

ژنراتور : MTU

موتور دیزل : MTU

Standby		Prime		دیزل ژنراتور
KVA	KW	KVA	KW	
1000	800	910	728	



### موتور دیزل

Manufacturer	MTU	تولید کننده
Model	16V2000G25TB	مدل
Number of cylinders	16	تعداد سیلندر ها
Cylinder arrangement	vertical	آرایش سیلندر ها
Displacement , Liters	1.99	جا به جایی
Bore × Stroke , mm	130× 150	قطر سیلندر × کورس پیستون
Compression Ratio	16:1	نسبت تراکم
Aspirating m <sup>3</sup> /min	60	سیستم تنفس
Gross engine power, kWb	728	قدرت ناخالص موتور
Fuel Consumption At 100% of power rating L/hr	193	مصرف سوخت در 100% بار
Fuel Consumption At 75% of power rating L/hr	145	مصرف سوخت در 75% بار
Fuel Consumption At 50% of power rating L/hr	99	مصرف سوخت در 50% بار
Exhaust gas temp.(after turbo) , °C	520 °	دمای گاز خروجی از اگزوز

### ژنراتور

Manufacturer	MTU	تولید کننده
Model	575RSL7074	مدل
Standby power at rated voltage ,KVA	1000	توان standby در ولتاژ نامی
Power factor	0.8	ضریب قدرت
Phase	3	فاز
Frequency, Hz	50	فرکانس
Speed, Rpm	1500	سرعت
Voltage, V	380	ولتاژ
Voltage Regulator	Three phase sensing	رگولاتور ولتاژ
Voltage Regulation, %	±0.25%	تنظیم ولتاژ
Over speed, Rpm	2250	مداکثر سرعت مجاز
Insulation class	H	کلاس عایق
Connection	6 LEAD HI WYE	اتصال
Protection class	IP23	کلاس حفاظتی

# DIESEL GENERATOR SET WATER CHARGE-AIR COOLING

910kVA/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>①</sup>

Prime Power	MTU 16V2000 DS1050	MTU 16V2000 DS1050	MTU 16V2000 DS1050
Voltage (L-L)	380V	400V	415V
Phase	3	3	3
PF	0.8	0.8	0.8
Hz	50	50	50
kW	728	728	728
kVA	910	910	910
Amps	1383	1313	1266
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

① Power available up to 40°C/400 m

## 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<sup>①</sup>

### // 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 1364  
 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  
 3% maximum harmonic content

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

## STANDARD FEATURES<sup>①</sup>

- // 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	16V2000G25TB
Type	4-Stroke
Arrangement	16-V
Displacement/cylinder: l (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)	810 (1086)
Speed regulation	±0.25%
Air filter	Dry

### // Lube Oil Capacity

Total oil system: l (gal)	102 (27)
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### // 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: l/hr (gal/hr)	600 (159)

### // Fuel Consumption<sup>②</sup>

	gal/hr	l/hr	g/kwh
At 100% of power rating:	51	193	198
At 75% of power rating:	38	145	198
At 50% of power rating:	26	99	203

### // Cooling/Radiator System

Water pump capacity: l/min (gpm)	667 (176)
Heat rejection to coolant: kW (BTUM)	355 (20,188)
Heat rejection to after cooler: kW (BTUM)	170 (9,668)
Heat radiated to ambient: kW (BTUM)	45 (2559)
Engine coolant capacity: l (gal)	130 (34)

### // Air Requirements<sup>③</sup>

Aspirating: m <sup>3</sup> /min (SCFM)	60 (2117)
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### // Exhaust System

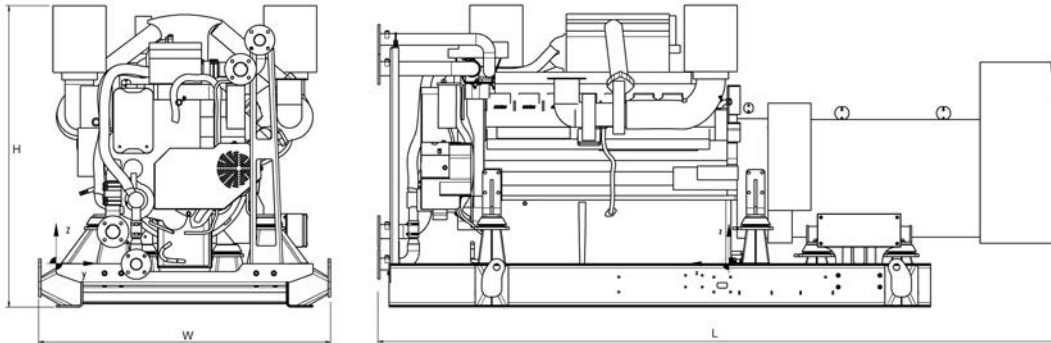
Gas temp. (stack): °C (°F)	520 (968)
Gas volume flow temp: m <sup>3</sup> /min (SCFM)	162 (5720)
Maximum allowable back pressure: kPA	8.5

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

② Values in accordance with ISO 3046-1. Conversion calculated with fuel density of 0.83 g/ml.

③ 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 on a 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.

System	Dimensions (L x W x H)	Weight (dry/less tank)
Open Power Unit (OPU)	4100x 1750 x 1809 mm (161.4 x 69 x 71.2 inch)	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:  $\leq 75\%$ .

// 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.