



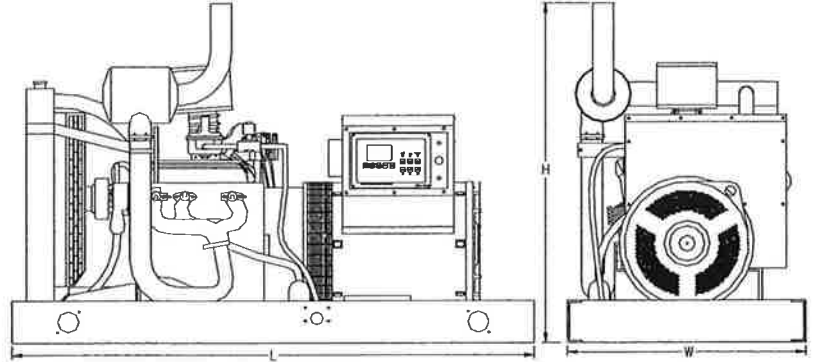
**DETROIT DIESEL**



S SERIES GAS

**25 ekW      60 Hz      Standby**

**208 - 600V**



- Generator Set Tested to ISO 8528-5 for Transient Response
- UL2200, CSA Listing Offered
- Accepts Rated Load in One Step Per NFPA 110, Level 1
- All gen-sets are prototype and factory tested
- MTU DD is a single source supplier
- Global Product Support
- 2 Year Standard Warranty
- Complete Range of Accessories

**3.0 L Engine**

- 3.0 Liter Displacement
- 4-Cycle

**Permanent Magnet Generator (PMG) - Optional**

- Brushless, Rotating Field
- 300% Short Circuit Capability
- 2/3 Pitch Windings

**Digital Control Panel**

- UL 508 Listed, CSA Certified, NFPA 110
- Complete System Metering
- LCD Display

**Cooling System**

- Integral Set-mounted
- Engine Driven Fan

**GEN-SET RATINGS**

Voltage (L-L)	Phase	PF	Hz	Natural Gas Standby Ratings		LP Gas Standby Ratings		skVA @ 30% voltage dip	Generator Model	Connection
				Amps	kW/kVA	Amps	kW/kVA			
240v	1	1.0	60	104	25/25	104	25/25	C/F	284PSL1542	12 LEAD ZIG-ZAG
208v	3	0.8	60	87	25/31.25	87	25/31.25	C/F	284PSL1542	12 LEAD LOW WYE
240v	3	0.8	60	75	25/31.25	75	25/31.25	C/F	284PSL1542	12 LEAD HI DELTA
480v	3	0.8	60	38	25/31.25	38	25/31.25	C/F	284PSL1542	12 LEAD HI WYE
600v	3	0.8	60	30	25/31.25	30	25/31.25	123	284PSL1752	4 LEAD WYE



25 kW Gas Gen-Set

**STANDARD EQUIPMENT**

**ENGINE**

- Air Cleaner
- Oil Pump
- Full Flow Oil Filter
- Jacket Water Pump
- Thermostats
- Exhaust Manifold – dry
- Blower Fan & Fan Drive
- Radiator - Unit Mounted
- Electric Starting Motor - 12V
- Governor – Electric Isochronous
- Base - Formed Steel
- SAE Flywheel & Bell Housing
- Charging Alternator - 12V
- Battery Box & Cables
- Flexible Fuel Connectors
- Flexible Exhaust Connection
- EPA Certified Engine

**DIGITAL CONTROL PANEL**

- Digital Metering
- Engine Parameters
- Generator Protection Functions
- Engine Protection
- SAE J1939 Engine ECU Communications
- Windows-based Software
- Multilingual Capability
- Remote Communications to our RDP-110 Remote Annunciator
- 16 Programmable Contact Inputs
- 7 Contact Outputs
- UL Recognized, CSA Certified, CE Approved
- Event Recording
- IP 54 Front Panel Rating with Integrated Gasket
- NFPA110 Level Compatible

**GENERATOR**

- NEMA MG1, IEEE and ANSI standards compliance for temperature rise and motor starting
- Sustained short circuit current of up to 300% of the rated current for up to 10 seconds
- Self Ventilated and Drip-proof
- Superior Voltage Waveform
- Digital, Solid State, Volts-per-hertz Regulator
- No load to full load regulation
- Brushless Alternator with Brushless Pilot Exciter
- 4 pole, Rotating Field
- 130°C Standby Temperature Rise
- 1 Bearing, Sealed
- Flexible Coupling
- Full Amortisseur Windings
- 125% Rotor Balancing
- 3-phase Voltage Sensing
- ± .25% Voltage Regulation
- 100% of Rated Load - One Step
- 3% Maximum Harmonic Content

**ADDITIONAL FEATURES**

- Oil Drain Extension & S/O Valve
- Flexible Fuel Connector
- Battery Cables
- Vibration Isolation Pads
- Jacket Water Heater: -20° F
- Mainline Circuit Breaker
- UL2200 Listed
- Steel Sub-base
- Radiator Duct Flange (OPU)
- Lube Oil & Antifreeze
- Operator's and Owner's Manual
- 2 year/3000 hour Warranty
- Factory Tested at .8 PF (3 PH)

**OPTIONAL FEATURES**

- Battery Charger 6 amp or 10 amp
- Battery: 12 volt w/ rack
- Circuit Breaker: Standard or 100%
- Muffler (OPU only)
- Weatherproof Enclosure
- Sound Attenuation
  - 1 1/2" Foam
  - Sound Scoops
- Remote Annunciator
- Isochronous Governor



**APPLICATION DATA**

**Engine**

Manufacturer: ..... GM	Rated RPM:..... 1800
Model: ..... 3.0L	Engine Governor:..... Bosch
Type:..... 4-Cycle	Max Power: Standby: bhp (kWm) ..... 43 (32)
Arrangement: ..... 4-Inline	Speed Regulation: ..... ±.25%
Displacement: in. <sup>3</sup> (lit) ..... 181 (3.0)	Frequency: ..... 60 Hz
Bore: in. (cm) ..... 4.0 (10.2)	Air Cleaner:..... Dry
Stroke: in. (cm) ..... 3.6 (9.1)	
Compression Ratio:..... 9.3:1	

**Liquid Capacity (Lubrication)**

Total oil system: gal (lit) ..... 1.3 (4.7)
Engine jacket water capacity: gal (lit) ..... 1.0 (3.78)
System Coolant capacity: gal (lit): ..... 3.33 (12.6)

**Electrical**

Electric volts DC ..... 12
Cold cranking Amps under 0°F (-17.8°C) ..... 600

**Fuel Inlet**

Fuel Supply Connection Size:..... <sup>3</sup> / <sub>4</sub> "NPT
Fuel Supply Pressure in H <sub>2</sub> O (mm H <sub>2</sub> O):..... 7-11 (178-279)

**Fuel Consumption (NG-1000 BTU/ft<sup>3</sup> / LP-2500 BTU/ft<sup>3</sup>)**

	NG	LPG
At 100% of Power Rating:ft <sup>3</sup> /hr (m <sup>3</sup> /hr).....	360 (10.2)	144 (4.1)
At 75% of Power Rating:ft <sup>3</sup> /hr (m <sup>3</sup> /hr).....	260 (7.4)	104 (2.9)
At 50% of Power Rating:ft <sup>3</sup> /hr (m <sup>3</sup> /hr).....	230 (6.5)	92 (2.6)

**Cooling - Radiator System**

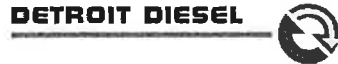
Ambient Capacity of Radiator: °F (°C).....	Standby 122 (50)
Maximum Allowable Static Pressure on Radiator Exhaust: in H <sub>2</sub> O (kPa).....	0.5 (.12)
Water Pump Capacity: gal/min (lit/min).....	18.2 (69)
Heat Rejection to Coolant: BTUM (kW).....	1,445 (25.4)
Heat Radiated to Ambient: BTUM (kW).....	690 (12.1)

**Exhaust System**

	Standby
Gas Temp.(Stack): °F (°C).....	1,220 (660)
Gas Volume at Stack Temp: CFM (m <sup>3</sup> /min) ..... 220 (6.2)	
Maximum Allowable Back Pressure: in. H <sub>2</sub> O (kPa).....	40.7 (10.1)

**Air Requirements**

	Standby
Aspirating: CFM (m <sup>3</sup> /min).....	81 (2.3)
Air Flow Required for Radiator Cooled Unit: CFM (m <sup>3</sup> /min).....	4,752 (134)
Air Flow Required for Heat Exchanger/ Remote Radiator based on 25°F Rise: CFM (m <sup>3</sup> /min).....	1,917 (54.3)



**25 ekW Gas Gen-Set**

**EMISSIONS DATA**

	<u>NOx</u>	<u>HC</u>	<u>CO</u>	<u>PM</u>
Natural Gas: .....	C/F .....	C/F .....	C/F .....	C/F .....
Liquid Propane: .....	C/F .....	C/F .....	C/F .....	C/F .....

All units are in g/hp-hr.

**SOUND DATA**

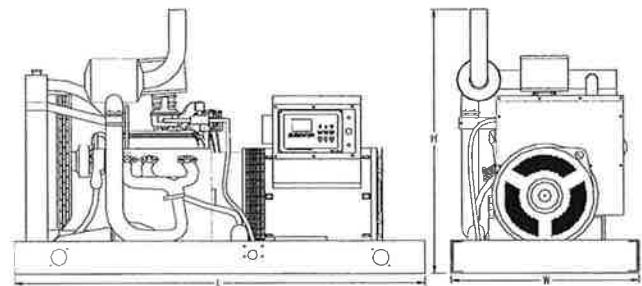
	<u>Standby Full Load</u>	<u>Standby No Load</u>
23 ft (7m) OPU w/ critical grade muffler (dBA) .....	82.6 .....	74.6 .....
23 ft (7m) Sound Attenuated Enclosure (dBA) .....	74.6 .....	66.6 .....

**RATING DEFINITIONS and CONDITIONS**

- Ambient capability factor at 300m (984ft). Consult your local MTU DD Power Generation Distributor for other altitudes.
- Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. No overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271.
- Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings, consult the factory.
- Deration Factors:
  - Altitude: Derate 2% per 1,000 ft (305m) above 3,000 ft (914m).
  - Temperature: Derate 2% per 20°F (11°C) above 85°F (29°C).

**Weights & Dimensions**

	<u>OPU</u>	<u>EPU</u>
Length: in. (cm) .....	74(188) .....	74(188) .....
Width: in. (cm) .....	34(86) .....	34(86) .....
Height: in. (cm) .....	54.5(139) .....	51(129) .....
Weight (less tank): lb (kg) .....	1400(635) .....	1675(760) .....



Drawing above for illustration purposes only, based on standard open power 480 volt generator. Lengths may vary with other voltages.  
\*Do Not Use for Installation Design

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