

## YOUR POWER TO SUCCESS

BEST FUEL ECONOMY  
BEST COST OF OWNERSHIP

BEST IN RELIABILITY  
BEST IN CLASS SERVICE



\* Terms and conditions apply



You can rely on us...

**EICHER ENGINES**  
AIR COOLED

**TMTL ENGINES**  
WATER COOLED

#IndiaKaEngine



# FEATURES & BENEFITS

## ENGINE

|                                                         |                                                                                                                                          |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Cutting Edge Technology                                 | Best in Class Fuel Efficiency<br>Lowest Maintenance<br>Longest Oil Change Period<br>Longest Overhauling Period<br>Most Economical Genset |
| A 1 Governing                                           | Quality of Power<br>Lowest Flickering and Fluctuation                                                                                    |
| High Moment of Inertia and Torque                       | Best in Class Block Loading Capability<br>Better Performance at Varying Loads                                                            |
| Individual Blowers (Air Cooled Range)                   | Even cooling of all the cylinders<br>Better efficiency                                                                                   |
| Turbo Charger with Inter Cooler<br>(Water Cooled Range) | Better Engine Efficiency                                                                                                                 |
| Most Reliable Engines                                   | Prime Power Rating available across range<br>Most Powerful Engines in their Class                                                        |

## ACOUSTIC ENCLOSURE

|                                                                                                                                                                                                                                   |                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| CRCA Sheet                                                                                                                                                                                                                        | Longer Life<br>Thickest in its class                            |
| 40 mm PU Foam (5 to 60 kVA)                                                                                                                                                                                                       | Low noise and vibration level<br>Super Silent Options available |
| Silencer Inside the Canopy                                                                                                                                                                                                        | Better Aesthetics<br>Longer life of Silencer                    |
| Compact Size                                                                                                                                                                                                                      | Saves Space<br>Suitable for roof top installation               |
| Large Doors on Both Sides<br>Drain Provided for Lube Oil and Fuel Tank<br>Unitary Front and Back Panel<br>Canopy with Internal Bolting<br>Stainless Steel Hinges with SS Studs<br>SS Slam Locks with Barrel & Padlock arrangement | Ease of Maintenance<br><br><br><br><br>Higher Degree of Safety  |
| Dual Fuel Lock<br>S-bend Fuel Pipe<br>Stainless Steel Fuel Strainer                                                                                                                                                               | Pilferage Proof                                                 |
| State of Art Powder Coating Plant                                                                                                                                                                                                 | Long Life Weather Protection                                    |

## BEST IN CLASS SERVICE

|                                                                                                                                                                  |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Single Point of Contact<br>Round the Clock Assistance<br>Pan India Service Network<br>Highly Qualified & Trained Service Team<br>Post Service Feedback Mechanism | Delighted Customer |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|

## WARRANTY TERMS

Warranty period covers 2 Years or 5000 Hours run\* (whichever is earlier)  
Warranty on 5C covers 5 Years or 5000 Hours run\* (whichever is earlier)  
\* Terms and conditions apply

## 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

Protection for Over / Under Voltage / Frequency / Speed, Over load, Canopy FAN fault,<sup>#</sup> Load imbalance, Low Lube oil pressure, High cylinder / water temperature, Low Fuel level, Radiator water low, Charging alternator / V-Belt failure etc. Service due prompt - Control unit will display the Service due alert based on running hours





## Controller: DSE4522 MKI

### KEY FEATURES OF DSE 4522 CONTROLLER

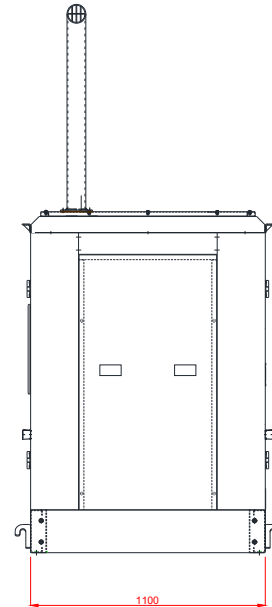
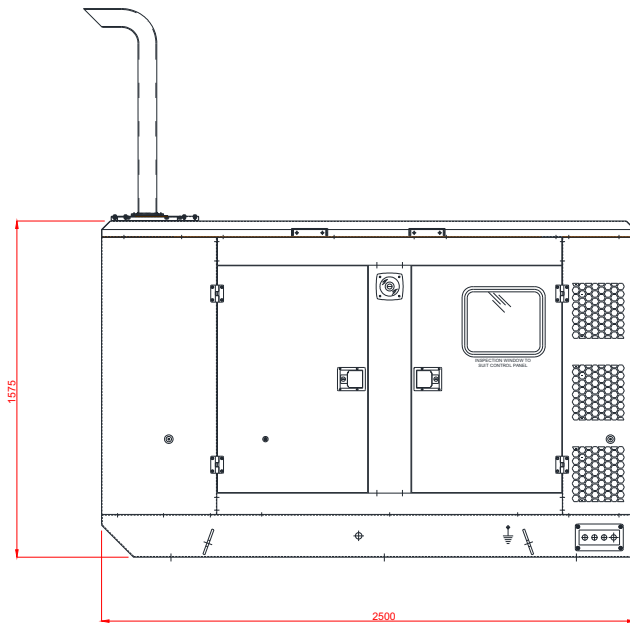
- LCD display
- True RMS Voltage
- Current and Power monitoring
- USB Communications
- Engine parameter monitoring.
- Fully configurable inputs for use as alarms or a range of different functions.
- Engine ECU interface to electronic engines
- The DSE smart PC Software allows
- Alteration of selected operational sequences,
- Timers, alarms and operational sequences.
- **Operating Temperature:** -30 °C +70 °C (-22 °F +158 °F )
- **Operating voltage:** 8 V to 32 V DC
- **COMMUNICATION PORTS :**  
USB Port: Type B USB 2.0 For connection to PC
- Configurable digital inputs/output
- Generator running hours counter
- Three phase sensing
- Generator Power Monitoring like, Kilo watts / KV/Amp / Ar / Power factor
- Generator Protections like, Over load, Over voltage , Low Voltage, Single phasing
- Engine Protection like, Low RPM, High RPM, Low Lube oil , High Temperature
- Event Log
- Generator monitoring like, Battery Voltage, Engine run time scheduler ,
- Maintenance Alarm
- Automatic transfers between Generator and utility ( Mains ) transfer facility is available
- Remote Start / stop facility
- IP42 (front of module when installed into the control panel WITHOUT being sealed to the panel)
- IP65 (front of module when installed into the control panel with the optional

# TECHNICAL SPECIFICATIONS

## Technical Specifications - 82.5 KVA

|                                       |                      |                                                            |
|---------------------------------------|----------------------|------------------------------------------------------------|
| Genset Rating                         | kVA                  | 82.5                                                       |
| Genset Model                          |                      | PECH 82.5 TP                                               |
| Duty                                  | Prime / Standby      | Prime                                                      |
| Engine manufacturer                   | -                    | TAFE Motors and Tractors Limited                           |
| Engine Brand                          |                      | TMTL Engines                                               |
| Engine model                          | -                    | 449W0-EG083                                                |
| Number of cylinders                   | nos.                 | 4                                                          |
| Aspiration                            | -                    | Turbo Charged Inter-cooled                                 |
| Engine power (gross)                  | BHP                  | 102.2                                                      |
| Rated speed & frequency               | RPM /Hz              | 1500/ 50 Hz                                                |
| Stroke                                | mm                   | 108                                                        |
| Bore                                  | mm                   | 134                                                        |
| Displacement                          | cc                   | 4910                                                       |
| Compression ratio                     | -                    | 17:01                                                      |
| Reference standard                    | -                    | Engine: As per ISO 3046-1, Genset: As per ISO 8528         |
| Type of governor                      | -                    | Electronic/Isochronous                                     |
| Class of Governing                    | -                    | G3                                                         |
| Air cleaner                           | -                    | Dry                                                        |
| Type of cooling                       | -                    | Water Cooled                                               |
| Fuel Tank Capacity                    | L                    | 250                                                        |
| Lube oil Sump capacity (with filters) | L                    | 18                                                         |
| Phase                                 | -                    | 3 Phase 4 wire                                             |
| Voltage                               | VAC                  | 415                                                        |
| Voltage Regulation                    | %ge of Rated voltage | +/- 1%                                                     |
| Power Factor                          | Lag                  | 0.8                                                        |
| Power Alternator Type                 | -                    | Brushless with AVR, Single Bearing, Bell Housing: SAE 3/10 |
| Insulation                            | -                    | Class-H                                                    |
| Make                                  | -                    | Stamford / Leroy Somer / CG or Meccalte                    |
| Starting System                       | -                    | Electric                                                   |
| Battery                               | Volts, Ah            | 12 Volts, 120 Ah                                           |
| Silencer Location & Type              |                      | Internal / Residential                                     |
| Acoustic Insulation Type              | -                    | PU FR Retardant                                            |
| Acoustic Insulation Thickness         | mm                   | 50                                                         |
| DG Set Dimensions ( L X B X H)        | mm                   | 3300 X 1300 X 1700                                         |
| Weight of DG Set (Approx)+            | kg                   | 1960                                                       |

# Dimensions and Weight



**Overall Size (L x W x H): 2500 X 1100 X 1575 (mm)**

**Weight (Dry, Max):**

**NOTE:** Drawing provided is for reference only and should not be used for planning installation. Please contact the Company or latest updated details. All the data is as per respective manufacturers' specification. PERFECT reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

**Disclaimer:** Due to continues product improvements, specifications are subject to change without prior notice.



## Perfect House Pvt. Ltd.

### CORPORATE OFFICE:

2nd Floor, 99C Kavya Aura, Next to Rosewood Hotel, Tardeo, Mumbai – 400034

### FACTORIES:

Plot no. M-7, Additional MIDC, Satara -415004

Plot no. J-2/6, Additional MIDC, Satara -415004

Plot no. J-2/5, Additional MIDC, Satara -415004

### OFFICE NUMBER:

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