



WATER COOLED



THREE PHASE



50 Hz



DIESEL

| Generating Rates | | PRIME | STANDBY |
|-----------------------|-----------------|---------|---------|
| Power | kVA | 100 | 110 |
| Power | kW | 80 | 88 |
| Current | (cos Phi=0,8) A | 144 | 159 |
| Standard Voltage | V | 400/230 | |
| Revolution Per Minute | r.p.m. | 1500 | |
| Rated at power factor | Cos Phi | 0,8 | |

Standard Features

- 4 Stroke, 1500 RPM, water cooled heavy duty diesel engine
- Protection system on manual run
- Flexible oil pipes and oil draining valve
- Pre-heater
- Lubrication oil and anti-freeze
- 4 Poles, synchronotype, 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

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 / Manuel)
- Analog indicators
- 1 Phase - 3 Phase switch plugs
- Alarm system for fuel level
- Remote control and monitoring

Stand By Power : Supplying of emergency electrical power at variable load, in the event of normal utility power failure. This rating is maximum power, no overload capability is available.

Prime Power : Supplying of electrical power at variable load for an unlimited number of hours in the event of normal utility power failure. 10% over load capability is available.

Engine Specifications

| | | |
|-------------------------------|------------|---------------|
| Brand | | VOLVO PENTA |
| Model | | TAD531GE |
| Engine Power Stand BY | (kWm / hp) | 98/133 |
| Revolution Per Minute | (r.p.m.) | 1500 |
| Total Displacement | (L) | 4.76 |
| Cylinders Orientation | | 4 SINGLE LINE |
| Bore x Stroke | (mm x mm) | 108 x 130 |
| Compression Orientation | | 18:1 |
| Governor Type | | MECHANICAL |
| Aspiration System | | TURBO CAC |
| Injection | | DIRECT |
| Cooling | | WATER COOLED |
| Electrical System | (VDC) | 12 |
| Lub-Oil Capacity | (L) | 13 |
| Engine Coolant Capacity | (L) | 19.7 |
| Fuel Tank Capacity | (L) | 200 |
| Maximum Exhaust Temperature | (°C) | 557 |
| Maximum Exhaust Gas Flow | (m3/h) | 1002 |
| Maximum Allowed Back Pressure | (kPa) | 5 |
| Cooling Air Flow | (m3/min) | 120 |
| Fuel Consumption 50 % | (L/h) | 12 |
| Fuel Consumption 75 % | (L/h) | 17 |
| Fuel Consumption 100 % | (L/h) | 23 |

- Replacable cylinder jacket
- Dry type replacable oil filter
- Heat-resistant radiator for 50 °C

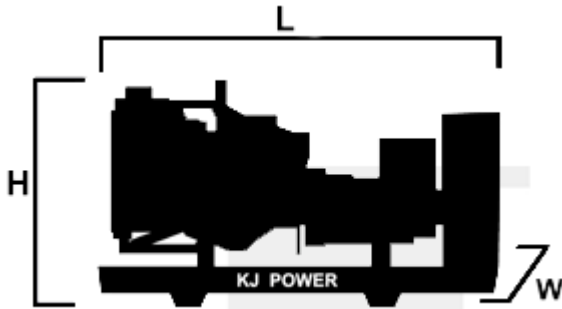
Alternator Specifications

| | | |
|--------------------------------|-----------|------------------|
| Output Voltage | (V) | 400/230 |
| Frequency | (Hz) | 50 |
| Stationary Voltage Regulation | (±) | 1 % |
| Short Circuit Current | | > 300 % |
| Insulation | | H |
| Protection | | IP 23 |
| Efficiency | (%) | 90.6 |
| Overloading | | 110 % FOR 1 HOUR |
| Power Factor | (cos Phi) | 0.8 |
| Total Harmonic Distortion Rate | | THF < 3 % |
| Connection Type | | STAR |
| Number Of Pole | | 4 |
| Number Of Bearing | | SINGLE |

- 4 Poles, Self-Excitation and Self-Cooled, Brushless, Synchronotype alternator
- Electronic type automatic voltage regulator (AVR)

Dimensions Without Canopy

| Dimensions and Weight | | |
|-----------------------|----|------|
| Length (L) | mm | 2150 |
| Height (H) | mm | 1590 |
| Width (W) | mm | 1100 |
| Wet weight | kg | 1200 |
| Fuel Tank Capacity | L | 200 |


Dimensions With Canopy

| Dimensions and Weight | | |
|-----------------------|----|------|
| Length (L) | mm | 2550 |
| Height (H) | mm | 1800 |
| Width (W) | mm | 1100 |
| Wet weight | kg | 1550 |
| Fuel Tank Capacity | L | 200 |


Control Panel Features

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable language
- Waveform display of V & I
- Harmonic analysis of V & I
- Synchroscope & check synch
- Allows closed transfers
- 16Amp MCB & GCB outputs
- 8 configurable digital outputs
- Outputs expandable to 40
- 4 configurable analog inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Multiple nominal conditions
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of gensets
- Manual "speed fine adjust" on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel filling & fuel theft alarms
- Battery back-up real time clock
- Idle speed control
- Battery charge0 run enabled
- Combat mode support
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Modem & Ethernet diagnostics
- Configurable through USB, RS-485, Ethernet and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring Ethernet and GPRS
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (USB & RS232)
- Dynamic DNS support
- Easy USB firmware upgrade
- IP65 rating with standard gasket

