

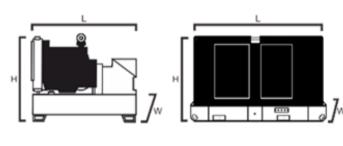
Technical Data

| | | | | | | | <u> </u> |
|------------------------|-------------|-----------------|--------------------|-----------------|-------------------|-----|--------------------------------|
| Engine | Alternator | | | Generator Model | | | |
| DCEC Cummins 6BT5.9-G1 | | Werna WR274C | | | PC100-C1 / Silent | | |
| Frequency | Pha | se Power Factor | | | Emissions | | |
| 50Hz/1500rpm | 3-Ph | ase | Factor Cos Φ = 0.8 | | 0.8 | N/A | |
| RATINGS | Prime Power | | Standby Power | | Rated Current | | Fuel Consumption @100% Load |
| | (PRP) | | (ESP) | | Amps | | |
| Voltage (V) | kWe | kVA | kWe | kVA | (/ | ٨) | L/h |
| 380/220 | 80 | 100 | 88 | 110 | 151,9 | | 21,7 |
| 400/230 | 80 | 100 | 88 | 110 | 144,3 | | 21,7 |
| 415/240 | 80 | 100 | 88 | 110 | 139,1 | | 21,7 |



Key Features:

- High efficient water cooled diesel engine.
- Single bearing with brushless alternators (Class H, with AVR).
- Radiator with pressure cap and drain point.
- Fully guarded engine-driven fan.
- Fully welded steel skid base with lifting holes and fork lift legs.
- Integral fuel tank with filler cap and gauge (≤650kVA).
- Heavy duty rubber anti-vibration mountings.
- 12V or 24V maintenance free starter battery and connecting cables.
- Separate engine-driven battery charging alternator.
- Spin on oil and fuel filters and dry type air filter element.
- Industrial silencer (15dBA reduction) supplied loose.
- Auto start control system with LCD show.
- Battery charger provided.
- Main line 3P circuit breaker.
- Rigorous factory test wiring with IEC standard.
- Operation & Maintenance manual & Wiring diagrams.
- Wide range of optional extra features available.



| | Dimensions & Weights | Silent |
|---|-------------------------|--------|
| | Length (L)-mm: | 2800 |
| | Width (W)-mm: | 1150 |
| | Height (H)-mm: | 1630 |
| N | Dry Weight-kg: | 1303 |
| | Fuel tank (H) | 8 |
| | (dBA)@7m no load | N/A |

Ratings:

All three phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 0.8 or 1.0 power factor. (1)PRP (Prime Power):

Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

(2)ESP (Standby Power):

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure. (3)STD:Standard Alternator.

Tide Power reserves the right to change the design or specifications without notice and without any obligation or liability.



| Engine | DCEC Cummi | ns 6BT5.9-G1 | | |
|----------------------------|---|----------------------------|------------|--|
| | Engine Frequency / Speed | Hz / r/min | 50 / 1500 | |
| | No. of Cylinders / Type | 6 cyl / 4-stroke | | |
| | Aspiration | Turbocharged | | |
| | Compression Ratio | 17.3:1 | | |
| General Performance | Governor Type | Mechanical | | |
| General Performance | Bore | mm 102 | | |
| | Storke | mm | 120 | |
| | Displacement | Litres | Litres 5,9 | |
| | Piston Speed | m/s | 6,0 | |
| | Gross Engine Power OutputPrime / Standby | kWm | 86 92 | |
| | Type Injection System | BYC A Direct Injection | | |
| | Fuel Consumption at 110% Prime Power | Litres/hour | 23,4 | |
| First Orations | Fuel Consumption at 100% Prime Power | Litres/hour | 21,7 | |
| Fuel System | Fuel Consumption at 75% Prime Power | e Power Litres/hour | | |
| | Fuel Consumption at 50% Prime Power | | | |
| | Fuel Consumption at 25% Prime Power | Litres/hour | 6,6 | |
| | Engine Oil Pressure for Engine Protection Devices | | , | |
| | — Idle Speed (Minimum) | kPa | 207 | |
| Oil System | — Governed Speed(Maximum) | , , , | | |
| , | Maximum Oil Temperature | Maximum Oil Temperature °C | | |
| | Minimum Required Capacity - Sump plus Filters | | | |
| | Coolant Capacity - Engine Only | | | |
| 0 " 0 ' | Standard Thermostat (Modulating) Range | °C 82-9 | | |
| Cooling System | Minimum Pressure Cap | | | |
| | Maximum Top Tank Temperature for Standby / Prime | °C | 104 / 100 | |
| Intake / Exhaust System | Maximum Intake Air RestrictionDirty Element | kPa | kPa 6 | |
| | Maximum Intake Air RestrictionClean Elemen | kPa | 4 | |
| | Intake Air Flow | Litre/sec. | 100 103 | |
| | Maximum Exhaust Back Pressure | kPa | 10 | |
| | Exhaust Gas FlowPrime / Standby | Litre/sec. | 252 271 | |
| | Exhaust Gas TemperaturePrime / Standby | °C | 480 510 | |
| Electric System | Cranking Motor (Heavy Duty, Positive Engagement) | V | 12 / 24 | |
| | Battery | Maintenance-free | | |
| | Radiated Heat to Ambient | kW | 19 21 | |
| Energy Balance | Heat Rejection to Coolant | kW | 54 61 | |
| | Heat Rejection to Fuel | kW | 82 92 | |

| - Alternator | 50Hz/1500rpm | | | | | |
|---------------|----------------------------|-------------------------|--|--|--|--|
| | Manufacture / Brand | Leroy Somer / Firstall | | | | |
| | Model | WR274C | | | | |
| | Coupling / No. of Bearings | Direct / Single Bearing | | | | |
| | Phase / Poles | 3-Phase / 4-Pole | | | | |
| | Power Factor | Cos Φ = 0.8 | | | | |
| General Data | AVR Regulation | Yes | | | | |
| | Voltage Regulation | ±0.5 % | | | | |
| | Insulation Class | Н | | | | |
| | Drip Proof | IP23 | | | | |
| | Voltage Regulator | AVR | | | | |
| | Altitude | ≤1000 m | | | | |