Abva



| Generating Rate       | es              | Prime | Standby |
|-----------------------|-----------------|-------|---------|
| Power                 | kVA             | 19    | 21      |
| Power                 | kW              | 15    | 17      |
| Current               | (cos Phi=0,8) A | 84    | 92      |
| Standard Voltage      | Avivalia        | 230   | 230     |
| Revolution Per Minute | r.p.m           | 1500  | 1500    |
| Rated At Power Factor | Cos Phi         | 0,8   | 0,8     |

### Standard Features

- 4 stroke 1500RPM, water cooled heavy duty diesel engine
- Dry type replacable air filter
- Heat-resistant radiator for 50 °C
- Flexible oil pipes and oil draining valve
- Pre-heater
- 4 poles synchrontype, single bearing, brushless alternator
- Batteries and cables
- Electrostatic paint coated, steel, welded chassis
- Fuel tank housed in the chassis
- Industrial type silencer
- Electronic battery charger
- Electrical wiring diagram
- User manual and operating manual
- Protection system on manual run
- Lubrication oil and anti freeze

# Optional Equipments

- Soundproof canopy
- Automatic transfer switch
- Circuit Breaker
- Trailer
- External fuel tank
- Electronic governor
- Heating system for fuel tank
- Oil heater
- Fuel filling system (Automatic / Manual)
- Analog indicators
- 1 Phase 3 phase switch plugs
- Alarm system for fuel level
- Remote control and monitoring

Abyaran

- Prime Power: Supplying of electrical power at variable load for an unlimited number of hours in the event of normal utility powerfailure according to ISO8528-1. 10% over load capability is available.
- Stand By Power: Supplying of electrical power at variable load, in the event of normal utility power failure according to ISO8528-1. This rating is maximum power, no overload capability is available.



Abya



| Engine Specifications   |   |                    |
|---|---|--------------------|
| Brand   |   | PERKINS            |
| Model   |   | 404A-22G1          |
| Engine Power  | (kWm / hp)                                | 20,3/27,2          |
| Revolution Per Min  | (r.p.m)                                   | 1500               |
| Total Displacement  | (L)                                       | 2,21               |
| Cylinders Orientation   |   | 4 Vertical In-line |
| Broke x Stroke  | (mm x mm)                                 | 84 x 100           |
| Compression Orientation   |   | 23,3:1             |
| Governor Type   |   | Mechanic           |
| Aspiration System   |   | Natural            |
| Injection   | h-rayan                                   | Indirect           |
| Cooling   | M. G. | Water Cooled       |
| Electrical System   | (VDC)                                     | 12                 |
| Lub-oil Capacity  | (L)                                       | 10,6               |
| Engine Coolant Capacity   | (L)                                       | 7                  |
| Fuel Tank Capacity  | (L)                                       | 62                 |
| Maximum Exhaust Temperature   | (°C)                                      | 505                |
|   |   |                    |
| Maximum Exhaust Gas Flow  | (m3/h)                                    | 3,94               |
|   |   |                    |
| Maximum Exhaust Gas Flow  | (m3/h)                                    | 3,94               |
| Maximum Exhaust Gas Flow<br>Maximum Allowed Back Pressure                     | (m3/h)<br>(kPa)                           | 3,94<br>10,2       |
| Maximum Exhaust Gas Flow<br>Maximum Allowed Back Pressure<br>Cooling Air Flow | (m3/h)<br>(kPa)<br>(m3/min)               | 3,94<br>10,2<br>50 |

Replacable cylinder jacket

Dry type replacable air filter

Heat-resistant radiator for 50 °C

| Alternator Specifications      |           |               |
|--------------------------------|-----------|---------------|
| Standard Voltage               | (V)       | 230           |
| Frequency                      | (Hz)      | 50            |
| Stationary Voltage Regulation  | (±)       | 1             |
| Short Circuit Current          |           | 300           |
| Insulation                     |           | H-7/0)/\Qqu   |
| Protection                     |           | IP 23         |
| Efficiency                     | (%)       | 86            |
| Overloading                    |           | 1 Hour - %110 |
| Rated At Power Factor          | (cos Phi) | 0,8           |
| Total Harmonic Distortion Rate |           | 2             |
| Connection Style               |           | Star          |
| Number of Pole                 |           | 4             |
| Number of Bearing              |           | Single        |

Self-cooled

Electronic type automatic voltage regulator (AVR)

4 poles, self-excitation, brushless, synchrontype alternator



AbVa



## **Dimensions Without Canopy and Weight**

| WIDTH x LENGTH x HEIGTH | mm | 1500x950x1450 |
|-------------------------|----|---------------|
| Wet Weight              | kg | 517           |



## **Dimensions With Canopy and Weight**

| WIDTH x LENGTH x HEIGTH | mm | 2000x950x1450 |
|-------------------------|----|---------------|
| Wet Weight              | kg | 727           |



Abyaran

#### **Control Panel Features**

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs full snapshot
- Multiple Automatic test program
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable language
- Waveform display of V&I
- Harmonic analysis of V&I
- Synchroscope & check synch 16 Amp MCB & GCB outputs
- 8 configurable digital outputs
- Outputs expandable to 40
- 4 configurable analog outputs
- Battery charge run enabled

- Weekly Operation Schedule
- Dual mutual standby with equal aging of gensets
- Manual speed fine adjust some ECU's
- Automatic fuel pumpcontrol
- Disable protection feature
- Excess protection power
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Waveform display of V&I
- Battery back-up real time clock
- Idle speed control
- All parameters front panel editable

- Multiple nominal conditions
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Free configuration software
- Allow SMS controls
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (USB & RS232)
- Modem & ethernet diagnostic
- Configurable through USB, RS-485, Ethernet
- Ready for central monitoring Ethernet and

