

### **CPCB IV+**

### New Features & Fnhancements

#### Lowest Total Cost & **Improved Ownership** Experience

- Improved running cost per unit
- efficiency over CPCB II
- Pan India service centres equipped and
- Use of only TATA Genuine parts in after sales service

# **Common Rail Diesel Injection**

#### **Exhaust Gas Recirculation** (EGR)

- Controls NOx emissions through lowering the oxygen concentration in the combustion chamber
- Reduces consumption of lubricating oil
- Increases the fuel injection pressure

#### Selective Catalyst Reduction (SCR)

- emission control system a special catalyst into the exhaust stream
- SCR technology is designed to reduce Nitrogen Oxide (NOx)
- Emits Nitrogen + Water in to the environment

### TATA Diagnostic Software (TDS)

#### Canopy

- Centre lifting
- PU Coated foam on doors for less absorption of diesel and oil
- Made only of TATA or equivalent quality steel
- Thicker sheet gauge than market offerings
- Drawer type fuel tank
- Oil & Coolant Drain arrangement
- Separate mounting for DEF Tank with 25 litres capacity
- Anti vibration Mounting Pads for engine and alternator mounting



















#### **Prime Power Engines**

- Prime power is designed for unlimited hours, as compared to standby models designed for limited hours in a year
- Prime power gensets also permit 10% overloading
- Engine offerings by TATA MOTORS.
- 4SP 55 KW (Prime rating)
- 497 76 KW (Prime rating)
- 697 118 KW (Prime rating)
- 90% reduction in PM (Particulate Matter)
- 87% reduction in HC (Hydrocarbons) & NOx (Nitrogen Oxide) in 497 & 697 models

#### **Electronic Interface**

- Engine Control Unit (ECU)
- Controller Area Network
   (CAN) based engine
   diagnostics
- torque calculation for improved fuel efficiency
- with TATA RMS

#### **Diesel Oxidation** Catalyst (DOC)

#### **TATA MOTORS Remote Monitoring** System (RMS)

#### Genset at your finger-tips with

- Real time visibility and check on parameters
- Keep a check on your fuel level
- Track run time anytime and get reports on performance
- Check maintenance schedule and get notifications
- Check fuel consumption and past consumption trends
- Alarms for faster diagnosis

#### Deepsea Controller

The DSE controller is Microprocessor based having inbuilt Auto Logic Feature and has a graphical LCD display showing

- Phase voltage and current
- Genset kVA, kW, kWh, Power factor
- Lube oil pressure & Engine temperature
- RPM, Run hours, Fuel level
- Over/Under speed
- Over/Under voltage
- Over current
- Low fuel level etc



Recommended for warranty support and longer life of generator set

# Technical Specifications:

# **TATA MOTORS**

## **3 Phase DG SETS**

Voltage	TMG125 125 100 agging)						
Power Rating (kVA)   25   30   35   40   40   45   50   58.5   70   82.5   100	125 100						
Power Rating (kW)   20   24   28   32   32   36   40   46.8   56   66   80	100						
Note							
Voltage         415 V         425 V         427 V         427 V <th co<="" td=""><td>anninn)</td></th>	<td>anninn)</td>	anninn)					
Current per phase (Amperes)         35         42         49         56         56         63         70         81         97         114         139           RPM / Frequency         Length (Amperes)         1500 RPM / 50 Hz         1500 RPM / 50 Hz <td r<="" td=""><td>2991197</td></td>	<td>2991197</td>	2991197					
RPM / Frequency         1500 RPM / 50 Hz         1500 RPM / 50 Hz <th <="" colspan="5" td=""><td colspan="2">415 V</td></th>	<td colspan="2">415 V</td>					415 V	
DG Set Noise at 1 meter	174						
Fuel Tank Capacity (Approx in Ltrs.)   120	PM / 50 Hz						
Note: Do not overfill the diesel tank above it's given capacity to maintain adequate air space.  CANOPY DIMENSION  Length (mm)	< 75 dB						
CANOPY DIMENSION           Length (mm)         2250         2550         2800         100	250						
Length (mm)       2250       2550       2800         Width (mm)       1100       1100       1100       1100         Height (mm)       1530       1530       1730         ENGINE         Make       497SPTC88       497SPTC89       497TC57       69         Horse Power       43       43       43       43       74       74       74       103       103       160         Performance class       IS0 8528       IS0 8528       IS         Governing class       63       63       63       63         Displacement (cc)       2956       3784       4         Number of Cylinders       4       4       4       4							
Width (mm)       1100       1100       1100       1100       1100       1100       1100       1100       1100       1100       1100       1100       1100       1100       11730       1100							
Height (mm) 1530 1730 1730 1730 1730 1730 1730 1730 17	3300						
ENGINE           4SP         497           497SPTC88         497SPTC89         497TC57         69           Horse Power         43         43         43         43         43         74         74         74         74         103         103         160           Performance class         ISO 8528	1250						
Make       4\$P       4\$P       497       150 8528       497 SPTC89       497 C57       65         Horse Power       43       43       43       43       74       74       74       74       103       103       160         Performance class       ISO 8528       ISO 8528 <th <="" colspan="5" td=""><td>1930</td></th>	<td>1930</td>					1930	
497SPTC88     497SPTC89     497TC57     69       Horse Power     43     43     43     43     74     74     74     74     103     103     160       Performance class     ISO 8528     ISO							
Horse Power 43 43 43 43 74 74 74 103 103 160  Performance class  Governing class  Displacement (cc)  Number of Cylinders  43 43 43 43 74 74 74 74 103 103 160  150 8528  150 85	697						
Performance class         ISO 8528         ISO 8528 <td>TC60</td>	TC60						
Governing class         63         63           Displacement (cc)         2956         3784           Number of Cylinders         4         4	160						
Displacement (cc)         2956         3784           Number of Cylinders         4         4	O 8528						
Number of Cylinders 4 4	G3						
·	5675						
Bore X Stroke 97 x 100 97 x 127 9	6						
	′ x 127						
Rated Speed (rpm) 1500 1500	1500						
Aspiration TCIC TCIC	TCIC						
Ambient Temperature Range -10 to 50 deg C -10 to 50 deg C -10 to	50 deg C						
Fuel System CRDI CRDI	CRDI						
Lube oil change period 500 500	500						
Total lubrication system 8.3 11.5	16						
Total coolant capacity including engine & radiator (Ltrs.)  12 16	23						
DEF Capacity (Ltrs.)  NA  25	25						
Starting Voltage 12V 12V	12V						
Fuel recommended High Speed Diesel High Speed Di	oeed Diesel						
Lube oil recommended         TMG0 - CK4 15W40         TMG0 - CK4 15W40         TMG0	CK4 15W40						
ALTERNATOR							
Make Stamford Or Equivalent							
Enclosure type IP23							
Class of insulation & Excitement Class H & Self Excited	Class H & Self Excited						
Voltage regulation +/-1%							
Bearing & Type Single Bearing & Brushless	Single Bearing & Brushless						
Maximum unbalanced load across phases Up to 25%							
Max Time to build up rated voltage at rated RPM <2 Seconds, provided engine reach the rated speed							

## Awards & Recognition BY TATA MOTORS



All India No. 1 GOEM for 4 consecutive years



No. 1 GOEM for achieving highest market share of TATA MOTORS Gensets in



No. 1 GOEM for Highest TATA Genuine Parts Purchase

# Technical Specifications:

## 1 Phase DG SETS

# **TATA MOTORS**

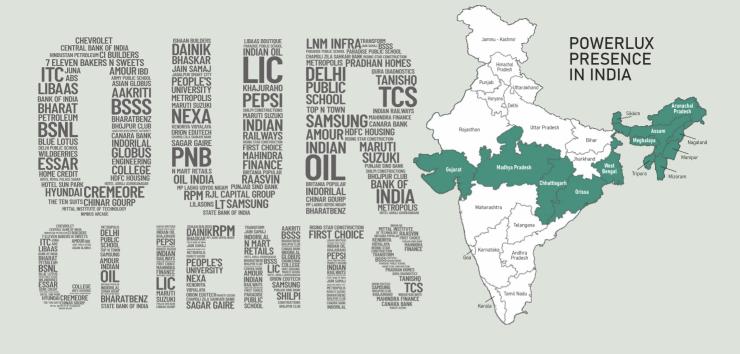
TATA MOTORS ENGINE RANGE	4SP RANGE							
GENSET SPECIFICATION								
Genset Model	TMG25	TMG30	TMG40 HD	TMG45	TMG58.5			
Power Rating (kVA)	25	30	40	45	58.5			
Power Rating (kW)	20	24	32	36	47			
Power Factor	0.8 (lagging)							
Voltage	415 V							
Current per phase (Amperes)	109	130	174	196	254			
RPM / Frequency	1500 RPM / 50 Hz							
DG Set Noise at 1 meter	< 75 dB							
Fuel Tank Capacity (Approx in Ltrs.)	120 150							
	Note: Do not ov	erfill the diesel tank abov	e it's given capacity to mair	ntain adequate air space.				

DG Set Noise at 1 meter	<75 dB						
Fuel Tank Capacity (Approx in Ltrs.)	120 150						
	Note: Do not o	overfill the diesel tank abov	e it's given capacity to ma	intain adequate air space.			
CANOPY DIMENSION							
Length (mm) <sup>^</sup>	2250 2575						
Width (mm)^	1100 1100						
Height (mm)^	1530 1530						
ENGINE							
Make	4SP						
	497S	PTC88	497SPTC89				
Horse Power	43	43	74	74	74		
Performance class	ISO 8528						
Governing class	G3						
Displacement (cc)	2956						
Number of Cylinders	4						
Bore X Stroke	97 x 100						
Rated Speed (rpm)	1500						
Aspiration	TCIC						
Ambient Temperature Range	-10 to 50 deg C						
Fuel System	CRDI						
Lube oil change period	500						
Total lubrication system capacity (Ltrs.)	8.3						
Total coolant capacity including engine & radiator (Ltrs.)	12						
DEF Capacity (Ltrs.)	NA						
Starting Voltage	12V						
Fuel recommended	High Speed Diesel						
Lube oil recommended	TMGO - CK4 15W40						
ALTERNATOR							
Make	Stamford Or Equivalent						
Enclosure type	IP23						
Class of insulation & Excitement	Class H & Self Excited						
Voltage regulation	+/-1%						
Bearing & Type	Single Bearing & Brushless						
Maximum unbalanced load across phases	Up to 25%						
Max Time to build up rated voltage at rated RPM	<2 Seconds, provided engine reach the rated speed						









#### How to calculate load

- 1) Put on only those equipments which you want to run on the Powerlux Silent Generator.
- 2) Go near the distribution box where you'll find four colored cables; Red, Yellow, Blue & Black.
- 3) Put the clamp meter around the Red, Yellow & Blue cable one by one and note down the ampere rating.
- 4) Now add the numbers in case of single phase requirement or pick the highest in case of three phase requirement.
- 5) Select your kVA from the ampere chart given in the technical specifications and see under which rating your requirement falls.



**Note:** After putting the clamp meter around the cable; turn off and on the heavy machines/equipments for better calculation. Also always select a rating 20% higher to your load for long term usage.

Get in touch with us



(AUTH. GOEM FOR TATA MOTORS LIMITED)

**Plant & Head Office:** Near Capital Filling Station, Raisen Road, Patel Nagar, Bhopal, Madhya Pradesh 462024

**Marketing Offices:** Ahmedabad | Kolkata | Bhubaneswar | Raipur

**E** bo@powerluxind.com **W** www.powerluxenergy.com **T-fax** 0755-4245361 **M** +91-975-242-5006/07

Dealer Stamp