

### About Product

IDEA generator sets are designed to be used as backup or continuous power supply. They are subjected to detailed load and performance tests in our production facilities in order to provide ideal performance and safe usage.



### Power Output Values

| Voltage | Standby Power (ESP) |        |        | Prime Power (PRP) |        |        |
|---------|---------------------|--------|--------|-------------------|--------|--------|
|         | kVA                 | kW     | Ampere | kVA               | kW     | Ampere |
| 400/231 | 550 kVA             | 440 kW | 795    | 500 kVA           | 400 kW | 722,5  |

**Standby Power (ESP) :** This rating is for the supply of continuous electrical power at variable load , in the event of utility power failure. No overload is permitted.

**Prime Power (PRP) :** This rating is for the supply of continuous electrical power at variable load. There is no limitation on the annual hours in operation and 10% overload power can be supplied for 1 hour in 12.

### Weight And Dimensions

| Type         | Width x Length x Height (mm) | Weight (kg) | Fuel Tank (Lt) | Sound dB(A) @1mt |
|--------------|------------------------------|-------------|----------------|------------------|
| Open         | 1300x3200x2160 mm            | 3880 kg     | 600lt          | TBA              |
| Soundproofed | 1300x4910x2420 mm            | 4590 kg     | 600lt          | 81               |



### Engine

|                                     |                   |                                 |
|-------------------------------------|-------------------|---------------------------------|
| Frequency                           |                   | 50 Hz                           |
| Output Rating                       | kW                | 459                             |
| Manufacturer and Model              |                   | FPT C13 TE7W                    |
| Fuel                                |                   | Diesel                          |
| Injection                           |                   | Direct - Electronic Common Rail |
| Aspiration                          |                   | Turbocharged & Aftercooled      |
| Cylinders                           |                   | 6                               |
| Bore and Stroke                     | mm                | 135 x 150                       |
| Displacement                        | lt                | 12,88                           |
| Cooling                             |                   | Water                           |
| Engine Oil Specification            |                   | SAE 15W40                       |
| Compression Ratio                   |                   | 16,5:1                          |
| Engine Oil Capacity                 | lt                | 32                              |
| Coolant Capacity (incl.radiator)    | lt                | 38,1                            |
| Governor                            |                   | Electronical (ECU)              |
| Air Filter                          |                   | Dry element                     |
| <b>FUEL CONSUMPTION</b>             |                   |                                 |
| 100 % Load                          | lt/h              | 100,6                           |
| 75 % Load                           | lt/h              | 80,2                            |
| 50 % Load                           | lt/h              | 51,5                            |
| <b>EXHAUST SYSTEM</b>               |                   |                                 |
| Maximum Temperature                 | °C                | 520                             |
| Exhaust Gas Flow                    | kg/h              | 2027                            |
| Maximum Allowed Back Pressure       | kPA               | 5                               |
| Exhaust Flange Size (Internal Dia.) | mm                | 94,5                            |
| <b>AIR SYSTEM</b>                   |                   |                                 |
| Intake Air Flow                     | m <sup>3</sup> /h | 1576                            |
| Total Cooling Air Flow              | m <sup>3</sup> /h | 408                             |
| <b>STARTING SYSTEM</b>              |                   |                                 |
| Starter Motor                       | kW                | 7,8                             |
| Battery Capacity                    | Ah                | 2x120                           |
| Auxiliary Voltage                   | V                 | 24                              |

### Alternator

|                                 |  |                                     |
|---------------------------------|--|-------------------------------------|
| Poles                           |  | 4 pole                              |
| Winding Connections             |  | Star                                |
| Insulation                      |  | Class H                             |
| Enclosure                       |  | IP23                                |
| Exciter System                  |  | Self regulating Brushless           |
| Voltage Regulator               |  | AVR                                 |
| Steady State Voltage Regulation |  | ± 1 %                               |
| Bearing                         |  | Single bearing sealed               |
| Coupling                        |  | Flexible disc                       |
| Cooling                         |  | Direct drive centrifugal blower fan |



### Control Panel IDP300

The new IDP300 genset controller is a cost effective modular genset controller ready for internet monitoring through plug-in modules.

Its main advantages are multifunctionality, support for multiple topologies, harmonic analysis and detailed power measurements.

Software features are complete with easy firmware upgrade through USB port. The Windows based PC software allows monitoring and programming through USB, RS-485, RS-232, Ethernet and GPRS.

The Rainbow Scada web service allows monitoring and control of an unlimited number of gensets from a single central location.



### Optional Equipments

Some Optional Equipment IDEA Provides with Generator Sets;

- Remote radiator applications,
- Automatic fuel filling system,
- Fuel tank, oil pan, instrument panel, alternator, coil heaters,
- Synchronization systems,
- Generator output fuse,
- Mains generator transfer switches,
- Seismic solutions,
- Remote monitoring
- Other requested solutions

### Reference Standards

IDEA Generator Sets are CE approved and comply with the following standards;

- Power according to ISO 3046 and ISO 8528
- EN 12100 , EN 13857 , EN 60204
- 2006/42/CE Machinery Safety
- 2006/95/EC Low Voltage
- 2004/108/CE EMC
- Ambient reference conditions 1000 mbar, 25 °C, 30 % relative humidity ISO8528

All the information in this leaflet is intended for general purposes only. IDEA reserves the right to change the specifications without notice.

