

Diesel Generator

Standby Power	Prime Power	Cooling
33 kVA / 26.4 kW	30 kVA / 24 kW	Radiator With Fan
Frequency	Voltage	Certificated
50Hz	400/230V	ISO


JDC33D5

JDC33D5S

1. General technical data

1.1 Version, dimensions and weight	Version	Open	Enclosure
	Dimensions	JDC33D5	JDC33D5S
	L (mm)	1760	2250
	W (mm)	840	900
	H (mm)	1450	1540
	Weight (kg)	760	1180
1.2 Main technical data	Engine Manufacturer & Model	Cummins 4B3.9-G12	
	Engine structure	4 Cylinder vertical in-line, 4 stroke	
	Displacement	3.9 Liter	
	Total Lub oil cap	10.9 Liter	
	Alternator Manufacturer & Model	JSM ALT184G	
	Fuel	Diesel	
	Control panel		
	Cooling	Fan with Radiator	
	Tank	140 Liter	
	Fuel consumption @ 100% Load	7.4 L/h	
	Fuel consumption @ 75% Load	6.1 L/h	
	Fuel consumption @ 50% Load	4.5 L/h	

Frequency	Voltage	Standby Power	Prime Power	ESP Amps (A)	PRP Amps (A)
50 Hz	400/230V	33 kVA / 26.4 kW	30 kVA / 24 kW	47.34	43.2

*Voltage rating are available under request: 50HZ 380V/415V/440V

Directives and Regulations

ENVIRONMENTAL CONDITIONS STANDARD ISO 8528-1:2018: 25°C, 100kPa and 30% relative humidity:

—**Prime Power (PRP):** Data on electrical power available at variable load without limit of hours per year. An overload of 10% is allowed for 1h out of 12.

—**Emergency Standby Power (ESP):** Data on electrical capacity available at variable load in case of emergency according to ISO 8528-1:2018.

The JSM Power Generator bears the CE and ISO marking which includes the following directives:

—**2006/42/EC.** Machine Safety Directive.

—**EN ISO 8528-13:2016.** Part 13: Safety. Alternating current generators powered by reciprocating internal combustion engines.

—**2014/30/EU.** Electromagnetic Compatibility Directive.

—**2000/14/EC.** Noise Emissions Directive. Sound power levels evaluated in accordance with the procedure laid down in the directive.

—**Directive 2011/65/EU** on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 2).

2. Engine technical data

2.1	Version	Open	Enclosure
General Engine technical data	Make and model	Cummins 4B3.9-G12	
	Emissions	N	
	No. of Cylinders	4 Cylinder vertical in-line	
	Cylinder bore (mm)	102	
	Piston stroke (mm)	120	
	Displacement (Liter)	3.9	
	Compression Ratio	18.0:1	
	Fire Order	1-3-4-2	
	Speed (r.p.m)	1500	
	Governor type	Electronic	
	Engine standby power (kW/HP)	40 HP / 30 kW	
	Engine prime power (kW/HP)	36 HP / 27 kW	
2.2	Aspiration	Naturally Aspirated	
Air intake system	Air Filter type	Dry Air Filter	
	Max intake air restriction with Dirty filter (kPa)	6.2	
	Max intake air restriction with Clean filter (kPa)	3.7	
2.3 Exhaust system	Maximum Exhaust back pressure (kPa)	10	
2.4 Fuel System	Fuel system	Directly injection	
	Injection pump type	WF A/Electronic Governor	
	Maximum restriction at lift pump (kPa)	13.6	
	Maximum Fuel inlet temp (°C)	70	
	Total Drain Flow (constant for all loads) Liter/hr	30	
2.5 Lube Oil System	Minimum required Lube system Capacity (Liter)	10.9	
	Engine oil pressure @ idle speed (min) kPa	207	
	Engine oil pressure @ Governed speed (Max) kPa	345	
	Max oil temp (°C)	121	
2.6 Cooling system	Cooling type	Water cooling with Fan	
	Coolant capacity (Engine only) Liter	7.2	
	Coolant capacity (With radiator) Liter	19	
2.7 Starter system	Electrical System	24 V	
	Battery capacity (qty/Ah)	2× 80Ah	

3. Alternator technical data

3.1

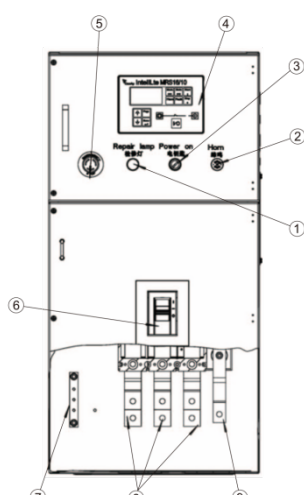
General Alternator technical data

Version	Open	Enclosure
Make and model	JSM ALT184G	
R.F.I Suppression	BS EN 61000-6-2 & BS EN 61000-6-4,VDE 0875G, VDE 0875N. refer to factory for others	
Frequency	50 Hz	
Rated Voltage	400 V	
Standby Power	33 kVA / 26.3 kW	
Prime Power	30 kVA / 24 kW	
Rated Speed (r.p.m)	1500	
Maximum overspeed (r.p.m)	2250	
Cont. H	125/40°C	
Voltage Regular	AVR	
Voltage Regulation	± 1.0 %	
Insulation system	Class H	
Protection	IP23	
Rated Power Factor	0.8 (Lagging)	
Total Harmonic distortion	THD<3%	
Waveform distortion	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%	

4. Controller Panel technical data

4.1

General Control Panel technical data

Version	Item	Description
	1	Buzzer
	2	Key Switch
	3	Indicator
	4	Controller
	5	Emergency Stop
	6	Main breaker
	7	Grounding Terminal (G)
	8	Liver Terminal (L)
	9	Neutral Terminal (N)

5. Controller system technical data

5.1	FUNCTIONS		Smartgen 4020
General Control system technical data	5.1 Display (Engine)	Oil pressure	✓
		Fuel Level	✓
		Coolant temp	✓
		Speed	✓
		Running hrs	✓
		Exhaust temp	✓
		Battery voltage	✓
		Start times	✓
	5.2 Display (Alternator)	3 Phase Voltage	✓
		3 Phase Current	✓
		Frequency	✓
		Power Factor	✓
		Active Power	✓
		Reactive Power	✓
		Apparent Power	✓
		KWH	✓
	5.3 Operation model	Manual	✓
		AUTO	✓
		STOP	✓
	5.4 Alarm & Protection (Engine)	Low / High Fuel level	✓
		Low Oil Pressure	✓
		Low Coolant level	✓
		Low / High Coolant temp	✓
		Over / Under Speed	✓
	5.4 Alarm & Protection (Alternator)	Over / Under Voltage	✓
		Over / Under Frequency	✓
		Over Current	✓
	5.5 Others	Remote Start / STOP	✓
		Short-Circuit Protection	✓
		IDMT Over current protection	✓
		Battery Voltage Fault	✓
		Emergency Stop	✓
		Overload	✓
		Programmable I/O Port (PIO)	✓
		Multi-Language	✓
		Event Logger	✓

