

(نراتور : MTU

*م*وتور د*يزل :* MTU

| S | tandby | Prin | ne | |
|------|--------|------|-----|--------------|
| KVA | KW | KVA | KW | |
| 1276 | 1020 | 1160 | 928 | ديزل ژنراتور |





| | موتور دیزل | |
|---|--------------|---------------------------------|
| Manufacturer | MTU | تولید کننده |
| Model | 18V2000G65TB | مدل |
| Number of cylinders | 18 | تعداد سیلندر ها |
| Cylinder arrangement | vertical | آرایش سیلندر ها |
| Displacement, Liters | 1.99 | <i>جا</i> به جایی |
| Bore × Stroke, mm | 130× 150 | قطر سیلندر $	imes$ کورس پیستون |
| Compression Ratio | 16:1 | نسبت تراکھ |
| Aspirating m ₃ /min | 69 | سيسته تنفس |
| Gross engine power, kWb | 928 | قدرت ناغالص موتور |
| Fuel Consumption At 100% of power rating L/hr | 243 | مصرف سوخت در 100% بار |
| Fuel Consumption At 75% of power rating L/hr | 181 | مصرف سوفت در 75% بار |
| Fuel Consumption At 50% of power rating L/hr | 123 | مصرف سوفت در 50% بار |
| Exhaust gas temp.(after turbo), °C | 555 ° | د <i>مای</i> گاز غرومی از اگزوز |



| | ژنراتور | |
|-------------------------------------|---------------------|----------------------------|
| Manufacturer | MTU | تولید کننده |
| Model | 740RSL7076 | مدل |
| Standby power at rated voltage ,KVA | 1276 | توان standby در ولتاز نامی |
| Power factor | 0.8 | ضریب قدرت |
| Phase | 3 | غاز |
| Frequency, Hz | 50 | فر <i>کا</i> نس |
| Speed, Rpm | 1500 | شرعت |
| Voltage, V | 380 | ولتاژ |
| Voltage Regulator | Three phase sensing | رگولاتور ولتاژ |
| Voltage Regulation, % | ±0.25% | تنظيم ولتاژ |
| Over speed, Rpm | 2250 | مداکثر سرعت مجاز |
| Insulation class | Н | کلاس عایق |
| Connection | 6 LEAD HI WYE | اتصال |
| Protection class | IP23 | کلاس مفاظتی |

DIESEL GENERATOR SET WATER CHARGE-AIR COOLING

1160kVA/50 Hz/Prime Power (Fuel Consumption Optimized) 380 - 415V





Optional equipment shown. Standard equipment may vary.

BENEFITS

- // Low installation costs
- // Best fuel consumption values
- // Long maintenance intervals

- // Best-in-class reliability and availability
- // Lifting vertically or with diagonal pull
- // Compact design

SYSTEM RATINGS[®]

| Prime Power | MTU 18V2000 DS1290 | MTU 18V2000 DS1290 | MTU 18V2000 DS1290 |
|-----------------|--------------------|--------------------|--------------------|
| Voltage (L-L) | 380V | 400V | 415V |
| Phase | 3 | 3 | 3 |
| PF | 0.8 | 0.8 | 0.8 |
| Hz | 50 | 50 | 50 |
| kW | 928 | 928 | 928 |
| kVA | 1160 | 1160 | 1160 |
| Amps | 1762 | 1674 | 1614 |
| Generator model | 740RSL7076 | 740RSL7076 | 740RSL7076 |
| Temp rise | 125 °C/40 °C | 125 °C/40 °C | 125 °C/40 °C |
| Connection | 6 LEAD HI WYE | 6 LEAD HI WYE | 6 LEAD HI WYE |

CERTIFICATIONS AND STANDARDS

- // Engine-generator set is designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004
- // Performance Assurance Certification (PAC)
 - Engine-generator set tested according to ISO 8528-5 for transient response
 - Verified product design, quality and performance integrity
 - All engine systems are type and factory tested

// Power Rating

- Permissible average power output during 24 hours of operation up to 75%

STANDARD EQUIPMENT®

// Engine

Air filters Oil pump for draining Full flow oil filters Closed crankcase ventilation Jacket water pump Thermostats Exhaust manifold – dry Belt driven radiator fan Electric starting motor – 24V Governor – electronic isochronous Base – formed steel SAE flywheel & bell housing Charging alternator Flexible fuel connectors Flexible exhaust connection

// Generator

NEMA MG1, IEEE and ANSI standards compliance for temperature rise and motor

VDE 0530, IEC 60034-1, BS4999, BS5000, CSA22.2-100, AS 1366

Sustained short circuit current of up to 250% of the rated current for up to 10 seconds

Self-ventilated and drip-proof IP23

Superior voltage waveform

Digital, volts-per-hertz regulator

No load to full load regulation Brushless alternator with brushless pilot exciter 4 Pole, rotating field

125 °C maximum prime temperature rise

Heavy duty shielded ball bearings with a minimum B-10 life of $40,\!000~\mathrm{hrs}$

Flexible coupling

Full amortisseur windings 3-phase voltage sensing

- 0.05% II

±0.25% voltage regulation

100% of rated load – one step according to NFPA 110

3% maximum harmonic content

 [@] Represents standard product only. Consult Factory/MTU On site Energy distributor for additional configurations.

- // The engine-generator set complies to G3
- // Engine generator set tested according to ISO 8528-5 for transient response
- // Accepts rated load in one step as per NFPA 110
- // All engine-generator sets are type and factory tested
- // MTU Onsite Energy is a single source supplier
- // Global product support

- // 18V2000 diesel engine (35,82 Liter (2186 cu inch) displacement; 4-stroke)
- // Engine-generator resiliently mounted
- // Complete range of accessories
- // Brushless, rotating field generator (PMG excitation; 250% short circuit capability; 2/3 pitch stator windings)
- // Complete system metering
- // LCD display

APPLICATION DATA

| // Engine |
|-----------|
|-----------|

| Manufacturer | MTU |
|------------------------------------|------------------------|
| Model | 18V2000G65TB |
| Туре | 4-Stroke |
| Arrangement | 18-V |
| Displacement/cylinder: I (cu inch) | 1.99 (121) |
| Bore: mm (inch) | 130 (5.1) |
| Stroke: mm (inch) | 150 (5.9) |
| Compression ratio | 16:1 |
| Rated speed rpm | 1500 |
| Engine governor | Electronic isochronous |
| Max power: kWm (bhp) | 1000 (1341) |
| Speed regulation | ±0.25% |
| Air filter | Dry |

// Lube Oil Capacity

| *************************************** | |
|---|----------|
| Total oil system: I (gal) | 130 (34) |

// Electrical

| Electric Volts DC | 24 |
|--|------|
| Cold cranking amps under -17.8 °C (0 °F) | 1000 |

// Fuel System

| Fuel supply connection size | M22x1,5 - 60°/Male |
|--------------------------------|------------------------------------|
| Fuel return connection size | M12x1,5 - 60°/Male |
| Maximum fuel lift: m (ft) | 5 (16) |
| Recommended fuel | see MTU fluids & lubrication spec. |
| Total fuel flow: I/hr (gal/hr) | 600 (159) |

// Fuel Consumption²

| | gal/hr | l/hr | g/kwh |
|--------------------------|--------|------|-------|
| At 100% of power rating: | 64 | 243 | 202 |
| At 75% of power rating: | 48 | 181 | 200 |
| At 50% of power rating: | 32 | 123 | 204 |

// Cooling/Radiator System

| Water pump capacity: I/min (gpm) | 667 (176) |
|---|--------------|
| Heat rejection to coolant: kW (BTUM) | 425 (24,169) |
| Heat rejection to after cooler: kW (BTUM) | 215 (12,227) |
| Heat radiated to ambient: kW (BTUM) | 50 (2,843) |
| Engine coolant capacity: I (gal) | 140 (37) |

// Air Requirements®

| Aspirating: m³/min (SCFM) | 69 (2434) |
|---------------------------|-----------|

// Exhaust System

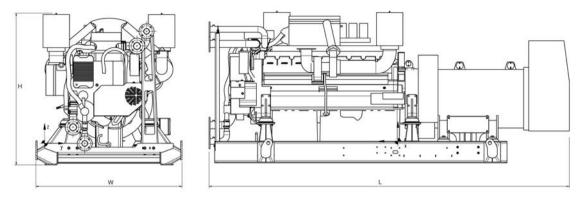
| 198 (6991) |
|------------|
| |
| |

① Represents standard product only. Consult Factory/MTU Onsite Energy distributor for additional configurations.

 $[\]ensuremath{@}$ Values in accordance with ISO 3046-1. Conversion calculated with fuel density of 0.83 g/ml.

③ Air density = $1.184 \text{ kg/m}^3 (0.0739 \text{ lbm/ft}^3)$

WEIGHTS AND DIMENSIONS



Drawing above for illustration purposes only, based an standard open power 400 Volt engine-generator set. Lengths may vary with other voltages. Do not use for installation design. See website for unit specific template drawings.



Dimensions (LxWxH)

 $4325 \times 1750 \times 1821 \text{ mm} (170.3 \times 69 \times 71.7 \text{ inch})$

Weight (dry/less tank)

6478 kg (14,283 lbs)

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

SOUND DATA

// Consult your local MTU Onsite Energy distributor for sound data.

EMISSIONS DATA

// Consult your local MTU Onsite Energy distributor for emissions data.

RATING DEFINITIONS AND CONDITIONS

- // 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, ISO 3046-1, BS 5514 and AS 2789. Average load factor: ≤ 75%.
- // Deration factor:

Altitude: Consult your local MTU Onsite Energy distributor for altitude derations.

Temperature: Consult your local MTU Onsite Energy distributor for temperature derations.

Materials and specifications subject to change without notice.