

Force MTU Power Systems Pvt. Ltd Diesel Generator Set



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



Special Features:

- Fully authority CRDI engine with 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

Force MTU Benefit:

- Global product design, single factory manufacturing product for the world
- 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:

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

FM 910 Diesel Generator Rating					
910 kVA	728 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	12V1600G91F
Type	4-Cycle
Arrangement	12V
Displacement: Ltrs.	22.44
Bore: mm	126
Stroke: mm	150
Compression ratio	15.89
Rated rpm	1500
Engine governor	ECU 8
Engine Rated power	1190 BHP (888 kW)
Air cleaner	Dry – Heavy Duty

Fuel System

Max. fuel flow: Ltrs/min	5.7
Fuel tank capacity: Ltrs	990

Liquid Capacity

Total oil system: Ltrs (Initial Filling)	72.5
Engine Oil change quantity: Ltrs	64
Total Coolant Capacity Ltrs	163
Engine Oil Pressure: Bar	4.5 to 5.5

Control Panel

Controller	DEIF
Circuit Breaker Amps	MDO 1600

Exhaust System

Exhaust Flow : m ³ /s	2.68
Exhaust Temp after Turbo : °C	506
Exhaust Back pressure: mBar	50

Generator

Duty	Prime
Generator Type	4 Pole Brushless
Insulation class	H-Class
Bearing	Single
Enclosure	IP23
Voltage regulation	± 1 %
Exciting system	Brushless (AREP)
AVR Type	Digital
Winding Pitch	2/3
Rated Speed	1500
Rated Voltage	415
Alternator Efficiency	95.5%

Electrical

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

Cooling System

Ambient capacity of radiator: °C	45
Pressure on rad.: kPa	0.2
Heat rejection to coolant: kW	350

Protection

Aspiration: m ³ /s	High Coolant temperature
Cooling air flow: m ³ /s	Over speed
Alternator	Low Oil Pressure
	Over/Under voltage
	Over/Under Frequency
	Over current
	Short Circuit

Length	Width	Height	Appox.Weight
7500 mm	2000 mm	2717 mm	9200 kg.(in dry condition)

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

Fuel consumption measured at NTP Condition & Fuel consumption data is based on diesel having specific gravity of 0.85 and conforming to IS: 1460. Fuel consumption tolerance is ±5%



Special Features:

- Fully authority CRDI engine with 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
- Complied to CPCB IV+ Norms.

Standard features:

- Radiator, Engine & Alternator mounted on single skid
- Radiator with 45°C ambient temperature
- Dry type air filter with restriction indicator
- Integrated Fuel tank with 09 hours capacity
- Fuel pre filter with water Separator
- AC Panel and DC Control Panel mounted inside Enclosure.

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Exhaust After Treatment features:

- Compact design with integrated silencer
- Combined ATS for both banks
- Good margin on emission parameters

FM 610 Diesel Generator Rating					
610 kVA	488 kWe	3 Phase	415V	50 Hz	0.8 p.f.

Conformance Standards

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

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Application Data

Engine

Manufacturer	FMTU
Model	12V1600G20F4IN
Type	4-Cycle
Arrangement	12V
Displacement: Ltrs.	21
Bore: mm	122
Stroke: mm	150
Compression ratio	17.5
Rated rpm	1500
Engine governor	ECU 9
Engine Rated power	703 BHP (524kW)
Air cleaner	Dry – Heavy Duty

Fuel System

Max. fuel flow: Ltrs/min	5.7
Fuel tank capacity: Ltrs	990

Fuel Consumption

At 100% of power Rating: Ltrs/ Hr	122
At 75% of Power Rating: Ltrs/Hr	100
At 50% of Power Rating: Ltrs / Hr	71

Liquid Capacity

Total oil system: Ltrs (Initial Filling)	72.5
Engine Oil change quantity: Ltrs	65
Total coolant capacity: Ltrs	140
Engine Oil Pressure: Bar	4.5 to 5.5

Control Panel

Controller	DEIF- SGC 420 MK-II
Circuit Breaker	4P, Manual ACB, 42kA

Exhaust System

Exhaust Flow: m ³ /s	2.1
Exhaust Temp after Turbo: °C	483
Exhaust Back pressure: mBar	180

Exhaust ATS Dimensions

Sr. No.	EATS	Size Diameter (inch.) X Length (Inch.)
1	DOC	12" x 5"
2	SCR	12" x 6"
3	ASC	12" x 4"

Generator

Duty	Prime
Generator Type	4 Pole Brushless
Insulation class	H-Class
Bearing	Single
Enclosure	IP23
Voltage regulation	± 0.25 %
Exciting system	MAUX Auxiliary (DER1)
AVR Type	Digital
Winding Pitch	2/3
Rated Speed	1500
Rated Voltage	415
Alternator Efficiency	94.6%

Electrical

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

Cooling System

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

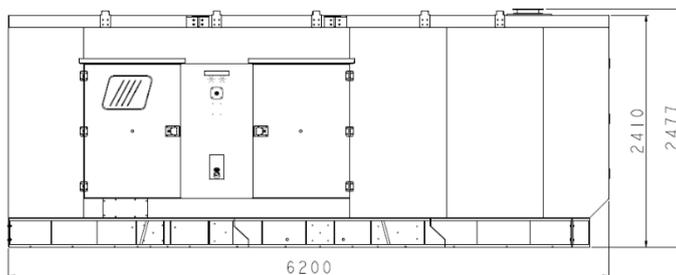
Air Requirements

Aspirating: m ³ /s	0.8
Cooling air flow: m ³ /s	8

Protection

Engine	High coolant temperature Over Speed Low Oil Pressure
Alternator	Over/Under voltage Over/Under Frequency Over current Short Circuit
After Treatment System	No Dosing at Low ambient High ATS temperature High Pressure across ATS

Length	Width	Height	Approx. Weight
6200 mm	2000 mm	2410 mm	7500 Kg. (in dry condition)



Note: - Drawing above for illustration purposes only, based on standard enclosed. Please contact company representative for more details. Refer these technical specifications as draft version.

Fuel consumption measured at NTP Condition & Fuel consumption data is based on diesel having specific gravity of 0.85 and conforming to IS: 1460. Fuel consumption tolerance is +5%

Force MTU Power Systems Pvt. Ltd.,

IndoSpace Rohan Industrial Park, Talegaon – Chakan Road,
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Dealer

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FM 500 Diesel Generator Rating					
500 kVA	400 kWe	3 Phase	415V	50 Hz	0.8 p.f.

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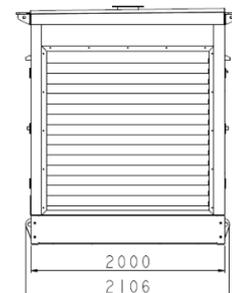
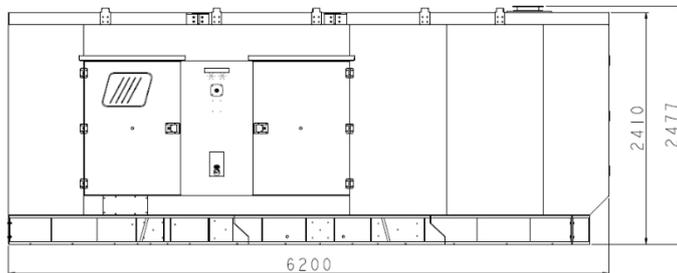
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