

IDJ250D

IDEA DIESEL GENERATING SET TECHNICAL SPECIFICATIONS



ELECTRICAL			
FREQUENCY	VOLTAGE	PRIME	STAND-BY
50 Hz	400/230 V	227 kVA / 181 kW	250 kVA / 200 kW
Rated Speed	1500 RPM		
Phase	3		
Power Factor	0,8		

Prime: This rating is for the supply of continuous electrical power at variable load. There is no limitation on the annual hours in operation and 10% overload power can be supplied for 1 hour in 12.

Stand-by: This rating is for the supply of continuous electrical power at variable load, in the event of utility power failure. No overload is permitted.

WEIGHT AND DIMENSIONS				
		OPEN	CANOPY	
Length	mm	2750	3750	
Width	mm	1200	1200	
Height	mm	1650	1900	
Weight	kg	1845	2330	

IDJ250D

ENGINE			
		50 Hz	
Output Rating	kW	227	
Manufacturer and Model		DHI 227TAD	
Fuel		Diesel	
Injection		Direct	
Aspiration		Turbocharged & Intercooled	
Cylinders		6	
Bore and Stroke	mm	114 x 135	
Displacement	lt	8,27	
Cooling		Water	
Engine Oil Specification		SAE 15W40	
Compression Ratio		18:1	
Engine Oil Capacity (Sump Only)	lt	19	
Coolant Capacity (incl.radiator)	lt	42	
Governor		Electronic	
Air Filter		Dry element	
Fuel Consumption		50 Hz	
100 % Load	lt/h	49,4	
75 % Load	lt/h	37	
50 % Load	lt/h	24,7	
EXHAUST SYSTEM			
Maximum Temperature	°C	≤600	
Exhaust Gas Flow	m³/min	40	
Maximum Allowed Back Pressure	kPA	6	
Exhaust Flange Size (Internal Dia.)	mm	84	
AIR SYSTEM			
Intake Air Flow	m³/min	20,4	
Total Cooling Air Flow	m³/min	270	
STARTING SYSTEM			
	kW	8	
Starter Motor	Ah	2 x 105	
Battery Capacity Auxiliary Voltage	V	2 x 105	
Auxiliary voicage	V	24	
FUEL SYSTEM			
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		FN590	
Diesel Specification	lt lt	EN590 370	
	lt	EN590 370	
Diesel Specification Fuel Tank Capacity	lt		
Diesel Specification Fuel Tank Capacity ALTERNATOR	lt lt	370	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles	lt	370 4 pole	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections	lt	370 4 pole Star	
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Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections	lt	370 4 pole Star	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections Insulation Enclosure	It	370 4 pole Star Class H IP23	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections Insulation Enclosure Exciter System	It	370 4 pole Star Class H IP23 Self regulating Brushless	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections Insulation Enclosure Exciter System Voltage Regulator	It	370 4 pole Star Class H IP23 Self regulating Brushless AVR	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections Insulation Enclosure Exciter System Voltage Regulator Steady State Voltage Regulation	It	370 4 pole Star Class H IP23 Self regulating Brushless AVR ± 1 %	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections Insulation Enclosure Exciter System Voltage Regulator Steady State Voltage Regulation Bearing	It	370 4 pole Star Class H IP23 Self regulating Brushless AVR ± 1 % Single bearing sealed	
Diesel Specification Fuel Tank Capacity ALTERNATOR Poles Winding Connections Insulation Enclosure Exciter System Voltage Regulator Steady State Voltage Regulation	It	370 4 pole Star Class H IP23 Self regulating Brushless AVR ± 1 %	

The IDP500 is next generation genset control unit combining multi-functionality and wide communication possibilities together with a reliable and low cost design.

The unit complies and mostly exceeds world's tightest safety, EMC, vibration and environmental standards for the industrial category. Software features are complete with easy firmware upgrade process through USB port. The Windows based PC software allows monitoring and programming through USB, serial and GPRS.



CONTROL PANEL FEATURES					
Alarm and Shutdown functions					
High Coolant Temperature	Alarm & Shutdown				
Low Oil Pressure	Alarm & Shutdown				
Battery High / Low Voltage	Alarm				
Battery Charger Alternator Failure	Alarm				
Overspeed / Underspeed	Alarm & Shutdown				
Failure to Start	Alarm & Shutdown				
Low Coolant Level	Alarm & Shutdown				
Stop Fault	Alarm & Shutdown				
Low Fuel Level	Alarm				
Service Required	Alarm				
Generator High / Low Voltage	Alarm & Shutdown				
Generator High / Low Frequency	Alarm & Shutdown				
Symmetry between Phases	Alarm & Shutdown				
Over Current	Alarm & Shutdown				
Recitifer Fail	Alarm				
ECU failure	Alarm				
Measure and Monitor functions					
Total Run Hour	Coolant Temperature				
kW meter - Generator	Oil Pressure				
Service Indicator	Fuel Level				
Phase to Phase Voltage - Mains	Battery Voltage				
Phase to Neutral Voltage - Mains	Engine RPM				
Phase to Phase Voltage - Generator	Battery Charge Alternator Voltage				
Phase to Neutral Voltage - Gen.	Frequency - Generator & Mains				
Phase current - Generator	Power Factor - Generator				
Other functions					
Events History	Programmable Timer				
External Start Capability	Multi Lingual				
Start Restriction Program	Lamp test				
Mains Failure Start	Remote Monitoring				
Test Run Start (On load & off Load)	Manual Override				
Allows SMS controls	Remote Programming				
Fuel consumption counter	Magnetic Pick Up Input				
Waveform display of voltage & current	Total Harmonic Distortion view				
Programmable as an ATS controller	Manual "speed fine adjust" on selected ECUs				
Standardized USB port for programming	J1939-CANBUS for electrocially governed				
and communication	engines				

GENERATOR FEATURES	STANDARD		OPTIONAL
ENGINE	MANUAL	AUTOMATIC	
Engine		•	Х
Cooling Pack			Χ
Tropical Radiator	Х		•
Heavy Duty Air Filter	X		•
Electronic Governor		Χ	•
High Coolant Temperature Sender		•	Х
Low Oil Pressure Sender		•	Х
Low Coolant Level Sender		•	Х
Radiator Guards		•	Х
Hot Component Guards		•	Х
Manual Oil Drain Pump		Χ	•
Fuel Prefilter		Х	•
Water Jacket Heater	Х	•	• (Manual)
Industrial Silencer - Open Set		•	Х
Residential Silencer - Open Set		Χ	•
Residential Silencer - Canopy		•	Х
Cold start aid		Χ	•
Remote Radiator	X		•
Trailer		Χ	•
ELECTRICS			
Alternator	•		X
Circuit Breaker - 3 poles		X	
Circuit Breaker - 4 poles	X		•
Battery Isolator	X		•
Earth Fault Protection	X		•
Anti condensation Heater	X		•
Optional Voltages	X		•
Class F insulation	X		•
External Stop Button - Canopy	•		Х
GSM SMS message sending on fault	X		•
Battery Charger	X	•	(Manual)
ATS Panel - 3 Poles	X	•	X
ATS Panel - 4 Poles	X	Х	• (Automatic)
Synchronisation Panel	Х	X X	(Automatic) Not Available

• - Available X - Not Available

REFERENCE STANDARDS

IDEA Generating Sets are CE certified and conform to the following standards;

- Power according to ISO 3046 and ISO 8528
- EN 12100, EN 13857, EN 60204
- 2006/42/CE Machinery Safety
- 2006/95/EC Low Voltage
- 2004/108/CE EMC
- Ambient reference conditions 1000 mbar, 25 °C, 30 % relative humidity ISO8528

All the information in this leaflet is intended for general purposes only.IDEA reserves the right to change the specifications without notice.

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