



MTU Diesel Generator Set

Power System Engineer



ZBM3781



Performance

- Carefully selected components
- Accurately developed and tested configuration

Quality Control

- International standard testing procedure
- Professional manufacture team

Service efficiency

- Humanization design and improvements
- Superior accessibility to all service points

Increased transport efficiency

- Compact and safe concept
- Sturdy design

Superior resale value

- Designed and built to last



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All specification can be changed without notice.

Technical Data

Model	ZBM3781	
Prime power	kw/kva	2750/3438
Standby power	kw/kva	3025/3781
Rated speed	r/min	1800
Standard Voltage	V	480
Available Voltages	V	480/277-440/254-220/127-208/120
Rated power factor		0.8

Engine	CONTINUOUS	STANDBY
Rated Output	kW	3010
Manufacturer	MTU	
Model	20V4000G83L	
No. of Cylinders and Build	4 Cycle;12V Cylinder Diesel	
Aspiration and Cooling	Exhaust turbo charger and Air charge air cooling;	
Bore/Stroke	mm	170X210
Compress the ratio	16.5:1	
Cooling system	Water-cooled	
Engine Speed/Frequency	rpm/Hz	1800/60HZ
Coolant Capacity	L	795
Starting System	Electric 24 volt DC	
Displacement	L	95.4
Lubricant system Capacity	L	390
Battery Volatge / Capacity	24VDC	
Governing Type	Type	Electronic engine management system "ADEC"
Air Filter	Type	Dry
Fuel Consumption	Load	100% 75% 50% 25%
	L/h	757 95.4 391 222

ALTERNATOR BRAND	LEROY SOMER	STAMFORD
Model	LVS1804W2	
Exciter System	Self-excited, brushless	
Poles	Num	4
Cooling Fan	Cast alloy aluminum	
Bearing	Single,double shielded	
Windings	100% copper	
Connection Type	Reconnectable	
Insulation Type	Class	Class H
Pitch	2/3	
Amortisseur Winding	Full	
Voltage Regulator	A.V.R. (Electronic)	
Steady Voltage Precision	± 1%	
Underspeed Protection	Standard	
Overexcitation Protection	IP23	
TIF (1960 Weightings)	<50	

Dimension		
Length*width*height	mm	6800*2800*3000
Net weight	kg	19500

Control Panel- SMARTGEN 6110/6120

The base mounted control panel in a vibration isolated sheet steel enclosure. The control panel is equipped as follows:

- Instruments: Analogue Voltmeter, Hours Run Meter, Water pressure Meter.
- Controls: Emergency Stop Pushbutton, Voltmeter Phase Selector Switch.
- Control module: Standard collocation is smartgen Auto start with AMF.



Main Features:

- Δ Automatic mains failure
- Δ Engine control, Generator protection
- Δ Built in alarms and warnings
- Δ Remote Start operation available
- Δ Fuel pump control
- Δ Mains simulation
- Δ Block heater control
- Δ Field adjustable parameters
- Δ Free MS-Windows Remote monitoring
- Δ LED displays
- Δ Configurable analogue inputs
- Δ I/O expansion capability

Protection Circuits

- WARNING
- Battery charge failure
- Low battery voltage
- SHUT DOWNS
- Fail to start
- Emergency stop
- Low oil pressure
- High engine temperature
- Over /Under speed
- Under/over generator frequency
- Failed to reach loading voltage
- Electrical trip
- Generator over current

Instruments

- ENGINE
- Engine speed
- Oil pressure
- Coolant temperature
- Run time
- Battery volts
- TOR
- Voltage (L-N)
- Current (L1-L2-L3)
- Frequency
- Mains
- Voltage (L-L, L-N)



This generator does comply with EU requirements related to working environment, regulations concerning safety and emissions as well with the outdoor noise directive 2000/14/EC.