

fزىراتور : MTU

*م*وتور د*يزل :* MTU

S	tandby	Prin	ne	
KVA	KW	KVA	KW	
1133	906	1030	824	ديزل ژنراتور





	موتور دیزل	
Manufacturer	MTU	تولید کننده
Model	16V2000G65TB	مدل
Number of cylinders	16	تعداد سیلندر ها
Cylinder arrangement	vertical	آرایش سیلندر ه <i>ا</i>
Displacement, Liters	1.99	ما به مایی
Bore × Stroke, mm	130× 150	قطر سیلندر × کور <i>س پیستون</i>
Compression Ratio	16:1	نسبت تراکم
Aspirating m <sub>3</sub> /min	66	سيسته تنفس
Gross engine power, kWb	824	قدرت ناغالص موتور
Fuel Consumption At 100% of power rating L/hr	214	مصرف سوغت در 100% بار
Fuel Consumption At 75% of power rating L/hr	158	مصرف سوفت در 75% بار
Fuel Consumption At 50% of power rating L/hr	108	مصرف سوخت در 50% بار
Exhaust gas temp.(after turbo), °C	530 °	د <i>مای گا</i> ز فرومی از اگزوز



	ژنراتور	
Manufacturer	MTU	تولید کننده
Model	575RSL7074	مدل
Standby power at rated voltage ,KVA	1133	توان standby در ولتاز نامی
Power factor	0.8	ضریب قدرت
Phase	3	غاز
Frequency, Hz	50	فر <i>کانس</i>
Speed, Rpm	1500	شرعت
Voltage, V	380	ولتاژ
Voltage Regulator	Three phase sensing	رگولاتور ولتاژ
Voltage Regulation, %	±0.25%	تنظيم ولتاز
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

1030kVA/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<sup>®</sup>

Prime Power	MTU 16V2000 DS1140	MTU 16V2000 DS1140	MTU 16V2000 DS1140
Voltage (L-L)	380V	400V	415V
Phase	3	3	3
PF	0.8	0.8	0.8
Hz	50	50	50
kW	824	824	816
kVA	1030	1030	1020
Amps	1565	1487	1419
Generator model	575RSL7074	575RSL7074	575RSL7074
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

3% maximum harmonic content

NEMA MG1, IEEE and ANSI standards compliance for temperature rise and motor VDE 0530, IEC 60034-1, BS4999, BS5000, CSA22,2-100, AS 1365 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 hrs Flexible coupling Full amortisseur windings 3-phase voltage sensing ±0.25% voltage regulation 100% of rated load - one step according to NFPA 110

① Represents standard product only. Consult Factory/MTU Onsite 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

- // 16V2000 diesel engine (31,84 Liter (1943 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	16V2000G65TB
Туре	4-Stroke
Arrangement	16-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)	890 (1194)
Speed regulation	±0.25%
Air filter	Dry

### // Lube Oil Capacity

***************************************	
Total oil system: I (gal)	102 (27)

### // 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 Consumption<sup>®</sup>

	gal/hr	l/hr	g/kwh
At 100% of power rating:	57	214	200
At 75% of power rating:	42	158	196
At 50% of power rating:	28	108	201

### // Cooling/Radiator System

Water pump capacity: I/min (gpm)	667 (176)
Heat rejection to coolant: kW (BTUM)	375 (21,326)
Heat rejection to after cooler: kW (BTUM)	195 (11,089)
Heat radiated to ambient: kW (BTUM)	45 (2559)
Engine coolant capacity: I (gal)	130 (34)

### // Air Requirements®

Aspirating: m <sup>3</sup> /min (SCFM)	66 (2328)	
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### // Exhaust System

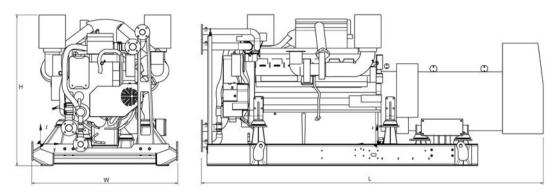
Gas temp. (stack): °C (°F)	530 (986)
Gas volume flow	
temp: m³/min (SCFM)	177 (6250)
Maximum allowable	
back pressure: kPA	8.5

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

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

<sup>3</sup> Air density = 1.184 kg/m<sup>3</sup> (0.0739 lbm/ft<sup>3</sup>)

## 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)

4100 x 1750 x 1809 mm (161.4 x 69 x 71.2 inch)

Weight (dry/less tank)

5945 kg (13,106 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.