

AD880-6



AKSA Power Generation has been producing industrial generator sets with an innovative compact design and excellence in quality for over **30 years**. AKSA has been providing reliable power through three main production plants and over 15 branch offices worldwide.





General Characteristics

Model Name	AD880-6	Frequency / PF	60Hz, 1800 rpm, 0.8pf
Engine Make & Model	Doosan DP222LB	Alternator Make	Stamford
Control Panel Model	DSE 7320	Base Frame / Enclosure	AKSA MS85 / AK90

Genset Rating - 60Hz, 1800rpm, 0.8pf

Engine	Alternator	Voltage	Standby Power	Prime Power	Standby Current
	HCI544F (Wnd-311)	480 / 277V	88okVA	8ookVA	1059A
DP222LB	HCI544F (Wnd-14)	380 / 222V	88okVA	800kVA	1337A
DP222LB	HCI634G (Wnd-311)	220 / 127V	88okVA	800kVA	2309A
	HCI634G (Wnd-311)	208 / 120V	88okVA	8ookVA	2449A

Stand-by Power (Maximum): Power available at variable load in the event of main power network failure. No over load is permitted.

Prime Power: Power available at variable load in lieu of a main power network. Overload of 10% is permitted for 1 hour in every 12 hours of operation. The above ratings represent the engine performance capabilities to conditions specified in accordance with ISO 8528/5 & ISO3046.

Derating may be required for conditions outside of the test conditions.

Codes & Standards

The Generator set is designed and manufactured in a facility certified to **ISO9001** standards.

The Generator set is designed and manufactured in a facility certified to ISO14001:2015 standards.

AKSA Power Generation provides single source responsibility for the generator set & accessories.

The generator set, with its components, are **prototype tested** and **production tested**











AD880-6



Engine Data	
Manufacturer	Doosan
Model	DP222LB
Displacement & Cylinders	21.927 L / 12 Cylinders
Engine Speed	1800rpm
Engine Standby Power	782 Kw
Engine Prime Power	711 kW
Aspiration	Turbocharged&Intercooled
Compression Ratio	15: 1
Bore / Stroke	128 mm / 142 mm
Break Mean Effective Pressure	2.37 Mpa
Mean Piston Speed	
Over Speed Limit	1980 rpm
Friction Power	66 kW
Dry Weight – w/fan	1420 kg
Sound Pressure at Rated Power	102.11 dB(A)

Lubrication System	
Oil Capacity, Max	40 L
Oil Capacity, Min	27 L
Max Oil Temp	120 °C
Min Oil Pressure	250 kPa

Air Intake System	
Max Intake Air Restriction	2.16 kPa – Clean Element
Max Intake Air Restriction	6.23 kPa – Dirty Element
Max Static Pressure After Rad	0.125 kPa

Electric System	
Engine Cranking Motor	24V
Engine Battery Charge System	Negative Ground
Battery Qty, Rating, CCA	2 x 120Ah
Cooling System	
Cooling Fan	Blower Type, 7 Blades
Pressure Cap Setting	49 kPa
Coolant Capacity	114 L
Max Water Temperature	103 °C
Thermostat Range	71–85 °C
Exhaust System	
Max Allowable Back Pressure	5.9 kPa
Fuel System	
	10.00

Injector Pump Type	Bosch In-line
Fuel Feed Pump Capacity	630
Max Fuel Inlet Restriction	10 kPa
Max Fuel Return Restriction	60 kPa

Fuel Consumption	
Standby Power (110%)	192.8 L/h
Prime Power (100%)	172.7 L/h
Prime Power (75%)	127.7 L/h
Prime Power (50%)	87.1 L/h
Prime Power (25%)	46.9 L/h



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Alternator Data

Manufacturer

Standards BS EN 60034

Control System Self Excited

A.V.R. AS440

Voltage Regulation \pm 1 %

Insulation System Class H

Protection IP23

Rated Power Factor 0.8

Stator Winding Double Layer Concentric

Winding Pitch Two Thirds

Winding Leads 12

Telephone Interference THF < 2 %

Waveform Distortion No Load < 1.5 %

Maximum Over speed 2250 rev/min

Battery Charger & Electrical System Data

Manufacturer AKSA

Model SmartGen BACo6A

Input Voltage 100V ~ 250V AC

Output Voltage / Current 27,6V DC / 3A

Jacket Water Heater Data

Manufacturer AKSA

Model HTR3000

Input Voltage Based on Gen Voltage

Power 3000W

Controller Data

Manufacturer DSE Stamford

Model 7320

Type Auto Mains Failure Control

Controller Features & Benefits

Microprocessor controlled

License free PC Software

IP65 rating offers increased resistance to water ingress

Modules can be integrated to building management systems

Real time clock provides accurate event log

Four line back-lit LCD text display

Five key menu navigation

Front panel editing with PIN protection

Support up to three remote display modules

Configurable timers and alarms

Multiple date and timer scheduler

Integral PLC editor

'Protections disabled' feature

kW & kVAr protection

Reverse power (kW & kVAr) protection

Power monitoring (kWh, kVAr, kVAh, kVArh)

Load switching (load shedding and dummy load outputs)

Unbalanced load protection

Independent Earth Fault trip

Fully configurable via DSE Configuration Suite PC Software

SCADA monitoring via DSE Configuration Suite PC Software





Enclosure Features

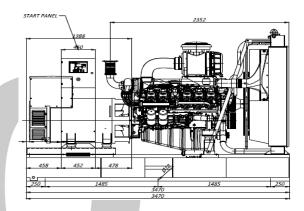
- ✓ Heavy Duty Steel Structure
- ✓ E-Stop on Enclosure
- ✓ Control Panel Eliminated from Engine Vibrations
- ✓ Control Panel Window
- ✓ Plastic Covered Corrosion Resistant Locks & Hinges

Enclosure Features

- ✓ Internally Mounted Exhaust System with Rain Cap
- ✓ Coolant Fill Cap
- ✓ Top Lifting Feature
- ✓ Base Fuel Tank
- ✓ Easy Access for Maintenance

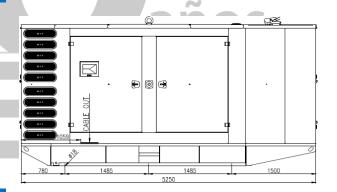
Open Skid Gen-Set Dimensions

Length	3470 mm
Width	1550 mm
Height	2301 mm
Dry Weight	4190 kg
Tank Capacity	1000 L



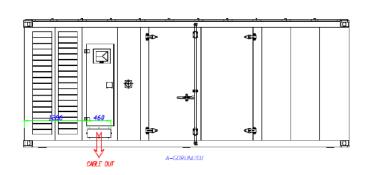
Enclosed Gen-Set Dimensions @480&380v Conf.

Length	5250 mm
Width	1605 mm
Height	2656 mm
Dry Weight	5400 kg
Tank Capacity	1000 L
Sound Pressure @ 7 meters	86 dB(A)



Enclosed Gen-Set Dimensions @208&220v Conf.

Length	6500 mm
Width	2200 mm
Height	2353 mm
Dry Weight	6600 kg
Tank Capacity	1100 L
Sound Pressure @ 7 meters	TBD









Standard Features & Accessories

- ✓ Heavy Duty Steel Base Frame
- ✓ Integral Fuel Tank
- ✓ Fuel Drain Plug
- ✓ Control Panel Window
- ✓ Engine Jacket Water Heater
- ✓ Battery and Battery Rack
- ✓ Battery Charger
- ✓ Radiator fill cap on enclosure
- ✓ Anti Vibration Pads between Engine/Alternator & Base Frame
- ✓ Residential Grade Silencer Inside Enclosure
- ✓ Industrial Grade Silencer Set for Open Skid Sets
- ✓ Sound Absorb Foam for Enclosure
- ✓ Air Inlet & Outlet Rodent Guards
- ✓ Oil Drain Valve
- ✓ Coolant Drain Valve
- ✓ Flex Fuel Lines
- ✓ Air Filter Restriction Gauge
- ✓ Engine Manifold Cover
- ✓ Turbocharger Cover
- ✓ Protection Covers for Rotating Parts
- ✓ Exhaust Insulation Cover
- ✓ Control Panel Window
- ✓ Operations Manual
- ✓ 24 Months / 2000 hours Limited Standby Warranty

Optional Accessories

- ☐ Main Line CB (3 / 4 Poles)
- □ PMG
- □ Voltage Regulation ±0.5% w/MX321AVR
- Anti-condensation Heater
- ☐ Standalone Bulk Fuel Tank
- ☐ Fuel Level Display & Alarm on Controller
- ☐ Low / High Fuel Alarms
- ☐ Fuel Water Separator Filter
- ☐ Auto Fuel Fill Control System
- ☐ Oil Temperature Display on Controller
- ☐ Manual Speed Adjust Rheostat
- Manual Voltage Adjust Rheostat
- ☐ Remote Annunciator Panel
- ☐ Remote Control & Monitoring Panel
- ☐ Advanced SMS Messaging
- ☐ Control Panel Heater
- Battery Disconnect Switch
- □ Battery Heater
- ☐ 10A Battery Charger
- ☐ Battery Charge Ammeter
- ☐ Tool Kit for Maintenance
- Power Plug Outlet Kit
- ☐ Automatic Transfer Panel (ATS) Contactor Design
- ☐ Automatic Transfer Panel (ATS) Changeover Design

 ${\rm *Manufacturer\ reserves\ the\ right\ to\ make\ changes\ in\ model,\ technical\ specifications,\ color,\ equipment\ and\ accessories\ without\ prior\ notice.}$

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