



**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-ULM2000

Engine Make Mitsubishi

Engine Model S16R-Y2PTAW2-1

Alternator Make Stamford

Control Panel Make & Model DSE 7320

Frequency & Speed 60Hz, 1800rpm

Enclosure Make & Model AKSA ISO Container UL







#### **Genset Rating**

| Engine             | Alternator       | Voltage    | Standby Power | Power Factor | Standby<br>Current |
|--------------------|------------------|------------|---------------|--------------|--------------------|
| S16R-<br>Y2PTAW2-1 | PI734F (Wnd-312) | 480 / 277V | 2000kW        | 0.8          | 3007A              |
|                    | S7L1D-G (Wnd-7)  | 600 / 347V | 2000W         | 0.8          | 2406A              |

#### \*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 ISO 14001:2015 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.















| Engine Data  |                            | Electric System                                   |                              |
|--|----------------------------|---|------------------------------|
| Manufacturer   | Mitsubishi                 | Battery Charge Alternator                         | 24V / 30Ah                   |
| Model  | S16R-Y2PTAW2-1             | Starting Motor Capacity                           | 7.5 kW x 2                   |
| Displacement & Cylinders                             | 65.37 L 16 Cylinders       | Battery Qty, Rating, CCA                          | 4 x 200Ah, 1150CCA           |
| Engine Speed   | 1800rpm                    |   |                              |
| Engine Standby Power wo/Fan                          | 2180 kW                    | Cooling System                                    |                              |
| Engine Prime Power wo/Fan                            | 1982 kW                    | Radiator Cooling System Type                      | Closed Circuit               |
| Aspiration   | Turbo-charged, InterCooler | Radiator Ambient Temp                             | > 50 °C                      |
| Compression Ratio                                    | 14:1                       | Coolant Capacity, Engine Only                     | 44.9 gal                     |
| Bore / Stroke  | 170 mm / 180 mm            | (Jacket & Air Cooler)  Max Coolant Temp at Engine | 208 °F                       |
| Break Mean Effective Pressure                        | 323 psi                    | Outlet  Thermostat, Start – Fully Open            | 160–185 °F                   |
| Mean Piston Speed                                    | 10.8 m/s                   | ritermostat, start – Funy Open                    | 100-165 r                    |
| Allowable Fan Loss Power                             | 50 kW                      | Exhaust System                                    |                              |
| Max Regenerative Power<br>Absorption Capacity wo Fan | 192 kW                     | Exhaust Outlet Size                               | 202 mm                       |
| Steady State Speed Stability                         | $\pm$ 0.25 %               | Max Allowable Back Pressure                       | 600 mmH2O                    |
| Max Over Speed Capacity                              | 2100 rpm                   | Exhaust Gas Flow                                  | 544 m³/min                   |
| Wet Weight – Engine Only                             | 15060 lb                   | Exhibits (das Flow                                | J44 III / IIIIII             |
| Fuel System  |                            | Air Intake System                                 |                              |
| Fuel Injector  | Mitsubishi PS8 Type x 2    | Intake Air Flow                                   | $206 \text{ m}^3/\text{min}$ |
| Max Suction of Feed Pump                             | 75 mmHg                    | Max Intake Air Restriction<br>(Clean Element)     | 400 mmH2O                    |
| Max Static Head of Return &<br>Leak Pipe             | 150 mmHg                   | Air Filter Type                                   | Dry Paper Element            |
| Fuel Consumption                                     |                            | Lubrication System                                |                              |
| Standby Power (110%)                                 | 160.0 gal/h                | Total System Capacity                             | 60.8 gal                     |
| Prime Power (100%)                                   | 141.0 gal/h                | Sump Capacity Max / Min                           | 53 gal / 37 gal              |
| Prime Power (75%)                                    | 106.2 gal/h                | Max Oil Temp                                      | 230 °F                       |
| Prime Power (50%)                                    | 71.4 gal/h                 | Oil Pressure at Rated Speed                       | 71 – 93 psi                  |
| Prime Power (25%)                                    | 40.5 gal/h                 |   |                              |

www.aksausa.com www.aksalatam.cor

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



Power

# APD-ULM2000



| Alternator Data                 |                         | Controller Data   | Controller Data  |  |  |
|---------------------------------|-------------------------|---|--|--|--|
| Manufacturer                    | Stamford                | Manufacturer  | DSE  |  |  |
| Standards                       | BS EN 60034             | Model   | 7320   |  |  |
| Control System                  | PMG                     | Type  | Auto Mains Failure Control                               |  |  |
| A.V.R.                          | MX321                   |   |  |  |  |
| Voltage Regulation              | $\pm$ 0.5 %             | Controller Features & Benefits  |  |  |  |
| Insulation System               | Class H                 | Microprocessor controlled   | Microprocessor controlled                                |  |  |
| Protection                      | IP23                    | License free PC Software  |  |  |  |
| Rated Power Factor              | 0.8                     | IP65 rating offers increase   | IP65 rating offers increased resistance to water ingress |  |  |
| Stator Winding                  | Double Layer Concentric | Modules can be integrated to building management systems  Real time clock provides accurate event log |  |  |  |
| Winding Pitch                   | Two Thirds              |   |  |  |  |
| Winding Leads                   | 12                      | Four line back-lit LCD tex  | t display  |  |  |
| Telephone Interference          | THF < 2 %               | Five key menu navigation  |  |  |  |
| Waveform Distortion             | No Load < 1.5 %         | Front panel editing with P  | IN protection  |  |  |
| Maximum Over speed 2250 rev/min |                         | Support up to three remote display modules  |  |  |  |
|                                 |                         | Configurable timers and a   | larms  |  |  |
| Battery Charger & Electr        | rical System Data       | Multiple date and timer so  | cheduler   |  |  |
| Manufacturer                    | ComAp                   | Integral PLC editor   |  |  |  |
| Model                           | InteliCharger           | 'Protections disabled' feat   | ure  |  |  |
| Input Voltage                   | 85V ~ 264V AC           | kW & kVAr protection  |  |  |  |
| Output Voltage / Current        | 27.2V Float / 2.5A pk   | Reverse power (kW & kVAr) protection  |  |  |  |
|                                 |                         | Power monitoring (kWh, l  |  |  |  |
| Jacket Water Heater Dat         |                         |   | lding and dummy load outputs)                            |  |  |
| Manufacturer                    | Hotstart                | Unbalanced load protection  |  |  |  |
| Model                           | CSM10902-000            |   |  |  |  |
| Input Voltage                   | 240V                    | Independent Earth Fault t   | лф   |  |  |

Fully configurable via DSE Configuration Suite PC Software

SCADA monitoring via DSE Configuration Suite PC Software

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

9000W





#### **Enclosure Features**

- ✓ Heavy Duty Steel ISO Container
- ✓ E-Stop on Enclosure
- ✓ Control Panel Eliminated from Engine Vibrations
- ✓ Standard Sound Attenuation Foam
- √ Stainless Steel Locks & Hinges

#### **Enclosure Features**

- ✓ Externally Mounted Exhaust System with Rain Cap
- Sound Absorb Louvers
- ✓ Container Lifting Hooks
- ✓ Oil & Coolant Drain Ports
- ✓ Easy Access for Maintenance

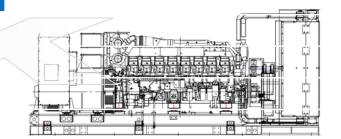
### **Open Skid Gen-Set Dimensions**

Length 229.1 in

Width 88.7 in

Height 119 in

Dry Weight 33070 lb



#### **Enclosed Gen-Set Dimensions – ISO Container**

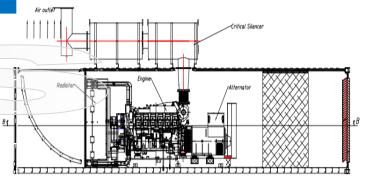
Length 480 in

Width 96 in

Height 181 in (114 in w/o silencer)

Dry Weight 63935 lb

Sound Pressure @ 7 meters 84 dB(A)



### Fuel Tank - UL142 Listed Base Design

Size 24hr (3840gal) 48hr (768-gal) 72hr (9300gal)

Dimensions (L/W/H) (in) 500 / 106.5 / 28 TBD

Weight (lb) 11800 TBD TBD





## Standard Features & Accessories **Optional Accessories** ✓ UL2200 Certification ☐ Main Line CB (3 / 4 Poles – 80% / 100% rated) Heavy Duty Steel Base Frame Upsize Alternator PMG w/MX321 AVR ■ Digital AVR **Engine Jacket Water Heater** ☐ Anti-condensation Heater **Battery and Battery Rack** ☐ Sub Base Fuel Tank (UL142 / UL2085) **Battery Charger** □ Fuel Level Display & Alarm on Controller Anti Vibration Pads between Engine/Alternator & Base Frame ☐ Low / High Fuel Alarms Critical Grade Silencer Inside Enclosure ■ Fuel Water Separator Filter Residential Grade Silencer Set for Open Skid Sets Auto Fuel Fill Control System Exhaust outlet rain cap and radiator fill cap □ Oil Temperature Display on Controller Sound Absorb Foam Material for Enclosure ☐ Manual Speed Adjust Rheostat **Emergency Stop Button** ■ Manual Voltage Adjust Rheostat Oil Drain Valve Remote Annunciator Panel Coolant Drain Valve ☐ Remote Control & Monitoring Panel Jacket Water Heater Isolation Valves Advanced SMS Messaging Flex Fuel Lines Control Panel Heater Air Filter Restriction Gauge ■ Battery Disconnect Switch **Engine Manifold Cover** ■ Battery Heater **Turbocharger Cover** ☐ Battery Charger 10/20 Amp **Protection Covers for Rotating Parts** ☐ Shunt Trip / Aux Contacts **Exhaust Insulation Cover** Spring Anti-vibration Isolators **Enclosure DC Light**

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

Automatic Transfer Panel (ATS)

☐ 5 Years / 2000 hours Limited Comprehensive Warranty

**Aksa Power Generation USA** 371 Exchange Street, West Monroe, LA 71292

**Operations Manual** 

T: + 1 318 8558377 sales@aksausa.com

24 Months / 2000 hours Limited Standby Warranty

Aksa Power Generation
USA & LATAM
a member of

KAZANCI HOLDING

Aksa Power Generation LATAM 12320 NW 116<sup>th</sup> Street, Miami, FL 33178 T: +1786 4936857 sales@aksausa.com