

650 kVA, 415 V, 50 Hz, Prime Duty Diesel Generator



Special Features:

- Fully authority CRDI engine with superior fuel economy and Industry leading average load factor
- Silencer Placement inside enclosure
- Digital Voltage & Frequency regulation
- Remote monitoring & diagnosis
- Major Service points on one side of the system
- Longer maintenance interval 500 Hours or 2 Years
- No schedule overhaul

Force MTU Benefit:

- Global product design, single factory manufacturing product for the world
- Best in class smallest foot print
- Services of the future:
 - Service call request available on your finger tip
 - Genset health monitoring through mobile App and remote desktop
 - Remote diagnostic
- 2 Years or 5000 Hours warranty on entire Diesel Generator System

Standard features:

- Single skid mounted Engine, Radiator coupled to Alternator
- Radiator with 45°C ambient temperature
- Dry type air filter with restriction indicator
- Integrated Fuel tank with 09 hours capacity
- Fuel Cooler & Fuel pre filter with water Separator
- AC Panel and DC Control Panel mounted inside enclosure



FM 650 Diesel Generator Rating					
650 kVA	520 kWe	3 Phase	415V	50 Hz	0.8 p.f.

Conformance Standards

- ISO 3046-1 • ISO 8528 -1 • AS 2789 • DIN 6271

Definition as per ISO 8528-1 (PRP)

Prime power is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer.

Definition as per ISO 8528-1 (ESP)

Emergency standby power is defined as the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers.

Application Data

Engine

Manufacturer	MTU
Model	12V160G20F
Type	4-Cycle
Arrangement	12V
Displacement: Ltrs.	21
Bore: mm	122
Stroke: mm	150
Compression ratio	17.5
Rated rpm	1500
Engine governor	ECU 8
Nominal power: kWm	576
Air cleaner	Dry

Fuel System

Max. fuel flow: Ltrs/min	5.7
Fuel tank capacity: Ltrs	900

Fuel Consumption

At 100% of power Rating: Ltrs/ Hr	134.7
At 75% of Power Rating: Ltrs/Hr	108.5
At 50% of Power Rating: Ltrs/Hr	82.5
At 25% of Power Rating: Ltrs/Hr	46.5
*Measured at altitude of 560 m above sea level & temp 35°C	

Liquid Capacity

Total oil system: Ltrs (Initial Filling)	72.5
Total coolant capacity: Ltrs	75

Control Panel

Controller	DSE 7320 MKII
Circuit Breaker	4P,Manual ACB

Generator

Duty	Prime
Generator Type	4 Pole Brushless
Insulation class	H-Class
Bearing	Single
Enclosure	IP23
Voltage regulation	±0.5%
Exciting system	MAUX Auxiliary (DER1)
AVR Type	Digital
Winding Pitch	2/3
Rated Speed	1500
Rated Voltage	415
Alternator Efficiency	94.8%

Electrical

Electric system volts DC	24
Number of batteries	2
Capacity: Ah	2 X 105

Cooling/Radiator System

Ambient capacity of radiator: °C	45
Pressure on rad.: kPa	0.2
Heat rejection to coolant: kW	255

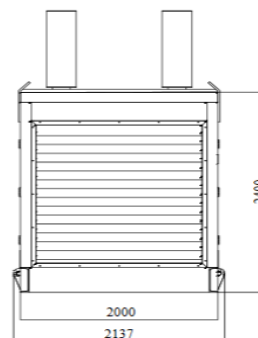
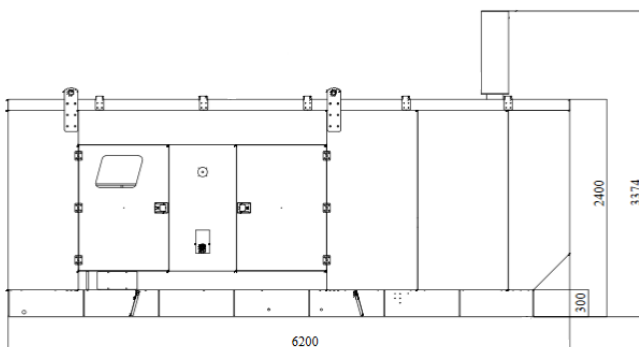
Air Requirements

Aspirating: m3/s	0.8
Cooling air flow: m3/s	8

Protection

Engine	High coolant temperature Over Speed Low Oil Pressure
Alternator	Over/Under voltage Over/Under Frequency Over current Short Circuit

Length	Width	Height	Appox.Weight
6200 mm	2000 mm	2400 mm	8580 kg.(in dry condition)



Note:-Drawing above for illustration purposes only, based on standard enclosed. Please contact company representative for more details

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Dealer