



- CPCB IV+ 10V: 380 kVA , 400 kVA, 450 kVA, and 500 kVA
- CPCB IV+ 12V: 550 kVA and 610 kVA
- 12V+: 910 kVA , 1010 kVA

Dependable Power For Demanding Environments

**CPCB IV+
EMISSION COMPLIANT**

Force MTU Power Systems Pvt. Ltd.

A Joint Venture of Force Motors and Rolls-Royce Power Systems GmbH

About Force Motors Limited

Force Motors Limited is India's leading manufacturer of shared passenger mobility solutions. The company is engaged in the design, development, and production of light commercial vehicles, multi-utility vehicles, and high-performance engines.

With five state-of-the-art manufacturing facilities and a robust network of over 300 sales and service touchpoints across India, Force Motors also maintains a strong international footprint through distributors in more than 25 countries across the Middle East, Gulf, Asia, Latin America, and Africa.

Its flagship platforms include the iconic Traveller, the rugged Trax, the all-terrain Gurkha, and Urbania—India's first modular monocoque van platform designed for premium shared mobility. The Traveller Monobus, with its innovative monocoque design, further strengthens Force Motors' leadership in the mid-size bus segment.

Force Motors has built strong relationships with global automotive leaders by consistently delivering high-quality engines and components. BMW and Mercedes-Benz assigned Force Motors the responsibility of producing and testing engines for all cars and SUVs manufactured in India.



About Rolls-Royce

Rolls-Royce Solutions GmbH is a wholly owned subsidiary of Rolls-Royce plc, a global group with revenue of ₹2,25,000 crore and over 50,000 employees in more than 50 countries. A leader in innovation and clean energy technologies, Rolls-Royce serves clients in 150+ countries including:

- 400+ airlines
- 160 armed forces
- 70 navies
- 5,000+ marine, power, and nuclear sector customers



About Force MTU Power Systems Pvt Ltd

Force MTU Power Systems Pvt. Ltd. is a strategic joint venture between Force Motors Ltd. (51%) and Rolls-Royce Solutions GmbH (49%). The company manufactures the globally renowned MTU Series 1600 diesel and gas engines in India, catering to high-performance applications in power generation, underfloor rail, and other demanding industrial sectors.

This partnership brings together Rolls-Royce's advanced engineering excellence and Force Motors' robust manufacturing capabilities and extensive supplier network in India. The joint venture delivers reliable, efficient, and customized engine solutions for both domestic and international market.



Technical Specifications of Our Offerings

Diesel Generator Model		FM380	FM400	FM450	FM500	FM550	FM610	FM1000	FM1000
Power Rating (kVA/kWe)	UoM	380/304	400/320	450/360	500/400	540/440	610/488	910/728	1010/808
Manufacturer		FMTU	FMTU	FMTU	FMTU	FMTU	FMTU	FMTU	FMTU
Model		10V1600G20F4IN	10V1600G20F4IN	10V1600G20F4IN	10V1600G20F4IN	12V1600G20F4IN	12V1600G20F4IN	12V1600G91F	12V1600G91F
Type		4-Cycle	4-Cycle	4-Cycle	4-Cycle	4-Cycle	4-Cycle	4-Cycle	4-Cycle
No. of Cylinders		10 V	10 V	10 V	10 V	12 V	12 V	12 V	12 V
Displacement	Ltrs	17.5	17.5	17.5	17.5	21	21	22.44	22.44
Bore x Stroke	mm	122 X 150	122 X 150	122 X 150	122 X 150	122 X 150	122 X 150	126 X 150	126 X 150
Compression Ratio		17.5	17.5	17.5	17.5	17.5	17.5	15.89	15.89
Rated	RPM	1500	1500	1500	1500	1500	1500	1500	1500
Engine Governer		ECU 9	ECU 9	ECU 9	ECU 9	ECU 9	ECU 9	ECU 9	ECU 9
Engine Power Rating		601 BHP (448 kW)	601 BHP (448 kW)	601 BHP (448 kW)	601 BHP (448 kW)	703 BHP (524kW)	703 BHP (524kW)	1190 BHP (888 kW)	1190 BHP (888 kW)
Air Cleaner		Dry -Heavy Duty	Dry -Heavy Duty	Dry -Heavy Duty	Dry -Heavy Duty	Dry -Heavy Duty	Dry -Heavy Duty	Dry -Heavy Duty	Dry -Heavy Duty
Liquid Capacity									
Total Oil Capacity (Initial Filling)	Ltrs	60.5	60.5	60.5	60.5	72.5	72.5	72.5	72.5
Change in Engine Oil Capacity	Ltrs	53	53	53	53	65	65	65	65
Total coolant capacity	Ltrs	60	60	60	60	135	135	163	163
Engine Oil Pressure	Bar	4.5 to 5.5	4.5 to 5.5	4.5 to 5.5	4.5 to 5.5	4.5 to 5.5	4.5 to 5.5	4.5 to 5.5	4.5 to 5.5
Control Panel									
Controller		DEIF- AGC 150 Standalone	DEIF- AGC 150 Standalone	DEIF- AGC 150 Standalone	DEIF- AGC 150 Standalone	DEIF- SGC 420 MK-II	DEIF- SGC 420 MK-II	DEIF- SGC 420	DEIF- SGC 420
Circuit Breaker		4P, MCCB Manual, 36kA	4P, MCCB Manual, 36kA	4P, MCCB Manual, 36kA	4P, MCCB Manual, 36kA	4P, MCCB Manual, 36kA	4P, Manual ACB, 42kA	Fixed Type ACB 1600 Amp	Fixed Type ACB 1600 Amp
Generator									
Duty		Prime	Prime	Prime	Prime	Prime	Prime	Prime	ESP
Generator		4 Pole, Brushless	4 Pole, Brushless	4 Pole, Brushless	4 Pole, Brushless	4 Pole, Brushless	4 Pole, Brushless	4 Pole, Brushless	4 Pole, Brushless
Insulation Class		H-Class	H-Class	H-Class	H-Class	H-Class	H-Class	H-Class	H-Class
Bearing		Single	Single	Single	Single	Single	Single	Single	Single
Enclosure		IP23	IP23	IP23	IP23	IP23	IP23	IP23	IP23
Voltage Regulation		±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.5 %	±0.25 %	±0.25 %
Exciting System		MAUX Auxiliary	MAUX Auxiliary	MAUX Auxiliary	MAUX Auxiliary	MAUX Auxiliary	MAUX Auxiliary	Brushless (AREP)	Brushless (AREP)
AVR Type		Digital DER1	Digital DER1	Digital DER1	Digital DER1	Digital DER1	Digital DER1	Digital D350	Digital D350
Winding Pitch		2\3	2\3	2\3	2\3	2\3	2\3	2\3	2\3
Rated Speed		1500	1500	1500	1500	1500	1500	1500	1500
Rated Voltage		415	415	415	415	415	415	415	415
Alternator Efficiency		94.90%	94.90%	94.90%	94.90%	94.90%	94.90%	0.954	0.954
Electrical									
Electric system volts DC	V	24	24	24	24	24	24	24	24
Number of Batteries		2	2	2	2	2	2	2	2
Capacity	Ah	2 *105	2 *105	2 *105	2 *105	2 *105	2 *105	2 *105	2 *105

*Fuel consumption measured at NTP Condition and conforming to IS: 1460. Fuel consumption tolerance is +5% F.S.P = Fuel Stop Power.

**Conformance Standards • ISO 3046-1 • ISO 8528 -1 • AS 2789 • DIN 6271

General Dimensions

General Model	Rating (kVA)	Length (mm)	Width (mm)	Height (mm)	Approx. Dry Weight (Kg)	Fuel Tank Capacity (Ltrs)
FM380	380/304	5800	2000	2210	6700	990
FM400	400/320	5800	2000	2210	6700	990
FM450	450/360	5800	2000	2210	6700	990
FM500	500/400	5800	2000	2210	6700	990
FM550	550/440	6200	2000	2410	7500	990
FM610	610/488	6200	2000	2410	7500	990
FM1000	910/728	7500	2000	2733	9200	990
FM1000	910/728	7500	2000	2733	9200	990

**In view of continuous product improvements, Force MTU Power Systems Pvt. Ltd. reserves the right to modify any and all of the above dimensions, parameters, and values without any prior intimation and financial and legal liability."

INDUSTRIES WE SERVE

Healthcare & Hospitals

Whether your facility has 10 beds or 10,000, reliable backup power is critical. Force MTU ensures uninterrupted power to support life-saving operations. Trusted by hospitals around the world.

Commercials & Public Buildings

Schools, offices, malls, and hotels rely on grid power—but demand reliable backups. Force MTU delivers high-performance gensets with switchgear and 24/7 support, ensuring safety and compliance.

Data Centers

Our gensets deliver fast, reliable backup power for mission-critical data centers. Built to meet high uptime SLAs with industry-leading load factors, fuel efficiency, and availability.

Manufacturing & Industrial Units

High energy demands from production lines require failproof backup systems. From food processing to chemicals and textiles—our diesel gensets offer high reliability and maximum uptime.

Airport

Force MTU gensets power major airports across India with consistent performance, one-step load acceptance, and compliance with stringent aviation infrastructure requirements.

Mining/Crushing Operations

Reliable Power ensures maximum uptime for crushing and mining customers, along with easy access to parts, reduced inventory needs, and prompt service support anywhere.

***Dependable Power.
Anytime. Anywhere.***

