## **FEATURES AND BENEFITS**

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Cutting Edge Technology

Longest Oil Change Period
Longest Overhauling Period
Most Economical Genset

A1/ Isochronous<sup>#</sup> Governing

Quality of Power
Zero Flickering and Fluctuation

High Moment of Inertia and Torque

Best in Class Block Loading Capability
Better Performance at Varying Load

Individual Blowers (Air Cooled Range)

Even cooling of all the cylinders
Better efficiency

Turbo Charger with Inter Cooler (Water Cooled Range)

Better Engine Efficiency

Most Reliable Engines

Prime Power Rating available across range
Most Powerful Engines in their Class

#### ACOUSTIC ENCLOSURE

CRCA Sheet Longer Life

40 mm PU Foam (5 to 62.5 kVA)
50 mm PU Foam (82.5 to 125 kVA)

Thickest in its class
Low noise and vibration level
Super Silent Options available

Silencer Inside the Canopy

Better Aesthetics
Longer life of Silencer

Compact Size Saves Space Suitable for roof top installation

Large Doors on Both Sides
Drain Provided for Lube Oil and Fuel Tank

Ease of Maintenance

Unitary Front and Back Panel Canopy with Internal Bolting Stainless Steel (SS) Hinges with SS Studs

Stainless Steel (SS) Hinges with SS Studs
SS Slam Locks with Barrel & Padlock

Dual Fuel Lock

arrangement

S-bend Fuel Pipe SS Fuel Strainer

# Available in 125 kVA

Higher Degree of Safety

Best in Class Fuel Efficiency

Pilferage Proof

# **CUSTOM OPTIONS**

- Special control panel options
- Super silent option (65 db)
- Ultra super silent option (58 db)
- Fuel tank available with different capacity/configurations
- RTU DG sets
- Custom made options for telecom industry

## **OUR CLIENTS**



All client names and logos featured are the property of their respective trademark or copyright owners and do not belong to TMTL.

## **SOLVING YOUR POWER NEEDS**



#### TAFE MOTORS AND TRACTORS LIMITED

(A wholly owned subsidiary of TAFE量)

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You can rely on us...

## **OUR HERITAGE**

As one of the pioneers in manufacturing diesel engines in the country with a heritage of more than 55 years lending to its expertise, TMTL Engines Division envisages growing exponentially in the power generation segment by providing cutting edge technology, best fuel efficiency, and lowest cost of ownership.

TAFE Motors and Tractors Limited (TMTL), a wholly owned subsidiary of Tractors and Farm Equipment Limited (TAFE), came into being when TAFE acquired the tractors, gears, transmission and engines business from Eicher Motors Limited in 2005. Through technical collaboration with companies such as Ricardo Consulting (UK), Sisu Diesel and Valtra (Finland), a new range of Engines from 38.1 HP to 160 HP (30 kVA to 125 kVA) was developed and added to the original German Technology heritage engines range of 11.5 HP to 60 HP.

TMTL Engines Division offers economical power solutions with custom built products and services to cater to a wide range of institutional and retail customers ranging from banking and finance, rental agents, commercial, construction and real estate, hospitality, information technology, government and public sector, small and medium enterprises, agro entrepreneurs and farmers, petrol pumps, educational institutes, residential and hospitals etc., and has an existing base of over 1 million highly satisfied customers.

With an emphasis to meet global standards of quality and productivity, TMTL Engines Division employs quality management tools such as TQM, TPM, SGA and Kaizen extensively. The engines plant at Alwar is certified under ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

TMTL Engines Division with a 700% growth on volume basis in last 14 years of its existence, is one of the fastest growing engines manufacturers in world and enjoys a dominant market share in the Telecom segment. TMTL Engines Division's flagship product, 125 kVA generator, is one of the most technologically advanced gensets in India with indigenously developed CRFIS engine and Isochronous Governing, which is helping TMTL carve a unique identity for itself in its quest to truly become world leading engine manufacturer.















## **TECHNICAL SPECIFICATION**

GENSET														
Power (kVA)	5	7.5	10	15	20	25	30-35	40-45	30	40-45	62.5	82.5	100	125
Duty	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime	Prime
Control Panel	Options Available for AMF / Manual Control													
Acoustic Insulation	PU FR - Acoustic Foam													
DG Dimensions in mm B H	1500 850 1225	1500 850 1225	1700 900 1350	1700 900 1250	1700 900 1250	2050 900 1250	2250 1000 1400	2450 1030 1400	2150 950 1400	2250 1000 1400	2650 1000 1550	3050 1300 1750	3050 1300 1750	3050 1300 1750
Fuel Tank Capacity (Lt.) *	50	50	60	80	80	100	100	100	80	100	125	250	250	250
Weight of DG Set (Kg) **	650	700	925	950	950	1050	1200 / 1225	1270 /1330	1200	1270/1330	1470	1980	2000	2050
ENGINE														
Engine Manufacturer	TAFE Motors and Tractors Limited													
Engine Brand	TMTL Engines													
Engine Model	198 ES	198 ES	222 ES	322 ES	323 ES	422 ES	422 TC	422 TCI	461 ES	621 ES	881 ES	1121 ES	1401 ES	1751 ES
No. of Cylinders	1	1	1	2	2	3	3	3	3	3	3	4	4	4
Aspiration	Naturally Aspirated Turbo Turbo Charged Naturally Charged Inter-cooled Aspirated							Naturally Aspirated		Turbo Charged Inter-cooled				
Engine BHP (gross)	11.5	11.5	18.7	25.1	25.7	35.5	48.2	60	38.1	59.1	82.3	102	128	160
Reference Standard					En	gine - BS: 551	4, ISO: 3046, IS	: 10000, Gense	et - ISO: 8528					
Displacement (cc)	981	981	1557	1963	1963	2945	2945	2945	3298	3298	3298	4910	4910	4910
Compression Ratio	17.5:1	17.5:1	17.8:1	17 : 1	17 : 1	17 : 1	17 : 1	17 : 1	18.5 : 1	18.5 : 1	17 : 1	17 : 1	17 : 1	17 : 1
Type/Class of Governing	Mechanical / A1 (As per BS 5514)									Iso- chronous				
Bore x Stroke (mm)	100x125	100x125	115x150	100x125	100x125	100x125	100x125	100x125	108x120	108x120	108x120	108x134	108x134	108x134
Type of cooling	Air Cooled Water Cooled													
Lub oil Sump capacity (with filters)	5	5	7.5	8.0	8.0	9.5	9.5	9.5	7.1	7.1	8.0	15	15	18
Engine Electrical System	12 Volts DC													
ALTERNATOR														
Phase	1 Phase / 3Phase									3Ph	ase			
Voltage	240 V AC, 415 V AC								415 V AC					
Power Alternator Type	Single Bearing, Brushless, Single / Three Phase, Insulation Class H													
Power Factor		0.8 lag												
Rated speed / Freq	1500 RPM / 50 / 60 Hz													

Because of continuous improvement, product specifications and features described herein are subject to change without notice

\* Fuel tank can be customized as per requirement

\*\* 1.The weight of DG is approximate (With Engine Lubricating Oil and Coolant as applicable but without Diesel fill)

2. Tolerance applicable on the weight of the DG Set +/- 50 kg owning to variation in DG Set accessories and different makes of Alternator





### **PRIME POWER (PRP)**

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. 10% overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.



# TMTL GENSET CONTROL UNIT

Controller Make - Deep Sea PLC.

Safeties for Over/Under Voltage/Frequency/Speed, Overload, Canopy Fan Fault, Load Imbalance, Low Lube Oil Pressure, High Cylinder/Water Temperature, Low Fuel Level, Radiator Coolant Low, Charging Alternator etc.

Service due Prompt - Control Unit will display the service due alert based on hours of operation

Automatic starting & AMF facility