DIESEL ENGINE-GENERATOR SET
40-JS6DT3

40 ekW / 60 Hz / Standby
208 - 600V

SYSTEM RATINGS

Standby

Voltage (L-L)	240V**	208V**	240V**	480V**	600V**
Phase	1	3	3	3	3
PF	1.0	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
kW	40	40	40	40	40
kVA	40	50	50	50	50
AMPS	167	139	120	60	48
skVA@30% Voltage Dip	63	105	105	140	92
Generator Model	361CSL1601	361CSL1601	361CSL1601	361CSL1601	361CSL1632
Temp Rise	130°C/27°C	130°C/27°C	130°C/27°C	130°C/27°C	125°C/40°C
Connection	12 LEAD ZIG-ZAG	12 LEAD LOW WYE	12 LEAD HI DELTA	12 LEAD HI WYE	4 LEAD WYE

** UL2200 Offered

FACTS

// EPA Tier 3 Certified
// Engine-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 engine-generator sets are prototype and factory tested
// MTU Onsite Energy is a single source supplier
// Global Product Support
// 2 Year Standard Warranty
// 4024HF285 Diesel Engine
- 2.4 Liter Displacement
- Electronic Unit Pump Injection
- 4-Cycle

// Complete Range of Accessories
// Permanent Magnet Generator (PMG) - Optional
- Brushless, Rotating Field
- 300% Short Circuit Capability
- 2/3 Pitch Windings
// Digital Control Panel(s)
- UL Recognized, c UL us, NFPA 110
- Complete System Metering
- LCD Display
// Cooling System
- Integral Set-Mounted
- Engine Driven Fan

STANDARD EQUIPMENT

// Engine

- Air Cleaner
- Oil Pump
- Full Flow Oil Filter
- Jacket Water Pump
- Closed Crankcase Vent
- Thermostat
- 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

// 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
- Full Amortisseur Windings
- 125% Rotor Balancing
- 3-Phase Voltage Sensing
- ±1% Voltage Regulation
- 100% of Rated Load - One Step
- 3% Maximum Harmonic Content

// Digital Control Panel(s)

- 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, c UL us, CE Approved
- Event Recording
- IP 54 Front Panel Rating with Integrated Gasket
- NFPA110 Level Compatible

// 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 0.8 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)
- Sub-Base Fuel Tank w/ Electrical Stub-Up Area
- Weatherproof Enclosure
- Sound Attenuation
  - 1 1/2" Foam
  - Sound Scoops
- Remote Annunciator
- Isochronous Governor

APPLICATION DATA

// Engine

Manufacturer	John Deere
Model	4024HF285
Type	4-Cycle
Arrangement	4-Inline
Displacement: Cu In (lit)	146 (2.4)
Bore: in (cm)	3.4 (8.6)
Stroke: in (cm)	4.1 (10.5)
Compression Ratio	18.2:1
Rated RPM	1,800
Engine Governor	JDEC
Max Power: Standby: bhp (kWm)	80 (60)
Regulation	±.25%
Frequency	60 Hz
Air Cleaner	Dry

// Liquid Capacity (Lubrication)

Total Oil System: gal (lit)	2.1 (7.9)
Engine Jacket Water Capacity: gal (lit)	0.68 (2.6)
System Coolant Capacity: gal (lit)	3 (11.4)

// Electrical

Electric Volts DC	12
Cold Cranking Amps Under 0°F (-17.8°C)	750

// Fuel System

Fuel Supply Connection Size	3/8" NPT
Fuel Return Connection Size	3/8" NPT
Maximum Fuel Lift: ft (m)	10 (3)
Recommended Fuel	Diesel #2
Total Fuel Flow: gal/hr (lit/hr)	21.7 (82)

// Fuel Consumption

At 100% of Power Rating: gal/hr (lit/hr)	3.7 (14)
At 75% of Power Rating: gal/hr(lit/hr)	2.8 (10.6)
At 50% of Power Rating: gal/hr (lit/hr)	1.9 (7.2)

// Cooling - Radiator System

Ambient Capacity of Radiator: °F (°C)	122 (50)
Max. Restriction of Cooling Air, Intake, and Discharge Side of Rad.: in. H_20 (kPa)	0.5 (0.12)
Water Pump Capacity: gpm (lit/min)	26 (100)
Heat Rejection to Coolant: BTUM (kW)	1,560 (27.4)
Heat Rejection to Air to Air: BTUM (kW)	484 (8.5)
Heat Radiated to Ambient: BTUM (kW)	386 (7)

// Air Requirements

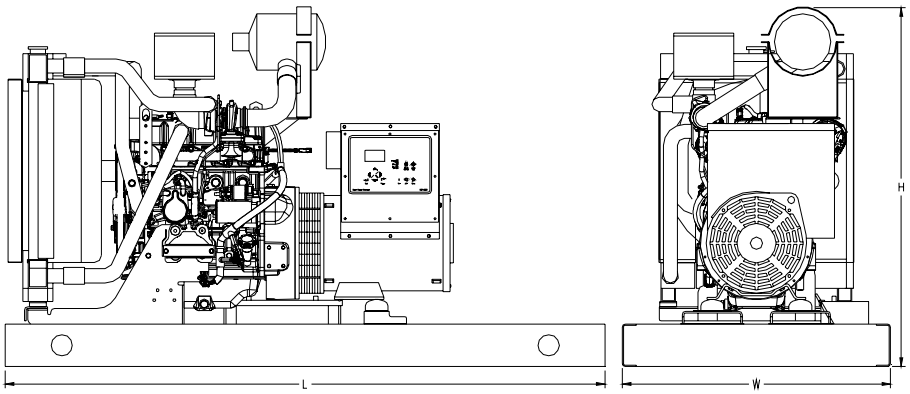
Aspirating: *SCFM (m^3/min)	140 (4)
Air Flow Required for Rad. Cooled Unit: *SCFM (m^3/min)	4,511 (128)
Air Flow Required for Heat Exchanger/Remote Rad. based on 25°F Rise: *SCFM (m^3/min)	871 (25)

* Air density = 0.0739 lbm/ft^3 (1.184 kg/m^3)

// Exhaust System

Gas Temp. (Stack): °F (°C)	1,029 (554)
Gas Volume at Stack Temp: CFM (m^3/min)	385 (10.9)
Maximum Allowable Back Pressure: in. H_20 (kPa)	30 (7.5)
Minimum Allowable Back Pressure: in. H_20 (kPa)	16 (4)

WEIGHTS AND DIMENSIONS



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.

System	Dimensions (L x W x H)	Weight (less tank)
OPU	85 x 38 x 51 in (2,160 x 970 x 1,300 mm)	1,434 lb (650 kg)
EPU	85 x 38 x 60 in (2,160 x 970 x 1,520 mm)	1,721 lb (781 kg)

Weights and dimensions are based on open power units and are estimates only. Consult the factory for accurate weights and dimensions for your specific generator set.

SOUND DATA

Unit Type	Standby Full Load	Standby No Load
OPU w/ Critical Grade Muffler (dBA)	84.6	80
Sound Attenuated Enclosure (dBA)	76.6	72

Measurements for sound data are taken at 23 ft (7 m).

EMISSIONS DATA

NO_x + NMHC	CO	PM
3.50	0.86	0.12

All units are in g/hp-hr and are EPA D2 cycle values. Emission levels of the engine may vary as a function of ambient temperature, barometric pressure, humidity, fuel type and quality, installation parameters, measuring instrumentation, etc. The data provided are laboratory results from one engine representing this rating. The data was obtained under controlled environmental conditions with calibrated instrumentation traceable to the United States National Bureau of Standards and in compliance with US EPA regulations found within 40 CFR Part 89. The weighted cycle value from each engine is guaranteed to be below the US EPA Standards at the US EPA defined conditions.

RATING DEFINITIONS AND CONDITIONS

// Ambient capability factor at 984 ft (300 m). Consult your local MTU Onsite Energy 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.

// Deration Factor:
Altitude: 0.5% per 1,000 ft (305 m) above sea level and 4% per 1,000 ft (305 m) above 10,000 ft (3,050 m).
Temperature: 0.5% per 10°F (5.5°C) above 77°F (25°C).

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Materials and specifications subject to change without notice.

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