- Internal Lighting
- Sound attenuated canopy with centre lift / fork slots
- Industrial silencer with rain flap
- Factory Test Certificate and Pre-delivery service
- Operation Manual

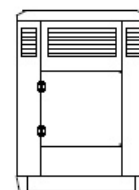
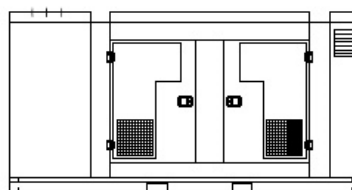
Typical Enclosed Generator Sound Pressure Level in Free Field Conditions

dB(A) @ 1m	81	dB(A) @ 7m	75
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All specifications are subject to change without prior notice

Dimensions and Weight

Length (L)	3200 mm
Width (W)	1260 mm
Height (H)	1700 mm
Dry Weight	2200 kg








ENGINE & COOLING TECHNICAL DATA
CUMMINS 6BT5.9

	DESCRIPTION	VALUE	UNITS
GENERAL	Engine Speed	1500	rpm
	Idling Speed	700	rpm
	Number of Cylinders	6	Inline
	Aspiration	Turbocharged	
	Thermal Output @ Prime Rating	86	kW
	Bore / Stroke	102 / 120	mm
	Displacement	5.9	litres
	Ignition Order	1 - 5 - 3 - 6 - 2 - 4	
	Governor	Electronic	
FUEL	Gas Type	Natural	
	Methane Content	>75%	CH4
	Gas Consumption at 100% Power	16.09	Nm ³ /h
	Mixer / Vaporizer	IMPCO	
	Gas Pressure needed at Regulator	3-5	kPa
AIR	Maximum Air Intake Restriction (Clean Filter)	2.48	kPa
	Maximum Air Intake Restriction (Contaminated Filter)	6.21	kPa
	Engine Air Intake Flow	100	litres/sec
	Engine Air Exhaust Flow	280	litres/sec
EXH	Exhaust Gas Flow	293	litres/sec
	Exhaust Gas Temperature	495	°C
	Maximum Exhaust Back Pressure	10	kPa
COOLING	Maximum Restriction to Cooling Air Flow	6.21	kPa
	Maximum Coolant Temperature	104	°C
	Coolant Flow	2	litres/sec
	Coolant Capacity (Engine and Radiator)	35	litres
	Thermostat Adjusting Temperature Range	82 - 95	°C
OIL	Total Oil Capacity	16.4	litres
	Typical Oil Consumption	<1.6	g/kWh
	Recommended Oil	SAE 15W / 40CD	
ELEC	Electrical System Voltage	24	V
	Battery Type	SLA	
	Battery Capacity CCA	475	A

ALTERNATOR TECHNICAL DATA
STAMFORD UCI224E

	DESCRIPTION	VALUE
GENERAL	Operating Temperature	40 °C
	Coupling	Direct
	Number of Bearings	Single
	Phase / Poles	3 Phase / 4 Pole / Winding 311
	Power Factor	Cos ϕ = 0.8
	Excitation	Self Excited
	Insulation System	Class H
	AVR Type	PMG
	Voltage Regulation	± 1%

CONTROLLER OPTIONS **DEEP SEA ELECTRONICS**

<p>DSE4510</p> 	<p>AUTO START CONTROL MODULE</p> <p>The DSE4510 is an Auto Start Control Module suitable for a wide variety of single genset applications. Whilst maintaining functions included within higher end controllers, such as generator or load power monitoring, this compact controller provides the user with the ultimate size to feature ratio. Monitoring engine speed, oil pressure, coolant temperature, frequency, voltage, current, power and fuel level, the modules will give comprehensive engine and alternator protection.</p>
<p>DSE6120</p> 	<p>AUTO MAINS FAILURE CONTROL MODULE</p> <p>The DSE6120 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single genset applications. Monitoring engine speed, oil pressure, coolant temperature, frequency, voltage, current, power and fuel level, the modules will give comprehensive engine and alternator protection.</p>
<p>STANDARD: DSE7420</p>	<p>AUTO MAINS FAILURE CONTROL MODULE</p>
	<p>The DSE7420 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas generator set applications. Monitoring an extensive number of engine parameters, the module displays warnings, shutdowns and engine status information on the back-lit LCD screen, illuminated LEDs, remote PC, audible alarm and via email alerts (utilising optional DSE890 3G Gateway). The DSE7420 can monitor the mains (utility) supply and includes USB, RS232, RS485 & Ethernet ports as well as dedicated terminals for system expansion. The module is compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offers a comprehensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.</p>
<p>DSE8610</p> 	<p>AMF/ SYNCHRONISING / LOAD SHARE / SET TO SET</p> <p>The DSE8610 is an easy to use multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines. The DSE8610 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.</p>
<p>DSE8620</p> 	<p>AMF/ SYNCHRONISING / LOAD SHARE / SET TO MAINS</p> <p>The DSE8620 is an Auto Mains (Utility) Failure Control Module suitable for paralleling single gensets (diesel or gas) with the mains (utility) supply. The module will automatically start the generator on detection of a mains failure, and will control the switchover from and back to the mains (utility) supply, offering an uninterrupted return. The modules synchronising functions include automatic synchronising with built-in synchroscope and closing onto dead bus. Direct and flexible outputs from the module are provided to allow connection to the most commonly used speed governors and automatic voltage regulators (AVRs).</p>

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REMOTE MONITORING JUBILEE WN RANGE

The DSEWebNet Gateway Modules are used in conjunction with supported DSE controllers to provide monitoring and communications data via the DSEWebNet® advanced communications system.

Gateway modules available are the DSE890 (3G/GSM/GPS/Ethernet), DSE891 (Ethernet only) and DSE892 (SNMP). The Gateway communicates to the connected DSE controller(s), monitoring the instrumentation and operating state. When this data changes, the new data is logged in the internal memory. At regular intervals the logged data is transmitted to the DSE host server.

The DSE host server is then integrated into the DSEWebNet® which can be accessed via an internet connected device and web browser to allow remote monitoring and control of multiple DSE controllers around the globe.

GSM, GPS and GSM/GPS antenna's are available as accessories.



AUTOMATIC TRANSFER SWITCHES JUBILEE JTS RANGE

Jubilee Transfer Switches combine reliability and flexibility in a small, economical package for transferring loads between a utility and a generator set, or between two generators.

Jubilee Transfer Switches and the control mechanisms are mounted in a key-locking enclosure. Enclosures meet IEC 60947-6-1 standard. Our 100-400 Amp switches are front-connected.

The microprocessor control monitors the utility and the standby generator power. When utility power fails, or is unsatisfactory, the control starts the generator. When stable utility power returns, the switch automatically transfers the load back to the utility.

A variety of Transfer Switches are available to suit multiple applications. For more information, see our **JTS Range** brochure.



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