

# Design for Innovation in Industry

## MODEL: IGNITE POWER IPC-500



500 kVA / 400 kW POWERED BY CUMMINS

### DIESEL GENERATING SET 400/230V - 50 Hz

	MODEL		IGNITE POWER IPC-500
Power Pf. 0.8	Standby	kVA	550
		kW	440
	Prime	kVA	500
		kW	400

- ♣ High quality, reliable and complete power unit
- Compact design
- Easy start and maintenance possibility
- Every generating set is subject to a comprehensive test program which includes full load testing, checking and provision of all control and safety shut down functions testing
- Fully engineered with a wide range of options and accessories: sound proof canopy and on road trailer









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### **ENGINE**

Cummins					
Model		QSZ13-G13			
Engine Power Output	kWm	450			
at rated rpm	HP	603			
Aspiration and Cooling		Turbocharged			
Total Displacement	Litre	13.0			
No. of Cylinders and Build		6 - Inline			
Engine Speed	rpm	1500			
Bore and Stroke	mmxmm	130x163			
Compression Ratio		17:1			
Governor		ELECTRONIC			
Fuel Consumption at full load	L/hr	101			
Fuel Tank Capacity	Litre	8 Hours			
Oil Capacity	Litre	45.52			
Coolant Capacity	Litre	23.1			
Thermostat fully open temperature	С	94			
Air Intake - Engine	kg/min	35			
Exhaust Gas Flow	kg/min	36.45			

- Heavy duty Cummins diesel engine
- Four stroke, water, cooled, turbo charged
- Direct injection fuel system
- Electronic Governor system
- 4 12/24 V D.C. starter and charge alternator
- Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Starter battery (miantenance free) including Rack and Cables
- 4 Flexible fuel connection hoses and manual oil sump drain valve
- Industrial capacity exhaust silencer and steel bellows
- Jacket water heater(at automatic models)
- Operation manuals and circuit diagram documents





Design	Brushless single bearing, revolving field
Stator	2/3 pitch
Rotor	Single bearing, flexible disc
Insulation System	Class H
Standard Temperature Rise	125 - 163°C Continuous
Exciter Type	Self Excited
Phase Rotation	A (U), B (V), C (W)
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load < 5%
Telephone Influence Factor (TIF)	<50 per NEMA MG1
Telephone Harmonic Factor (THF)	<2%

- ♣ Brushless, single bearing system, flexible disc, 4 poles
- Insulation class H
- Standard degree of protection IP23
- Self-exciting and self-regulating

- Impregnation with tropicalised epoxy varnish
- Solid state Automatic Voltage Regulator
- Stator winding with 2/3 pitch for improved harmonics



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### **CONTROL SYSTEM**

Control supervision and protection panel is mounted on the genset base frame. The control panel varies depending on requirment, in general ignite power generators are equipped with Deep Sea. The main features for Deep Sea are as follows:

#### **KEY BENEFITS**

Hours counter provides accurate information for monitoring and maintenance periods

User-friendly set-up and button or PC using USB layout for ease of use communication

Multiple parameters are monitored simultaneously which are clearly displayed on a large back-lit icon display

• The module can be configured to suit a wide range of applications

Compatible with a wide range of CAN engines, including tier 4 engine support

 Uses DSE Configuration Suite PC Software for simplified configuration

Licence-free PC software IP65 rating (with optional gasket) oers increased resistance to water ingress

#### **KEY FEATURES**

Large back-lit icon display
Heated display option available

 Fully configurable via the fascia or PC using USB communication

Ecient power save mode

3 phase generator sensing 3 phase mains (utility) sensing

(DSE6620 only)

Generator/load power

monitoring (kW, kV A, kV Ar, pf)

Generator overload protection Generator/load current

monitoring and protection

Breaker control via fascia

buttons

Fuel and start outputs (configurable when using CAN)

- 4 configurable DC outputs
- 4 configurable analogue/digital inputs
- 6 configurable digital inputs
- Configurable staged loading outputs

CAN, MPU and alternator speed sensing in one variant

3 engine maintenance alarms

Engine speed protection Engine hours counter

Engine pre-heat

Engine run-time scheduler

Engine idle control for

starting &stopping

Fuel pump control Real time clock

options available Battery voltage

monitoring
Start on low battery

voltage
• Configurable remote

start input1 alternative configurationComprehensive warning,

electrical trip or shutdown protection upon fault condition

LCD and LED alarm indication

Configurable event log (50)



Also Gensets can be equipped with different control panels depending on usage such as:

DSE 6610: Basic Autostart operation with stand alone application

DSE 7310: advanced Autostart operation with high protections

DSE 7320: advanced auto mains failure operation with high protection

DSE 8610: for synchronization application/solution

## OPTIONAL EQUIPMENTS

#### **Diesel Engine**

Oil heater

#### **Alternator**

- 3/4 Pole Output Circuit Breaker
- Anti condensation Heater

#### **Panel**

- Charge ammeter
- Transfer Switch 3Pole
- ♣ Transfer Switch 4 Pole♣ Earth Fault, single set
- Accessories
- Bulk fuel tank
- Automatic filling system
- 4 Fuel water separator filter
- Low fuel level alarm
- Residential silencer
- Enclosure or sound proof canopy
- Trailer
- Manual oil drain pump
- Tool kit for maintenance