



| MODEL    | rpm / Hz  | VOLTAGE   | PRIME <sup>(1)</sup> | STANDBY <sup>(2)</sup> |
|----------|-----------|-----------|----------------------|------------------------|
| PI 1675C | 1500 / 50 | 400 / 230 | 1400 kVA / 1120 kWe  | 1675 kVA / 1340 kWe    |

Full rated power available upto 100 meter elevation at ambient of 27degC, for other temperature and altitude limits please consult application team.

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Rated Output (PRP) <sup>(1)</sup> | 1200 kW <sub>m</sub>                 |
| Rated Output (ESP) <sup>(2)</sup> | 1429 kW <sub>m</sub>                 |
| Engine Make & Model               | Cummins KTA50-G8                     |
| No. of Cylinders                  | 16 Cylinder, 60° Vee                 |
| Cycle                             | 4 Strokes                            |
| Aspiration                        | Turbocharged & Low Temp. Aftercooled |
| Cooling Method                    | Water                                |
| Governing Type                    | Electronic                           |
| Governing Class                   | G2 - ISO 8528 Part 1                 |
| Compression Ratio                 | 14.9 : 1.0                           |
| Displacement                      | 50.3 L / 3067 in <sup>3</sup>        |
| Bore/Stroke (mm / in)             | (159/159)/(6.25/6.25)                |
| Battery and Charger Alternator    | 24 VDC, 55 Amp                       |

### AIR SYSTEM

|                           |                          |
|---------------------------|--------------------------|
| Air Filter Type           | Dry Element              |
| Combustion Air Flow (PRP) | 90 m <sup>3</sup> /min   |
| Combustion Air Flow (ESP) | 99.3 m <sup>3</sup> /min |
| Radiator Air Flow         | 1728 m <sup>3</sup> /min |

### COOLING SYSTEM

|                              |                        |
|------------------------------|------------------------|
| Total Coolant Capacity       | 240 L / 63.4 US gal    |
| Water Pump Type              | Centrifugal Eng-Driven |
| Radiator Fan Load            | 30 kW                  |
| Heat Radiation to Room (PRP) | 175 Kw                 |
| Heat Radiation to Room (ESP) | 210 kW                 |

### LUBRICATION SYSTEM

|                    |                          |
|--------------------|--------------------------|
| Oil Filter Type    | Spin on full flow filter |
| Total Oil Capacity | 204.0 L / 53.8 US gal.   |
| Oil Pan            | 148.0 L / 39.0 US gal.   |
| Oil Type           | API CH4/CI4; SAE 15W-40  |

Fuel Filter: Spin on full flow filter with water separator

|                           |                             |
|---------------------------|-----------------------------|
| Recommended Fuel          | Class A2 Diesel             |
| Fuel Consumption Standby  | 345.0 L/hr / 91.2 US gal/hr |
| Fuel Consumption 100% PRP | 289.0 L/hr / 76.3 US gal/hr |
| Fuel Consumption 75% PRP  | 222.0 L/hr / 58.7 US gal/hr |
| Fuel Consumption 50% PRP  | 155.0 L/hr / 40.9 US gal/hr |

### EXHAUST SYSTEM

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Muffler Type                      | Residential Grade                 |
| Max. Back Pressure                | 6.8 kPa                           |
| Exhaust Gas Flow (PRP/ESP)        | 230.7 / 261.0 m <sup>3</sup> /min |
| Exhaust Gas Temperature (PRP/ESP) | 485 / 510 °C                      |

### ALTERNATOR SPECIFICATIONS

|  |                             |
|--|-----------------------------|
| Rated Output (Prime) <sup>(1)</sup>    | 1650 Kva                    |
| Rated Output (Stand by) <sup>(2)</sup> | 1770 kVA                    |
| Alternator Make & Model                | Stamford S7L1D-D41          |
| Number of Poles                        | 4                           |
| Number of Winding Leads                | 6                           |
| Type of Bearing                        | Single                      |
| Insulation Class / Temp Rise           | H / H                       |
| Efficiency                             | 95.5%/95.3%                 |
| Ingress Protection Rating              | IP 23                       |
| Excitation System                      | Separately Excited by P.M.G |
| AVR Model                              | Stamford - MX341            |

### ALTERNATOR OPERATING DATA

|                     |                                  |
|---------------------|----------------------------------|
| Overspeed           | 2250 r.p.m                       |
| Voltage Regulation  | ± 1.0 %                          |
| Waveform distortion | No load <1.5%<br>Linear load <5% |
| Radio Interface     | Standard EN61000-6-2:2001        |
| Cooling Air Flow    | 2.63 m <sup>3</sup> /sec         |

<sup>(1)</sup> **PRIME POWER RATING (PRP):** PRP is defined as the maximum power which a Generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year. The permissible average power output over 24 hours shall not exceed 70% of PRP unless otherwise agreed by RIC engine manufacturer. An overload capability of 10% of 100% of the prime rated electrical power is permitted for emergency use for a period of 1 hour within 12 hours of operation

<sup>(2)</sup> **EMERGENCY STANDBY POWER RATING (ESP):** ESP is defined as the maximum power available during a variable electrical power sequence, under the stated operation condition, for which a generating set is capable of delivering power in the event of a utility power outage or under test condition for up to 200 Hours of operation per year. The permissible average output over 24 hour of operation shall not exceed 70 % of the ESP power rating noting that no over load is permitted.



### CONTROLLER SPECIFICATIONS

|                           |                                      |
|---------------------------|--------------------------------------|
| Controller Make & Model   | DeepSea 6120MKIII                    |
| Operation Mode            | MRS / AMF (optional)                 |
| Display                   | Graphic Back-lit LCD (128x64) pixels |
| Ingress Protection Rating | IP65                                 |
| Binary Inputs/Outputs     | 8 / 6                                |
| Analog Inputs             | 4                                    |
| Measurement               | Vac, A, Hz, kVA, kW, Vdc             |
| Event Log                 | Alarms log, Hrs log                  |
| Communication             | USB                                  |

### ENCLOSURE SPECIFICATIONS

|                           |  |
|---------------------------|--|
| Enclosure Type            | Acoustic & Weather Proof                 |
| Anticorrosive Protection  | Polyester Powder Coated Galvanized Sheet |
| Ingress Protection Rating | IP22                                     |
| Lifting                   | ISO Standard Lifting                     |
| Emergency                 | External Emergency Push Button           |
| Canopy RAL Color          | RAL 9001                                 |
| Baseframe RAL Color       | RAL 9011                                 |
| Noise Pressure level @ 7m | 88 dB(A)                                 |

### GENSET DIMENSIONS & WEIGHT

| GENSET TYPE | Length (mm) | Width (mm) | Height (mm) | Fuel Tank Capacity (L) | Dry Weight (kg) | Wet Weight (kg) |
|-------------|-------------|------------|-------------|------------------------|-----------------|-----------------|
| OPEN        | 5830        | 2280       | 3065        | NA                     | 12700           | 13410           |
| CLOSE       | 9209        | 2292       | 3615        | NA                     | 18400           | 18500           |

### STANDARD MECHANICAL FEATURES

Genset design provides a low noise level with an optimized performance of the ventilation and exhaust systems at 50 °C ambient temperature.

Robust structure design of Enclosure and Baseframe.

Heavy duty lifting lugs.

Multi doors for easy access & maintenance.

Ingress Protection Rating according to BS EN 60529.

Heavy Duty Baseframe with built-in tank & forklift pockets.

Residential Grade Muffler with rain cap.

### OPTIONAL FEATURES

Advanced Controllers are available on request.

4 poles manual / Motorized Circuit breaker

Jacket water pre-heater

Static Battery Charger

Critical grade muffler

Fuel Filter / Water separator Fuel Filter

Remote Annunciator

### Application

Infrastructure, Industrial, Residential, Telecom, Defence, Mining, Agriculture,

### STANDARD ELECTRICAL FEATURES

An advance Control system is designed to provide a comprehensive protection and to monitor the parameters of generating set.

ACB power circuit breaker.

Battery with charging alternator, cables, and tray.

Sealed harness & high resistant electrical connections.

Fast and accurate protection response.

Generating Set remote start function.

Numeric display with LED. Various languages capable.

