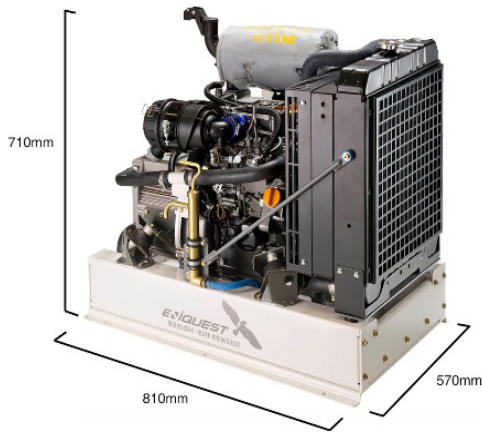




PowerMaker Ranger 6.0 (DC) Generator

PowerMaker Ranger 6.0 is a high-output direct current (DC) generator set that is designed to work with a storage battery bank.

Compact, quiet and virtually unbreakable, PowerMaker Ranger is built tough for any environment or application. It is ideal for plant battery charging, mobile mining, mine site communications, and hybrid power systems. The PowerMaker Ranger 6.0 DC diesel generator has remarkable fuel economy with using 22% less fuel than any other conventional engine and uses 44% less fuel to charge your batteries.



Specifications

| POWERMAKER Ranger | | | | |
|--|--|-------------------|----------------------------|-------------------|
| Model | Ranger 5.0 | Ranger 6.0 | Ranger 8.0 | Ranger 10.0 |
| Output power - Continuous* | 5.0kW @ 29V DC | 6.0kW @ 58.0V DC | 8.0kW @ 29.0V DC | 10.0kW @ 58.0V DC |
| Nominal output voltage | 24V DC | 48V DC | 24V DC | 48V DC |
| Maximum battery charging amps* | 175A | 105A | 280A | 178A |
| Bulk charge current (programmable) | Up to 175A | Up to 105A | Up to 280A | Up to 178A |
| Absorption charge voltage (programmable) | Up to 29V | Up to 58V | Up to 29V | Up to 58V |
| Battery charging typology | Two stage, constant current, constant voltage | | | |
| Engine | | | | |
| Engine make/model | Yanmar 2TNV70 | | Yanmar 3TNV70 | |
| Engine type | Diesel, naturally aspirated, indirect injected, industrial | | | |
| Engine displacement | 570cc | | 854cc | |
| Number of cylinders | 2 | | 3 | |
| Operating speed (automatic variable) | 1900 to 2500 RPM | 1900 to 2500 RPM | 1900 to 2500 RPM | 1900 to 2600 RPM |
| Cooling method | Water cooled with radiator and belt-driven cooling fan | | | |
| Fuel type | Automotive diesel | | | |
| Fuel consumption at full load | 1.74 litres/hour | 2.1 litres/hour | 2.8 litres/hour | 3.5 litres/hour |
| Fuel lift pump | Electric | | | |
| Maximum fuel suction capability | 1.6 metres vertical | | | |
| Starting | 12V (optional 24V) | | | |
| Lube oil type | SAE15W40 in ambients from -15°C to 40°C | | | |
| Lube oil capacity | 1.8 litres | 1.8 litres | 2.8 litres | 2.8 litres |
| Crank case oil evacuation | Drain valve (hand pump optional) | | | |
| Service intervals | 250 hours (500 hours optional) | | | |
| Alternator | | | | |
| Alternator make | Eniqest SF5.6 | | Eniqest SF8.0 | |
| Alternator type | Permanent magnet, brushless, with bearingless rotor | | | |
| Enclosure | Totally enclosed | | | |
| Windings connection | Three phase star | Three phase delta | Three phase star | Three phase delta |
| Voltage control | Variable engine speed | | | |
| Voltage control accuracy | Within +/-1% | | | |
| Rectifier type | Full wave dual bridge | Full wave bridge | Full wave dual bridge | Full wave bridge |
| General | | | | |
| Enclosure type (enclosed versions only) | Noise reducing, fully enclosed, fully banded, in powder coated aluminium, with integrated multi chamber exhaust silencer | | | |
| Noise emission @ full power @ 7 metres | 61dBA enclosed; 67dBA open | | 63dBA enclosed; 67dBA open | |
| Vibration isolation | High isolation angled at 45° for movement restraint | | | |
| Control type | Digital signal processing (DSP) based with engine protection | | | |
| Dimensions (open) - L x W x H mm | 810 x 570 x 710 | 810 x 570 x 710 | 900 x 540 x 700 | 900 x 540 x 700 |
| Dimensions (enclosed) - L x W x H mm | 1130 x 625 x 795 | 1130 x 625 x 795 | 1240 x 625 x 795 | 1240 x 625 x 795 |
| Weight (open/enclosed) | 175/205kg | 175/205kg | 195/235kg | 195/235kg |
| Operating environment | | | | |
| Normal operating temperature range | -15°C to +54°C | | | |
| Minimum operating temperature | -40°C with optional sequenced temperature starting | | | |
| Derating for temperature using current limit | 3% for every 10°C above 27 °C | | | |
| Normal operating altitude | Sea Level to 3000m | | | |
| Maximum operating altitude | 5000m with optional forced induction | | | |
| Derating for altitude | 1.3% for every 100m above sea level | | | |

* @ 27°C, 750mmHg, 60% relative humidity

These specifications are subject to change without notice.

Specifications

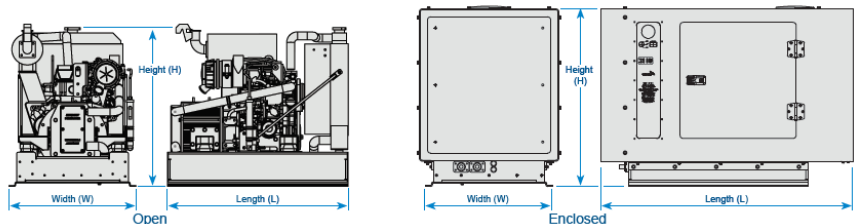
| | |
|-----------------|---------------------------|
| Portable | Yes |
| Operation | Automatic |
| Power | 6.0kW @ 58V |
| Voltage | 48V DC |
| Fuel | Diesel |
| Dimensions (mm) | 1130(L) x 625(W) x 795(H) |
| Weight | 205kg |

Features

- Quiet and compact
- Remarkable fuel economy
- Variable engine speed
- Water-cooled low-speed engine
- Direct-drive water-cooled alternator
- Charges any battery type
- Robust design
- Easy maintenance
- 2-year limited warranty

Ideal for:

- hybrid power plants
- solar power backup
- telecommunications



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