



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	APD-ULP13
Engine Make	Perkins
Engine Model	403D-15G
Alternator Make	Stamford
Control Panel Make & Model	DSE 7320
Frequency & Speed	60Hz, 1800rpm
Enclosure Make & Model	AKSA AUL 21



Genset Rating

Engine	Alternator	Voltage	Standby Power	Power Factor	Standby Current
403D-15G	PI044G (Wnd-311)	480 / 277V	13kW	0.8	19.6A
	PI044G (Wnd-06)	240 / 120V, 1ph	13kW	1	31.3A
	PI044G (Wnd-311)	208 / 120V	13kW	0.8	45.2A
	PI044G (Wnd-17)	600 / 347V	13kW	0.8	15.7A

***EPA – Certified for Emergency Stationary Applications**

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** according to the UL test program.

The generator set meets **NFPA70, 99, 110, 37** Level 1 when equipped with the necessary accessories and installed per NFPA standards.



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


Engine Data

Manufacturer	Perkins
Model	403D-15G
Displacement & Cylinders	1.496 L / 3 Cylinders
Engine Speed	1800rpm
Engine Standby Power	15.9 Kw
Engine Prime Power	14.4 kW
Aspiration	Naturally aspirated
Compression Ratio	22.5 : 1
Bore / Stroke	84 mm / 90 mm
Break Mean Effective Pressure	721.9 kPa
Engine Coolant Flow	45.4 l/min
Combustion Air Flow	1.23 m ³ /min
Exhaust Gas Flow	3.36 m ³ /min
Exhaust Gas Temperature	505 °C
Overall Thermal Efficiency	34 %
Speed Variation at Constant Load	±0.75 %

Fuel System

Combustion System	Indirect Injection
Nozzle Opening Pressure	14.7 Mpa
Fuel Lift Pump Flow/hour	63 liters/hr

Fuel Consumption

Standby Power (100%)	1.05 gal/h
Prime Power (100%)	0.95 gal/h
Prime Power (75%)	0.74 gal/h
Prime Power (50%)	0.53 gal/h

Electric System

System Voltage	12V
Alternator	65A, 12V
Battery Qty, Rating	1 x 36Ah

Cooling System

Radiator Face Area	0.167 m ²
Fan Number of Plates/Material	7 / Plastic
Total System Capacity	6 L (1.7 gal)
Max Top Tank Temperature	112 °C
Thermostat Range	82 – 95 °C

Exhaust System

Exhaust Temperature	505 °C
Maximum Back Pressure	10.2 kPa
Exhaust Gas Flow	3.36 m ³ /min

Air Intake System

Combustion Air Flow	1.23 m ³ /min
Max Intake Air Restriction (Clean Element)	3 kPa
Air Filter Type	Dry Paper Element

Lubrication System

Total System Capacity	6 L (1.6 gal)
Normal Oil Temp	125 °C
Oil Pressure – relief valve opens	262 – 359 kPa



Alternator Data

Manufacturer	Stamford
Standards	BS EN 60034
Control System	EBS
A.V.R.	AS480
Voltage Regulation	± 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	ComAp
Model	InteliCharger
Input Voltage	85V ~ 264V AC
Output Voltage / Current	13.8V Float / 4A pk

Jacket Water Heater Data

Manufacturer	Hotstart
Model	TPS051GT10-000
Input Voltage	120V
Power	500W

Controller Data

Manufacturer	DSE
Model	7320 MK II

Controller Features & Benefits

- Microprocessor controlled, UL & NFPA110 Compatible
- License free PC Software (Non-proprietary 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, two wire start/stop at Auto mode
- 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
- Load switching (load shedding and dummy load outputs)
- Fully configurable via DSE Configuration Suite PC Software
- SCADA monitoring via DSE Configuration Suite PC Software

Protection

- ✓ Gen. Voltage – under / over
- ✓ Gen. Freq. – under / over
- ✓ Engine Speed – under / over
- ✓ Engine Oil Pressure – low
- ✓ Engine Temp – low / high
- ✓ Battery Voltage – low / high
- ✓ Weak Battery
- ✓ Fail to Start / Stop
- ✓ Charge Alternator Fail
- ✓ Over Current & Load (kW/kVAr)
- ✓ Unbalanced Load
- ✓ Independent Earth Fault
- ✓ Reverse Power
- ✓ Loss of Speed Signal

Instruments

- ✓ Gen. Voltage (L-L/L-N)
- ✓ Gen. Frequency
- ✓ Engine speed
- ✓ Oil Pressure
- ✓ Water Temperature
- ✓ Battery Voltage
- ✓ Run Time
- ✓ Phase Sequence
- ✓ Power monitoring (kWh/kVAh/kVArh)
- ✓ Power (kWh/kVAh/kVArh)
- ✓ Power Factor
- ✓ Generator Current
- ✓ Generator Load (%)
- ✓ Earth Current



Enclosure Features

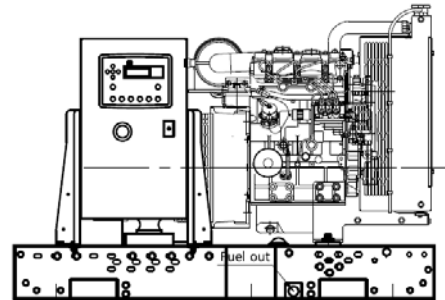
- ✓ Heavy Duty Steel / Aluminum Structure
- ✓ E-Stop on Enclosure
- ✓ Control Panel Eliminated from Engine Vibrations
- ✓ Standard Sound Attenuation Foam
- ✓ Plastic Covered Corrosion Resistant Locks & Hinges

Enclosure Features

- ✓ Internally Mounted Exhaust System with Rain Cap
- ✓ Coolant Fill Cap
- ✓ Removable Base Frame Lifting Hooks
- ✓ Oil & Coolant Drain Ports
- ✓ Easy Access for Maintenance

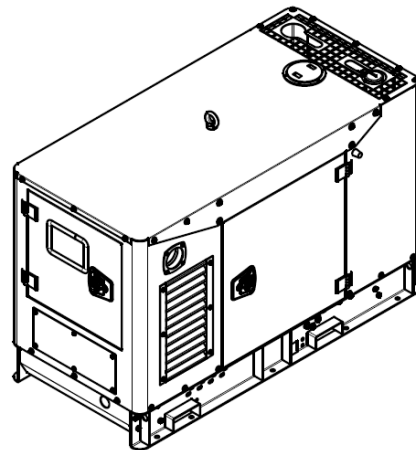
Enclosed Gen-Set Dimensions – Open

Length	66 in
Width w/o lift hooks	30 in
Height	32 in
Dry Weight	700 lb



Enclosed Gen-Set Dimensions

Length	66 in
Width w/o lift hooks	30 in
Height	41 in
Dry Weight	1100 lb
Sound Pressure @ 7 meters	69 dBA



Fuel Tank - UL142 Listed Base Design

Size	24hr (25gal)	48hr (50gal)	72hr (75gal)
Dimensions (L/W/H) (in)	80 / 30 / 8	80 / 30 / 12	80 / 30 / 18
Weight (lb)	525	625	750

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

**Standard Features & Accessories**

- ✓ UL2200 Certification
- ✓ Heavy Duty Steel Base Frame
- ✓ EBS
- ✓ Engine Jacket Water Heater
- ✓ Battery and Battery Rack
- ✓ Battery Charger
- ✓ Anti Vibration Pads between Engine/Alternator & Base Frame
- ✓ Critical Grade Silencer Inside Enclosure
- ✓ Residential Grade Silencer Set for Open Skid Sets
- ✓ Exhaust outlet rain cap and radiator fill cap
- ✓ Sound Absorb Foam Material for Enclosure
- ✓ Emergency Stop Button
- ✓ Oil Drain Valve
- ✓ Coolant Drain Valve
- ✓ Jacket Water Heater Isolation Valves
- ✓ Flex Fuel Lines
- ✓ Air Filter Restriction Gauge
- ✓ Engine Manifold Cover
- ✓ Turbocharger Cover
- ✓ Protection Covers for Rotating Parts
- ✓ Exhaust Insulation Cover
- ✓ Enclosure DC Light
- ✓ Operations Manual
- ✓ 24 Months / 2000 hours Limited Standby Warranty

Optional Accessories

- Main Line CB (3 / 4 Poles – 80% / 100% rated)
- Upsize Alternator
- Anti-condensation Heater
- Sub Base Fuel Tank (UL142 / UL2085)
- Fuel Level Display on Controller
- Fuel Level 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
- Battery Charger 10/20 Amp
- Shunt Trip / Aux Contacts
- Spring Anti-vibration Isolators
- Automatic Transfer Panel (ATS)
- 5 Years / 2000 hours Limited Comprehensive Warranty

AKSA POWER GENERATION USA LLC

371 Exchange Street, West Monroe,
Louisiana, 71292

Tel: 318.855.8377 Fax: 318.855.8381

E-mail: sales@aksausa.com

AKSA Power Generation USA is a member of

**KAZANCI HOLDING****DISTRIBUTED BY:**