

# **SPECIFICATION**



## **MODEL R14KS RG SERIES (FOR 50Hz DIESEL GENSET)**

Revision: A2 (11/22)

# RS series

## R14KS

50 Hz @ 1500rpm, 1-phase/3wiring

### 1 Standards & Conditions

#### Design Standards

The designs and the productions are in conformity with:

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

#### Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25°C to 45°C. The coolant heater is needed when the temperature is below 5°C
- Humidity: Less than 90%.
- Altitude: Below one thousand (1000) meters above sea level.

#### Factory Inspection

- Inspection items.
- Protection devices working test.
- Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

#### Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

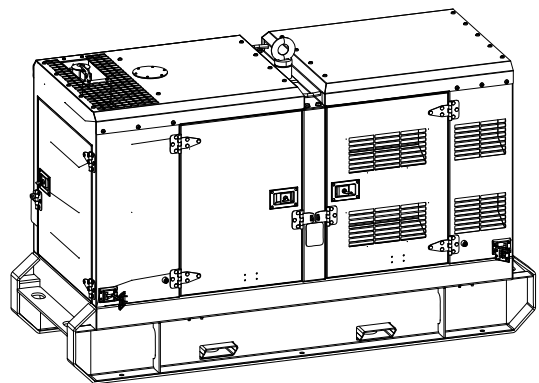
### 2 General Features

- Kubota engine V1505-BG
- Close coupled to Leroy Somer alternator LSA40M7
- Microprocessor controller ComAp InteliLite4-AMF9
- ABB main circuit breaker: 63A
- Rotate speed governor: Mechanical governor
- Excitation System: Self Excited, SHUNT
- A.V.R. Model: R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Remote run connector

- 1x12V/72AH sealed for life maintenance free battery
- Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- Steel base frame with forklift slots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank with 25 hours running
- Drain points for fuel tank
- Operator's Manual / Specifications

### 3 Equipment Specification

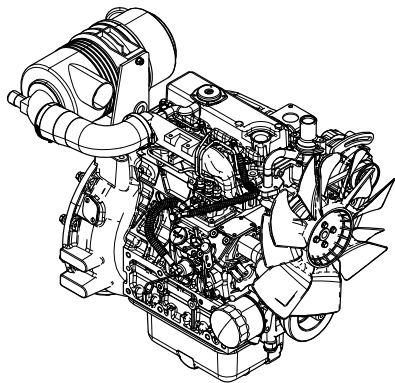
#### General technical data



|                                 |                |
|---------------------------------|----------------|
| Model.....                      | R14KS          |
| Tank capacity.....              | 100L           |
| Dry weight.....                 | 885kg          |
| Sound pressure level @ 7m ..... | 61dBA          |
| Dimensions L×W×H.....           | 1550X700X960mm |
| Standby Power .....             | 14kVA/11kW     |
| Prime Power .....               | 15kVA/12kW     |

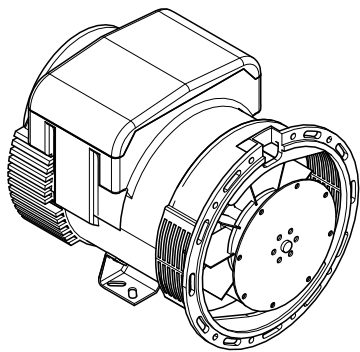
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|-------------------------|-------|-------|-------|-------|------|
| Voltage                 | 380V  | 400V  | 415V  | 440V  |      |
| Ampere                  | 21.3A | 20.2A | 19.5A | 18.4A |      |
| Genset Fuel Consumption |       |       |       |       |      |
| Frequency/Load          | 25%   | 50%   | 75%   | 100%  | 110% |
| 50Hz (L/h)              | N/A   | 2.0   | 3.0   | 3.9   | 4.3  |

Power System



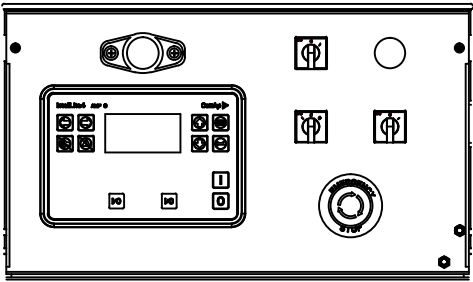
|                           |                                               |
|---------------------------|-----------------------------------------------|
| Engine Manufacturer/Brand | Kubota                                        |
| Engine Model              | V1505-BG                                      |
| Dimensions L×W×H          | 601x394x607mm                                 |
| Dry Weigh (approx.)       | 127kg                                         |
| Number of Cylinders       | 4                                             |
| Bore                      | 78mm                                          |
| Stroke                    | 78.4mm                                        |
| Displacement              | 1.498L                                        |
| Compression Ratio         | 23.0                                          |
| Type of injection         | High pressure common rail                     |
| Intake System             | Naturally Aspirated                           |
| Intake Resistance         | ≤1.96kPa                                      |
| Cooling System            | Water cooled                                  |
| Fan                       | Pusher                                        |
| Battery Voltage           | 12V                                           |
| Type of Fuel              | No.2-D S15, Ultra Low Sulfur Fuel Only        |
| Type of Oil               | Class CJ-4/CK-4 oil as per API classification |
| Oil Capacity              | 6.7L                                          |
| Type of Coolant           | Glycol mixture                                |
| Coolant Capacity          | 8.8L                                          |
| Back Pressure             | ≤5.3kPa                                       |
| Standby Power             | 12.5kW                                        |
| Prime Power               | 11.1kW                                        |

Alternator



|                                    |                        |
|------------------------------------|------------------------|
| Alternator Manufacturer/Brand      | Leroy Somer            |
| Alternator Model                   | LSA40M7                |
| Exciter                            | Brushless              |
| Cooling Fan                        | Cast alloy aluminum    |
| Windings                           | 100% copper            |
| Insulation Class                   | H                      |
| Winding Pitch                      | 2/3                    |
| Terminals                          | 12                     |
| Drip Proof                         | IP23                   |
| Altitude                           | ≤1000m                 |
| Overspeed                          | 2250rpm                |
| Air Flow                           | N/A                    |
| Voltage Regulation                 | ±1.0%                  |
| Total Harmonic TGH / THCat no load | < 1.5 % - on load < 5% |
| Telephone Interference             | THF<2%;TIF<50          |

IntelliLite4-AMF9 Control System

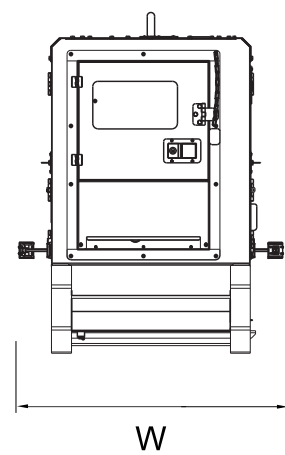
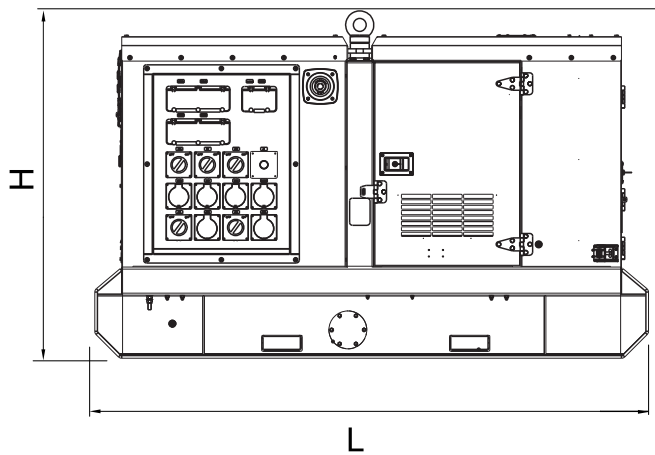
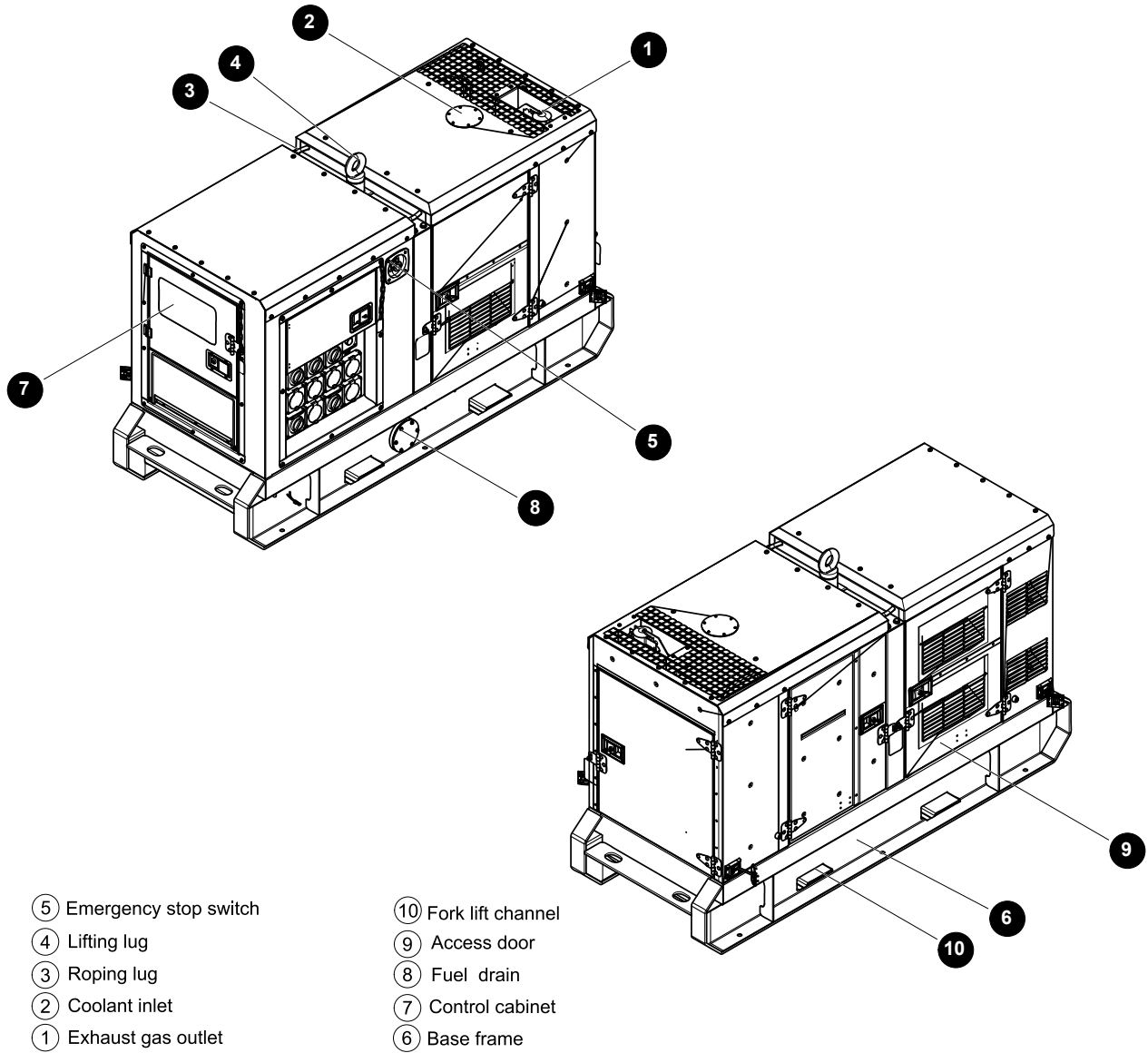


IntelliLite4-AMF9 is Single Gen-set controller for stand-by and prime-power applications and all-in-one intuitive & powerful PC tool for configuration/monitoring/control, locally or remotely and easy to install, configure and use

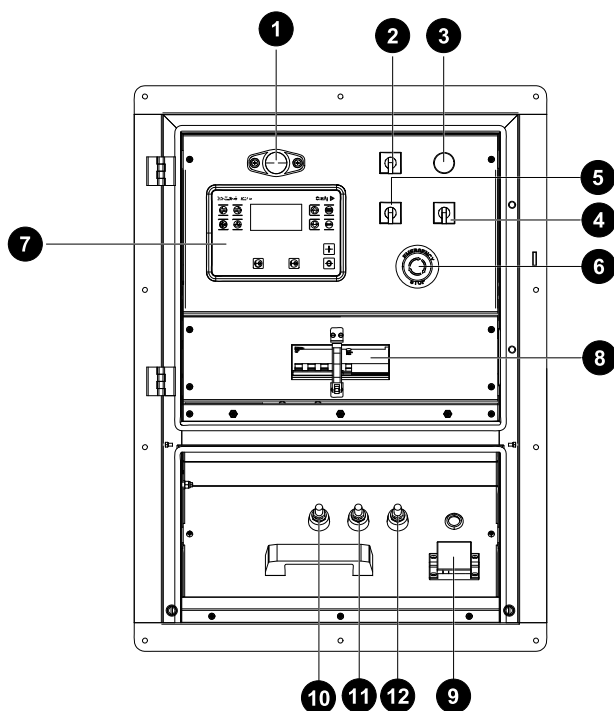
Standard Control Function

- Stand-by and prime-power application in one unit
- Dual Mutual Standby application support
- Remote display
- User setpoints and protections
- User Access Management
- Cyber security improvement
- Alternative configurations
- Multi-purpose schedulers

4 Overall Dimensions



## 5 Control System



| Ref. | Description                                |
|------|--------------------------------------------|
| 1    | Control panel lamp                         |
| 2    | Lamp switch                                |
| 3    | Not ready                                  |
| 4    | Control power                              |
| 5    | Control mode                               |
| 6    | Emergency stop button                      |
| 7    | Control module                             |
| 8    | Main circuit breaker                       |
| 9    | Mains input/remote communication connector |
| 10   | Live wire terminals                        |
| 11   | Neutral wire terminal                      |
| 12   | Ground wire terminal                       |



| Ref. | Description                       |
|------|-----------------------------------|
| 1    | LEFT button.                      |
| 2    | RIGHT button                      |
| 3    | HORN RESET button                 |
| 4    | FAULT RESET button                |
| 5    | UP button                         |
| 6    | PAGE button                       |
| 7    | DOWN button                       |
| 8    | ENTER button                      |
| 9    | START button                      |
| 10   | STOP button                       |
| 11   | GCB button                        |
| 12   | MCB button                        |
| 13   | GENERATOR status indicator        |
| 14   | MAINS status indicator            |
| 15   | Graphic B/W display, 132 × 64 px. |
| 16   | GCB Status                        |
| 17   | MCB Status                        |