Natural Gas Generator Datasheet

CS RANGE

JEG40CS-NG: 40/44 kVA

Technical Data

JEG40CS-NG

Engine	Model	Phase	Type	Jubilee Model
Cummins	**4BT3.9G11**	**Three**	**Enclosed**	**JEG40CS-NG**

RATINGS	PRIME POWER (PRP)			STANDBY POWER (ESP)		
Voltage	**kVA**	kWe	Amps	**kVA**	kWe	Amps
380	**40**	32	61	**44**	35	67
400	**40**	32	58	**44**	35	64
415	**40**	32	56	**44**	35	61
440	**40**	32	52	**44**	35	58

Power Definition

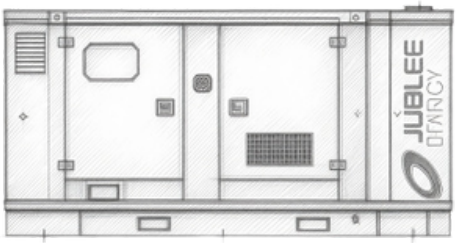
Prime Power (PRP) is the power continuously available at variable load in lieu of mains power. An overload of 10% is permitted for one hour in every 12 hours of operation.
Standby Power (ESP) is the maximum output available for up to a maximum of 500 hours per year. No overload is permitted.
Standard 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
- 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
- DSE7420 AMF Controller with protections
- Schneider 4P NSX range Adjustable Circuit Breaker
- Emergency Stop push buttons
- Sound attenuated canopy with centre lift / fork slots
- Internal Lighting
- Industrial silencer with rain flap
- Pre-delivery service
- Operation Manual
- Factory Test Certificate

Images are for illustrative purposes only and may vary.

Typical Enclosed Generator Sound Pressure Level in Free Field Conditions			
dB(A) @ 1m	79	dB(A) @ 7m	73



Weights and Dimensions		
Length	(L)	2900 mm
Width	(W)	1100 mm
Height	(H)	1700 mm
Dry Weight	**1600 kg**	

Realise Your Potential

Engine & Cooling Technical Data

JEG40CS-NG

	DESCRIPTION	VALUE	UNITS
GENERAL	Engine Speed	1500	rpm
	Idling Speed	700	rpm
	Number of Cylinders	4	Inline
	Aspiration	Natural	
	Thermal Output @ Prime Rating	32	kW
	Bore / Stroke	102 / 120	mm
	Displacement	3.9	litres
	Ignition Order	1 - 3 - 4 - 2	
	Governor	Electronic	
FUEL	Gas Type	Natural	
	Methane Content	95%	CH4
	Gas Consumption at 100% Power	11.5	Nm3/hr
	Mixer / Vaporiser	IMPCO	
	Gas Pressure Needed at Regulator	2.75 - 5	kPa
AIR	Max Air Intake Restriction (Clean Filter)	3.7	kPa
	Max Air Intake Restriction (Contaminated Filter)	6.21	kPa
	Engine Air Intake Flow	94	litres/sec
EXHAUST	Exhaust Gas Flow	338	litres/sec
	Exhaust Gas Temperature	495	°C
	Maximum Exhaust Back Pressure	10	kPa
COOLING	Maximum Restriction to Cooling Air Flow	28	kPa
	Maximum Coolant Temperature	104	°C
	Coolant Flow	2	litres/sec
	Coolant Capacity (Engine and Radiator)	25	litres
	Thermostat Adjusting Temperature Range	82 - 95	°C
OIL	Total Oil Capacity	12	litres
	Typical Oil Consumption	≤4	kPa
	Recommended Oil	SAE 15W / 40CD	
ELEC	Electrical System Voltage	24	V
	Battery Type	SLA	
	Battery Capacity CCA	60	A

Alternator Technical Data

JEG40CS-NG

	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

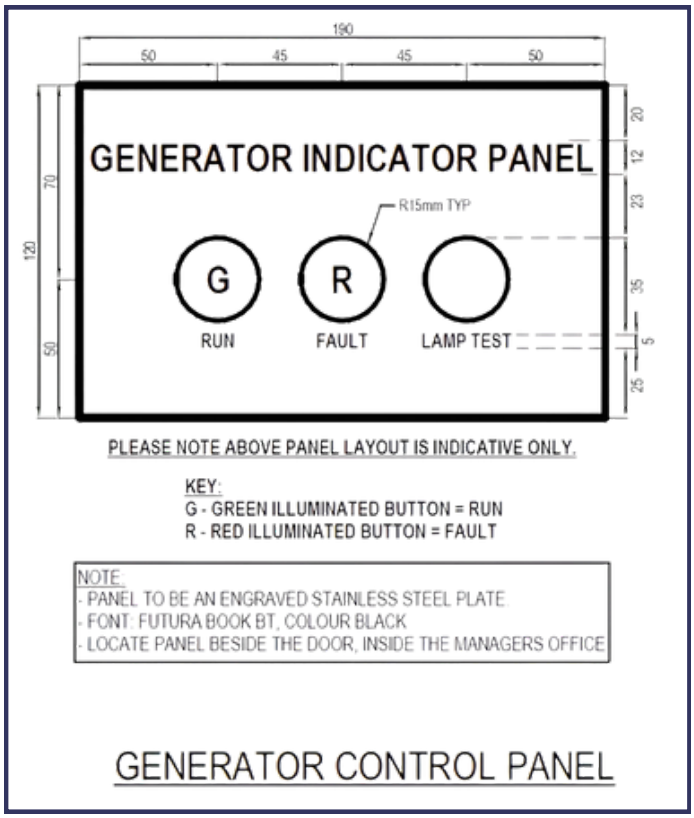
JEG40CS-NG

DSE4510	AUTO START CONTROL MODULE
	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.
DSE6020 MKII	**AUTO MAINS FAILURE CONTROL MODULE**
	The DSE6120 MKIII is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, genset applications. Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs and remote PC.
DSE7420 MKII	**AUTO MAINS FAILURE CONTROL MODULE (STANDARD FITMENT)**
	The DSE7420 MKII is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications. Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs and remote PC. The DSE7420 MKII will also monitor the mains (utility) supply. The module include USB, RS232, RS485 and Ethernet ports as well as dedicated DSENet® terminals for system expansion.
DSE8610	**AMF/ SYNCHRONISING / LOAD SHARE / SET TO SET**
	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.
DSE8620 MKII	**AMF/ SYNCHRONISING / LOAD SHARE / SET TO MAINS**
	The DSE8620 MKII represents the latest in complex load sharing & synchronising control technology. Designed to synchronise a single genset with a mains (utility) supply, the DSE8620 MKII control module is packed with multiple features and benefits that are unrivalled across the generator control industry.

Managers Room Option

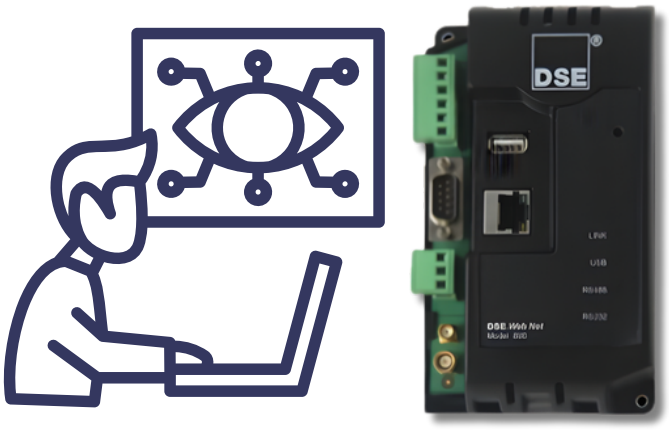
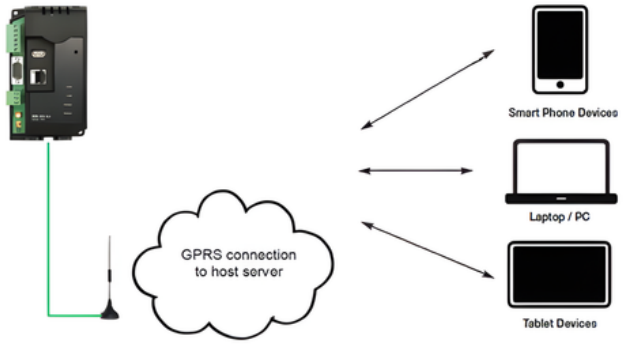
JEG40CS-NG

Generator Indicator Panel



Other Options

JEG40CS-NG

Remote Monitoring	Description
	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 antennas are available as accessories.
	

Automatic Transfer Switch	Description
	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 63-630 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.

All specifications are subject to change without prior notice

V26.05