

## DIESEL GENERATOR SET TP2000PA1

### Rating

#### 50HZ

| kVA/kW   | 380V      | 400V      | 415V      |
|----------|-----------|-----------|-----------|
| Prime:   | 2000/1600 | 2000/1600 | 2000/1600 |
| Standby: | 2200/1760 | 2200/1760 | 2200/1760 |

#### 60HZ

| kVA/kW   | 220 -240V | 440 - 480V | 380V* |
|----------|-----------|------------|-------|
| Prime:   | ---       | ---        | ---   |
| Standby: | ---       | ---        | ---   |

### DIMENSIONS & WEIGHT

#### Open

|                    |      |
|--------------------|------|
| 6150 X 2630 X 3120 | (mm) |
| 15000              | (kg) |

#### Enclosed 75

|                     |      |
|---------------------|------|
| 12000 X 3400 X 5100 | (mm) |
| 34000               | (kg) |

#### Enclosed 85

|                    |      |
|--------------------|------|
| 9500 x 3400 x 5100 | (mm) |
| 28000              | (kg) |

### Features

- CLLS Power provides one-stop service to integrated energy solutions.
- All gensets are tested before leaving our facilities.
- Complete with standard accessories for the convenience of installation.
- Genset comply to Singapore NEA requirements, EU and EPA Standards
- Our generator sets are design to providing dependable power and optimise performance in various applications.
- Covered with One year limited warranty / 1500 running hours upon commissioning /18 months upon site delivery, whichever occurs first.

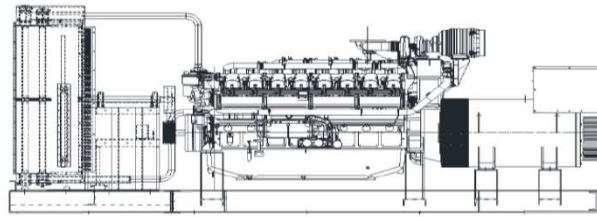
### POWER DEFINITION

#### Prime Power

- Apply to applications where utility power is unstable or unavailable. At Prime rating, the operating hour is unlimited to the annual hours of operation at variable load. 10% overload power for 1 hour in 12 hours.

#### Standby Power

- Apply to applications where utility power is reliable. In the event of power interruption, standby power is available at variable load up to the designed rating. There is no overload capacity.



### 1500rpm

#### PERKINS 4016-61TRG2

|  |            |
|--|------------|
| Prime power (kWm)                      | 1684       |
| Standby power (kWm)                    | 1895       |
| Displacement (Litre)                   | 61.1       |
| Bore (mm)                              | 160        |
| Stroke (mm)                            | 190        |
| Formation                              | 60 ° Vee   |
| Cylinders                              | 16         |
| Cycle                                  | 4          |
| Engine electrics (volt)                | 24         |
| Piston speed (m/s)                     | 9.5        |
| Mean effective pressure, Prime (MPa)   | 2.32       |
| Mean effective pressure, Standby (MPa) | 2.60       |
| Governor Type                          | Electronic |

#### AIR CONSUMPTION

|   |     |
|---|-----|
| Combustion air, prime (m <sup>3</sup> /min)   | 158 |
| Combustion air, standby (m <sup>3</sup> /min) | 176 |

#### EXHAUST OUT

|   |     |
|---|-----|
| Exhaust gas volume, prime (m <sup>3</sup> /min)   | 475 |
| Exhaust gas volume, standby (m <sup>3</sup> /min) | 475 |
| Exhaust backpressure (kPa)                        | 4   |
| Exhaust gas temperature, prime (°C)               | 457 |
| Exhaust gas temperature, standby (°C)             | 489 |

#### OIL SYSTEM

|                                |     |
|--------------------------------|-----|
| Oil pressure normal (kPa)      | 400 |
| Sump capacity (litre)          | 213 |
| Lub oil consumption 100% (l/h) | TBA |

#### COOLANT SYSTEM

|   |      |
|---|------|
| Coolant capacity (litre)                | 552  |
| Coolant flow (l/min)                    | 2100 |
| Radiator air flow (m <sup>3</sup> /min) | 2820 |
| Thermostat (°C)                         | 95   |

## DIESEL GENERATOR SET TP2000PA1

### OPTIONAL

- Engine
  - Heavy Duty Air Filter
  - Fuel Water Separator
  - Oil Level Maintainer
- Cooling System
  - Antifreeze 50/50
  - Block Heater
  - Remote Radiator
  - Heat Exchanger
- Alternator
  - Space Heater
  - Droop Kit
  - RTD
  - PMG
  - HV & MV
- Starting System
  - Ni-Cad Batteries
  - Plante Batteries
- Control Box
  - Key Start
  - Auto-Start
  - AMF
  - Synchronizing
- Electrical System
  - 3P/4P ACB
- Fuel System
  - Day Tank - Free Standing
  - Day Tank - Sub-base
  - Storage Tank
- Silencers
  - Critical Silencer
  - Absorptive Silencer

### SERVICE & MAINTANENCE

- Comprehensive maintenance contract available.

### CONTACT US

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### FUEL CONSUMPTION (l/h)

### 1500rpm

|           |     |
|-----------|-----|
| 110% Load | 463 |
| 100% Load | 405 |
| 75% Load  | 306 |
| 50% Load  | 208 |

### HEAT BALANCE (110%)

|                                     |      |
|-------------------------------------|------|
| Heat content fuel (kWm) @ 42.8MJ/kg |      |
| To work                             | 1985 |
| To water                            | 539  |
| To convection                       | 104  |
| To exhaust                          | 1642 |

### ALTERNATOR

|                         |           |
|-------------------------|-----------|
| Type                    | Brushless |
| Insulation              | Class H   |
| Voltage regulation      | ±1%       |
| Design                  | IP23      |
| Bearing                 | Single    |
| Sustained short circuit | 300%      |
| Pitch                   | 2/3       |
| Efficiency @ 0.8pf,     |           |
| 100%                    | 96.6%     |
| 75%                     | 96.8%     |
| 50%                     | 96.4%     |

### CONTROLLER OPTIONS

#### AMF Controller

- Stylish, compact and easy to navigate
- Complete Genset monitoring and protection functions
- History log on event and performance for easy troubleshooting
- kWh monitoring
- Built-in Earth Fault & Over Current protection
- Wide range of communication interfaces

#### Auto Start

- Monitoring, protection, operational status, fault conditions and metering display on back-lit LCD Screen
- Configuration of parameters
- Robust electronics package
- All set points and I/O's configurable via front panel

#### Key Start

- All at one glance monitoring
- Direct Access, functional and reliable
- Clear labelling
- Low Maintenance