# KING RGU100IS

**60Hz@1800RPM 440/254V 3PH**




**Picture for illustration purposes only**

## Overall performance

| | RGU100IS |
|---|---|
| PRP Continuous power kVA | 98 |
| PRP Continuous power kW | 78 |
| LTP Stand-by power kVA | 109 |
| LTP stand-by power kW | 87 |
| Power factor cos fiφ | 0.8 |
| Voltage VAC | 440/254 |
| Frequency Hz | 60 |
| Ampere PRP/LTP | 129 / 143 |
| Speed RPM | 1800 |

## Dimensions and noise level

| | |
|---|---|
| Length mm | 2430 |
| Width mm | 1056 |
| Height mm | 1700 |
| Net Weight kg | 1452 |
| Gross Weight kg | 1487 |
| Sound pressure at 7 mt dBA | - |

## General features

Silent generator with following specifications:

**Frame:**

- Heavy duty fabricated welded base plate with high quality steel UNI S235 JR
- Heavy duty, bell type, rubber anti-vibration mountings
- Dedicated area to make easier the electrical connection to the load
- Fuel tank with drain plug and retention basin
- Feet and four lifting holes on the base

**Canopy:**

- Large doors for easy access for service and maintenance
- Electro-galvanized sheet DC01+ZE25/25 (EN 10152: 2009)
- High precision sheet cutting with nitrogen laser technology to avoid oxidation
- Sandblasting and cataphoresis treatment of intake / exhaust grids
- Weatherproof sealed joints
- High-tech Nylon hinges: rust-free, no need to lubricate
- Lockable handles in each door
- RAL 9010 “orange peel” specific powder coat paint for outdoor usage
- Rain cap on exhaust outlet
- Coolant refilling specific hatch
- Fuel filler outside enclosure
- Ecological Sound foam: 100% Recyclable, 40mm thickness, fire-proof self-extinguishing class1 fire-reaction compliant washable, mechanically fixed to the frame

**Muffler:**

- Residential type, Super silent, integrated in the canopy
- With aluminum coating

**Control Panel:**

- Self-standing control panel tower made with metal structure and components to grant IP65 protection, easily removable for maintenance
- Easy access to control panel through a canopy’s door, equipped with lexan window
- Control panel is divided in two independent and insulated boxes separating Controls (Controller and numbered terminal board) from Power connection (circuit breaker and cable inlet)
- External dedicated area to make easier the electrical connection to the load
- Power connection between circuit breaker and alternator made with high resistance neoprene cables (H07RNF) and using cable glands for waterproof connections

All units and components are prototype tested, factory build and production tested. A specific control procedure during the several stages of production ensures long life and reliability.

## Data reference

Standard reference conditions temperature 25°C, altitude 1-1000m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Power performance data as quoted can be obtained after the initial running-in period of the engine, during which one has to follow the instructions of the engine manufacturer as stated in the use and maintenance manual of the specific engine. The tolerance shown by the engine manufacturer is +/- 5%. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.*For reasons of transport and/or storage, liquids (oil and antifreeze) and batteries might not be included in the delivery.

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## Engine general data

| | |
|---|---|
| Engine brand | **Fpt-Iveco** |
| Model | **NEF45SM3** |
| PRP Power kW | **78.80** |
| LTP Power kW | **86.80** |
| Fuel | **Diesel** |
| Nr. cylinders | **4** |
| Air intake | **Turbocharged** |
| Cooling | **Water** |
| Cubic capacity l. | **4.50** |
| Speed regulation | **Mechanical** |
| Performance Class - steady state regulator accuracy +/- % | **G2 - -** |
| Load Step G1 - KWe | **-** |
| Load Step G2 - KWe | **-** |
| Load Step G3 - KWe | **-** |
| Voltage VDC | **12** |
| Emissions | **-** |

## Alternator general data

| | |
|---|---|
| Alternator brand | **Stamford** |
| Model | **UCI274C** |
| Type of excitation | **Self-excited** |
| Type of regulation | **AVR** |
| Regulator precision +/-% | **1.00** |

## Structure data

| | |
|---|---|
| Type of structure | **KING** |
| Tank capacity l. | **150** |
| Retention basin | **yes** |
| Exhaust diameter mm | **89** |

## Fuel consumption

| | |
|---|---|
| Consumption 25% l./h | **-** |
| Consumption 50% l./h | **9.10** |
| Consumption 75% l./h | **13.60** |
| Consumption 100% l./h | **18.00** |
| Autonomy at 75% of load h. | **≈ 11 h** |

## Engine liquids and equipment

| | |
|---|---|
| Type of lubricant | **Oil SAE 15W40** |
| Lubrication capacity l.* | **12.80** |
| Type of coolant | **Antifreeze liquid** |
| Coolant capacity l.* | **18.50** |
| Air intake filter | **Paper cartridge** |
| Battery capacity Ah | **70** |
| Number of batteries* | **1** |

## Fuel system and energy balance

| | |
|---|---|
| AC pump suction head kPa | **-** |
| Combustion air flow volume LTP m3/min | **5.90** |
| Cooling air capacity LTP m3/min | **158.40** |
| Exhaust gas flow-density LTP m3/min | **15.30** |
| Exhaust gas temperature LTP °C | **510.00** |
| Brake mean effective pressure kPa | **5.00** |
| Energy to exhaust LTP kWt | **-** |
| Energy to coolant LTP kWt | **-** |
| Energy to radiation LTP kWt | **-** |

## Control panel features

### QT2A-4520

Self-standing tower with IP65 metal box
Circuit breaker
AMF controller DSE4520
- Voltmeter, Frequencymeter, Ammeter
- Generator power (kW, kV Ar, kV A & pf) monitoring
- Hour meter
- Fuel level meter
- Overload (kW & kV Ar) protection
- Low oil pressure protection
- High coolant temperature protection
- Low fuel level protection
- Battery charger alternator fault
- Rpm protection
Emergency stop button
Audible alarm
Terminal board for ATS connection
Can Bus reading Port (if standard on the engine)
Battery charger
On/off switch



Dealer

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