

Design for Innovation in Industry

MODEL: IGNITE POWER IP-20



20 kVA / 16 kW POWERED BY PERKINS

DIESEL GENERATING SET 400/230V, 380/220V - 50 Hz

	MODEL		IGNITE POWER IP-20
Power Pf. 0.8	Standby	kVA	22
		kW	18
	Prime	kVA	20
		kW	16

- 4 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: Canopy, sound proof canopy and on road trailer









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ENGINE

Perkins					
Model		404A/D-22G			
Engine Power Output	kWm	19			
at rated rpm	HP	25			
Aspiration and Cooling		Naturally aspirated			
Total Displacement	Litre	2.216			
No. of Cylinders and Build		4 - Inline			
Engine Speed	rpm	1500			
Bore and Stroke	mmxmm	84 x 100			
Compression Ratio		23.3:1			
Governor		Mechanical			
Fuel Consumption at full load	L/hr	5.3			
Fuel Tank Capacity	Litre	8 Hours			
Oil Capacity	Litre	10.6			
Coolant Capacity	Litre	7			
Radiator Cooling Air	m³/min	40.2			
Air Intake – Engine	m³/min	1.45			
Exhaust Gas Flow	m³/min	3.64			

- Heavy duty Perkins diesel engine
- Four stroke, water, cooled, turbo charged
- Direct injection fuel system
- Mechanical Governor system
- 12V D.C. starter motor
- Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Starter battery 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) Optional
- 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	Clockwise
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 3.5%. Non distorting balanced linear load < 5%
Telephone Influence Factor (TIF)	<50
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 input
- 1 alternative configuration Comprehensive warning, electrical trip or shutdown protection upon fault condition

LCD and LED alarm indication

• Configurable event log (50)



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