موتور دیزل : MTU	ژنراتور : MTU

	Prime		Standby	
	KW	KVA	KW	KVA
دیزل ژنراتور	800	1000	880	1100

موتور دیزل		
Manufacturer	MTU	تولید کننده
Model	16V2000 DS1100	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 m3/min	66	سیستم تنفس
Gross engine power, kWb	800	قدرت ناخالص موتور
Fuel Consumption At 100% of power rating L/hr	216	مصرف سوخت در 100% بار
Fuel Consumption At 75% of power rating L/hr	158	مصرف سوخت در 75% بار
Fuel Consumption At 50% of power rating L/hr	108	مصرف سوخت در 50% بار
Exhaust gas temp.(after turbo) , °C	535 °	دمای گاز خروجی از اگزوز

ژنراتور

Manufacturer	MTU	تولید کننده
Model	575RSL7074	مدل
Standby power at rated voltage ,KVA	1100	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	حداکثر سرعت مجاز
Insulation class	H	کلاس عایق
Connection	6 LEAD HI WYE	اتصال
Protection class	IP23	کلاس حفاظتی

DIESEL GENERATOR SET
AIR CHARGE-AIR COOLING

1000kVA/50 Hz/Prime Power (Fuel Consumption Optimized)
380 - 415V

Optional equipment shown. Standard equipment may vary.

BENEFITS

// Industry-leading average load factor
// Outstanding fuel economy
// Optimized maintenance intervals
// Low installation costs
// Best-in-class reliability and availability
// Lifting vertically or with diagonal pull
// Compact design

SYSTEM RATINGS①

Prime Power	MTU 16V2000 DS1100	MTU 16V2000 DS1100	MTU 16V2000 DS1100
Voltage (L-L)	**380V**	**400V**	**415V**
Phase	3	3	3
PF	0.8	0.8	0.8
Hz	50	50	50
kW	800	800	800
kVA	1000	1000	1000
Amps	1519	1443	1391
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 EQUIPMENT①

// 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
Radiator – unit mounted
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 1359
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

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

STANDARD FEATURES①

// 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
// Cooling System (integral set-mounted; engine driven fan)
// 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	16V2000G65TD
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)	890 (1194)
Speed regulation	±0.25%
Air Cleaner	Dry

// Lube Oil Capacity

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

// Fuel Consumption②

	gal/hr	l/hr	g/kwh
At 100% of power rating:	57	216	201
At 75% of power rating:	42	158	196
At 50% of power rating:	28	108	201

// Cooling/Radiator System

Ambient capacity of radiator: °C	40 (optional 50)③
Max. restriction of cooling air, intake, and discharge side of rad.: kPa (in. H_2O)	0,2 (0,803)
Water pump capacity: l/min (gpm)	667 (176)
Heat rejection to coolant: kW (BTUM)	400 (22,748)
Heat rejection to after cooler: kW (BTUM)	160 (9,099)
Heat radiated to ambient: kW (BTUM)	45 (2559)
Engine coolant capacity: l (gal)	110 (29)
Coolant to cooler temperature: °C (°F)	95 (203)

// Air Requirements④

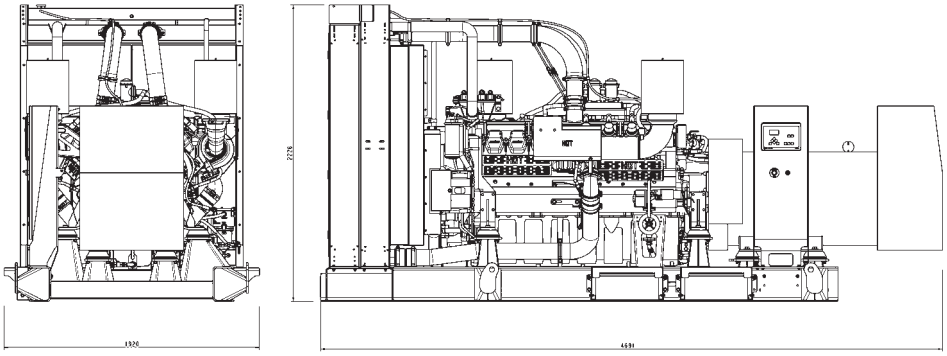
Aspirating: m^3/min (SCFM)	66 (2328)
Air flow required for rad. cooled unit: m^3/min	1236 (43606)

// Exhaust System

Gas temp. (stack): °C (°F)	535 (995)
Gas volume flow temp: m^3/min (SCFM)	195 (6880)
Maximum allowable back pressure: kPA	8,5 (34)

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 System ratings at 50°C may differ.
④ Air density = 1.184 kg/m^3 (0.0739 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.

System	Dimensions (L x W x H)	Weight (dry/less tank)
Open Power Unit (OPU)	4691 x 1920 x 2226 mm (185 x 76 x 88 inch)	6388 kg (14,084 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.

Subject to change. | 3236151 | Edition 02/14 | ENG 2014-07.

Materials and specifications subject to change without notice.