

IDJ110D

IDEA DIESEL GENERATING SET TECHNICAL SPECIFICATIONS



ELECTRICAL			
FREQUENCY	VOLTAGE	PRIME	STAND-BY
50 Hz	400/230 V	100 kVA / 80 kW	110 kVA / 88 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	2300	3200
Width	mm	1100	1100
Height	mm	1450	1700
Weight	kg	1290	1570

IDJ110D

SO Hz				
Output Rating kW 94 Manufacturer and Model DH R6105ZD-1 Fuel Diesel Injection Direct Aspiration Turbocharged Cylinders 6 Bore and Stroke mm 105 x 125 Displacement lt 6,49 Cooling Water Engine Oil Specification Compression Ratio SAE 15W40 Compression Ratio 16:1 Engine Oil Capacity (Sump Only) lt 15 Coolant Capacity (incl.radiator) lt 25 Governor Mechanical Mechanical Air Filter Dry element Dry element Fuel Consumption 50 Hz 100 % Load lt/h 22 15 % Load lt/h 16:5 50 Hz 100 % Load lt/h 11 EXHAUST SYSTEM Maximum Temperature °C \$600 \$8.40 6,5 \$8.40 6,5 \$8.40 6,5 \$8.40 6,5 \$8.40 6,5 \$8.40 6,5 </th <th>ENGINE</th> <th></th> <th>50 Hz</th>	ENGINE		50 Hz	
Manufacturer and Model	Output Rating	kW		
Injection			DHI R6105ZD-1	
Aspiration	Fuel		Diesel	
Cylinders 6 Bore and Stroke mm 105 x 125 Displacement lt 6,49 Cooling Water Engine Oil Specification Compression Ratio 16:1 16:1 Engine Oil Capacity (Sump Only) lt 15 Coolant Capacity (incl.radiator) lt 25 Governor Mechanical Air Fitter Dry element Fuel Consumption 50 Hz 100 % Load lt/h 22 75 % Load lt/h 16,5 50 % Load lt/h 11 EXHAUST SYSTEM Maximum Temperature °C ≤600 Exhaust Gas Flow m³/min 8,93 Maximum Allowed Back Pressure kPA 6,5 Exhaust Flange Size (Internal Dia.) mm 76 AIR SYSTEM Intake Air Flow m³/min 8,46 Total Cooling Air Flow m³/min 70 STARTING SYSTEM Starter Motor kW 6	Injection		Direct	
Cylinders 6 Bore and Stroke mm 105 x 125 Displacement lt 6,49 Cooling Water Engine Oil Specification Compression Ratio 16:1 Engine Oil Capacity (Sump Only) lt 15 Coolant Capacity (Sump Only) lt 25 Governor Mechanical Air Filter Dry element Fuel Consumption 50 Hz 100 % Load lt/h 22 75 50 Hz 100 % Load lt/h 16,5 50 % Load lt/h 11 11 11 EXHAUST SYSTEM Waximum Temperature °C \$600 \$6	Aspiration		Turbocharged	
Displacement	Cylinders			
Cooling Water Engine Oil Specification SAE 15W40 Compression Ratio 16:1 Engine Oil Capacity (Sump Only) It 15 Coolant Capacity (incl.radiator) It 25 Governor Mechanical Air Filter Dry element Fuel Consumption 50 Hz 100 % Load 1t/h 22 75 % Load 1t/h 16,5 50 % Load 1t/h 11 11 EXHAUST SYSTEM Maximum Temperature °C \$600 \$8.93 \$9.3	•	mm	105 x 125	
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Fuel Consumption	Governor		Mechanical	
100 % Load	Air Filter		Dry element	
15 % Load	Fuel Consumption		50 Hz	
EXHAUST SYSTEM		lt/h	22	
EXHAUST SYSTEM Maximum Temperature "C	75 % Load	lt/h	16,5	
Maximum Temperature °C ≤600 Exhaust Gas Flow m³/min 8,93 Maximum Allowed Back Pressure kPA 6,5 Exhaust Flange Size (Internal Dia.) mm 76 AIR SYSTEM Intake Air Flow M³/min M³/min M³/min To STARTING SYSTEM Starter Motor kW 6 Battery Capacity Ah 2 x 72 Auxiliary Voltage V 24 FUEL SYSTEM Diesel Specification Fuel Tank Capacity It 155 ALTERNATOR Poles Winding Connections Star Insulation Class H Enclosure IP23	50 % Load	lt/h	11	
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AIR SYSTEM Intake Air Flow m³/min 8,46 Total Cooling Air Flow m³/min 70 STARTING SYSTEM Starter Motor kW 6 Battery Capacity Ah 2 x 72 Auxiliary Voltage V 24 FUEL SYSTEM Diesel Specification EN590 Fuel Tank Capacity It 155 ALTERNATOR Poles 4 pole Winding Connections Star Insulation Class H Enclosure Image: M³/min 8,46 M³/min 9,0 EN590 EN590 Fuel Tank Capacity It 155	Maximum Allowed Back Pressure	kPA	6,5	
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Winding Connections Star Insulation Class H Enclosure IP23		1	A 1	
Insulation Class H Enclosure IP23			·	
Enclosure IP23				
	Insulation		Class H	
	Enclosure		IP23	
Exciter System I I Self regulating Brushless	Exciter System		Self regulating Brushless	
			AVR	
, , ,			± 1 %	
			Single bearing sealed	
Coupling Flexible disc	Coupling		Flexible disc	
1 0	Cooling	1	Direct drive centrifugal blower fan	

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		•	Х
Tropical Radiator		Χ	•
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		Χ	•
Trailer		Χ	•
ELECTRICS			
Alternator		•	Х
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	•		X
GSM SMS message sending on fault	X		•
Battery Charger	Х	•	• (Manual)
ATS Panel - 3 Poles	X	•	X
ATS Panel - 4 Poles	Х	Х	• (Automatic)
Synchronisation Panel	X	X	(Automatic)

• - 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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