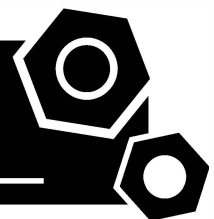


**Generator set**  
**Sound-proof type**  
**R45K**

# **SPECIFICATIONS**



# RS series

## R45K,EU Stage IIIA

50 Hz @ 1500rpm,3-phase/5-wiring

### 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 50°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.

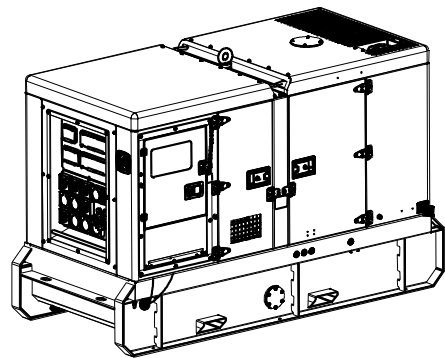
### 2 General Features

- Kubota engine V3800DI-T-BG
- Close coupled to LSA alternator LSA42.3M7
- Microprocessor control module InteliLite4-AMF9
- ABB main circuit breaker: 125A,4P
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited
- A.V.R Model:R250
- Key switch
- Emergency stop switch
- ATS (automatic transfer switch) receptacle
- Convenience receptacles: 3P and 1P
- 1x12V/72AH sealed for life maintenance free battery
- Lockable battery isolator switch

- Powder coated canopy
- 50°C radiator
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- Dry type air filter
- Base fuel tank for 33 hours running
- Drain points for fuel tank
- Operation Manual / Specifications

### 3 Equipment Specification

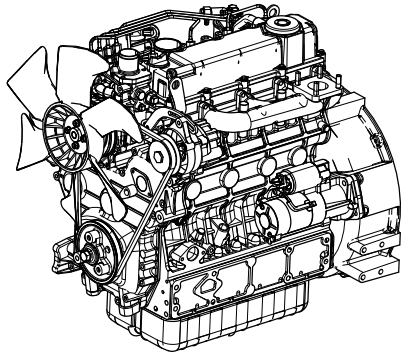
#### General technical data



|                       |                  |
|-----------------------|------------------|
| Model.....            | R45K             |
| Structure type .....  | R                |
| Tank capacity.....    | 360L             |
| Dry weigh.....        | 1555kg           |
| Noise level @7m ..... | 66.0dBA          |
| Dimensions L×W×H..... | 2550x1163x1646mm |
| Standby Power .....   | 50kVA/40kW       |
| Prime Power .....     | 45kVA/36kW       |

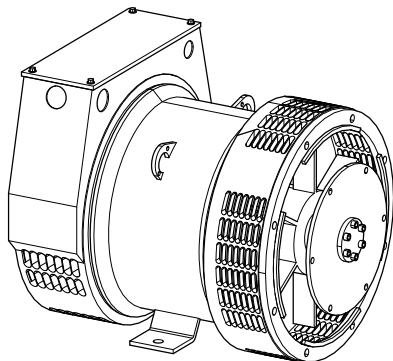
|                         |       |       |       |       |      |
|-------------------------|-------|-------|-------|-------|------|
| Voltage                 | 380V  | 400V  | 415V  | 440V  |      |
| Ampere                  | 68.4A | 65.0A | 62.6A | 59.0A |      |
| Genset Fuel Consumption |       |       |       |       |      |
| Frequency/Load          | 25%   | 50%   | 75%   | 100%  | 110% |
| 50Hz (L/h)              | N/A   | 5.4   | 8.2   | 10.7  | 11.8 |

**Diesel engine**



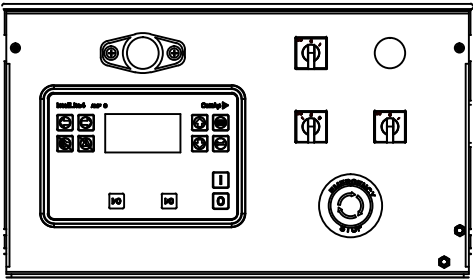
|                                 |                               |
|---------------------------------|-------------------------------|
| Engine Manufacturer/Brand.....  | KUBOTA                        |
| Engine Model.....               | V3800DI-T-BG                  |
| Dimensions L×W×H.....           | 745×549×794mm                 |
| Dry Weigh (approx.) .....       | 288kg                         |
| Number of Cylinders.....        | 4                             |
| Bore.....                       | 100mm                         |
| Stroke.....                     | 120mm                         |
| Displacement.....               | 3.769L                        |
| Compression Ratio .....         | 19.0                          |
| Type of Injection .....         | Direct injection              |
| Intake System.....              | Turbocharged                  |
| Intake Resistance.....          | 1.96kPa                       |
| Cooling System .....            | Water cooled                  |
| Fan .....                       | Pusher                        |
| Battery Voltage .....           | 12V                           |
| Type of Fuel.....               | Diesel Fuel No.2-D(ASTM D975) |
| Type of Oil .....               | Class CF lubricating oil      |
| Oil Capacity .....              | 13.2L                         |
| Type of Coolant .....           | Glycol mixture                |
| Coolant Capacity .....          | 8.2L                          |
| Back Pressure .....             | ≤7.07kPa                      |
| Standby Power .....             | 42.7kW                        |
| Prime Power.....                | 38.8kW                        |
| Fuel Consumption(100%load)..... | 10.7L/h                       |

**Alternator**



|                                                           |                                 |
|-----------------------------------------------------------|---------------------------------|
| Alternator Manufacturer/Brand .....                       | Leroy Somer                     |
| Alternator Model .....                                    | LSA42.3M7                       |
| Exciter.....                                              | Brushless                       |
| Cooling Fan .....                                         | Synthetic plastic               |
| Windings.....                                             | 100% copper                     |
| Insulation Class .....                                    | H                               |
| Winding Pitch.....                                        | 2/3                             |
| Terminals .....                                           | 12                              |
| Drip Proof .....                                          | IP23                            |
| Altitude.....                                             | ≤1000m                          |
| Overspeed .....                                           | 2250rpm                         |
| Air Flow.....                                             | 0.11 m³/s(50Hz),0.135m³/s(60Hz) |
| Voltage Regulation .....                                  | ±0.5 %                          |
| Total harmonic TGH / THCat no load < 1.5 % - on load < 5% |                                 |
| Telephone Interference.....                               | THF<2%;TIF<50                   |

**InteliLite4-AMF9 Control System**

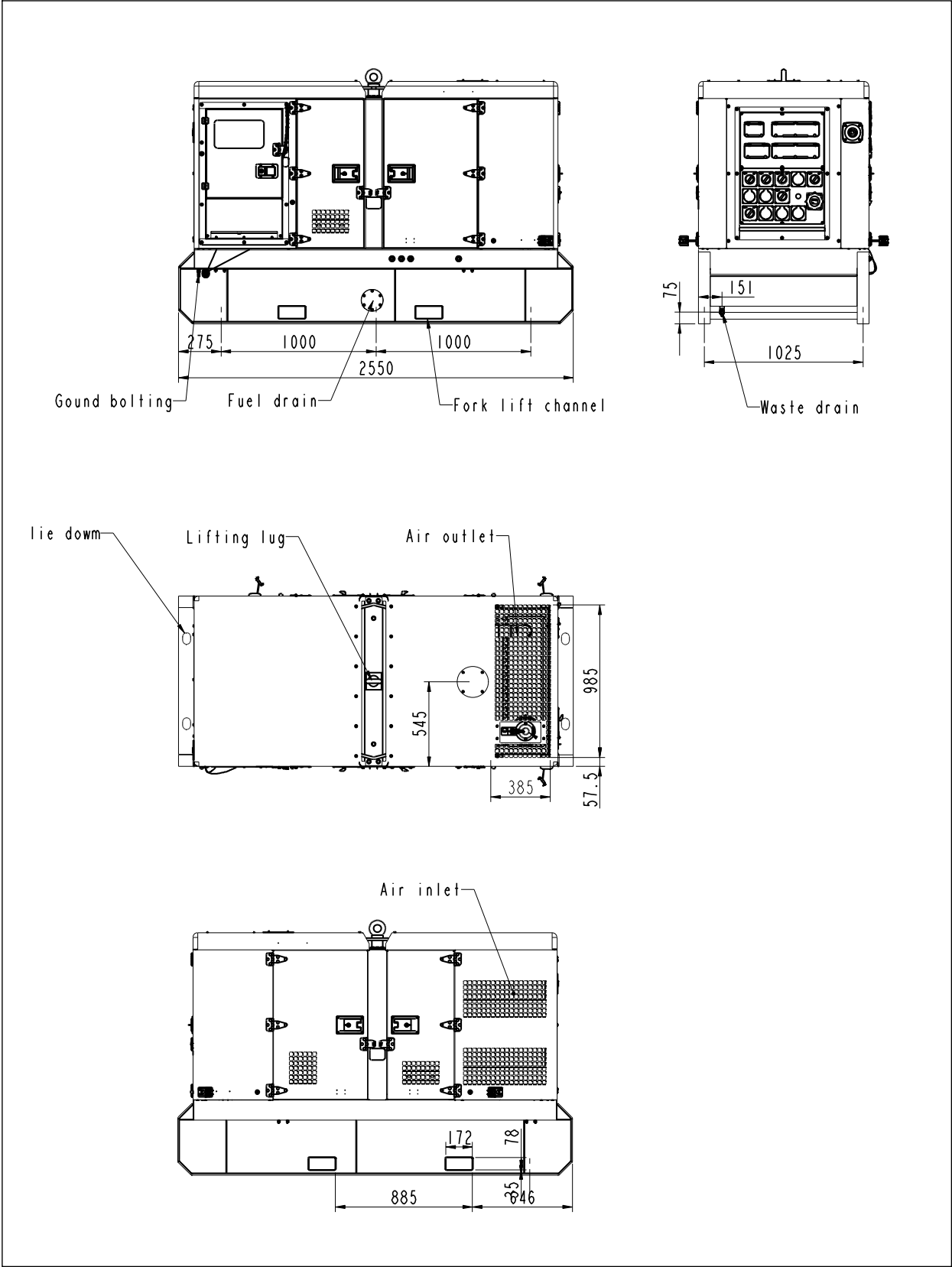


InteliLite4-AMF9 is Single Gen-set controller for stand-by and prime-power applications and all-in-one intuitive & powerful PC tool for configuration/monitoring/control, locally or remotely and easy to install, configure and use

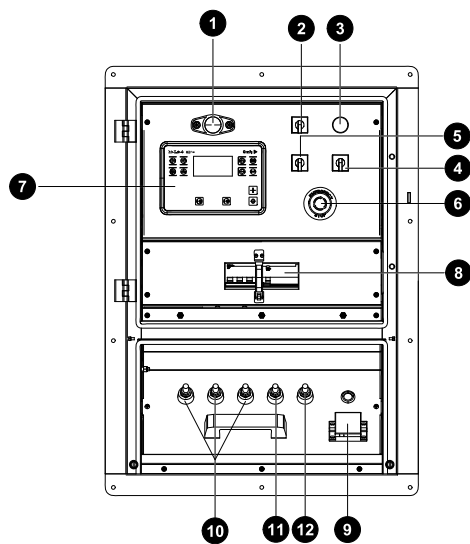
**Standard Control Function**

- 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

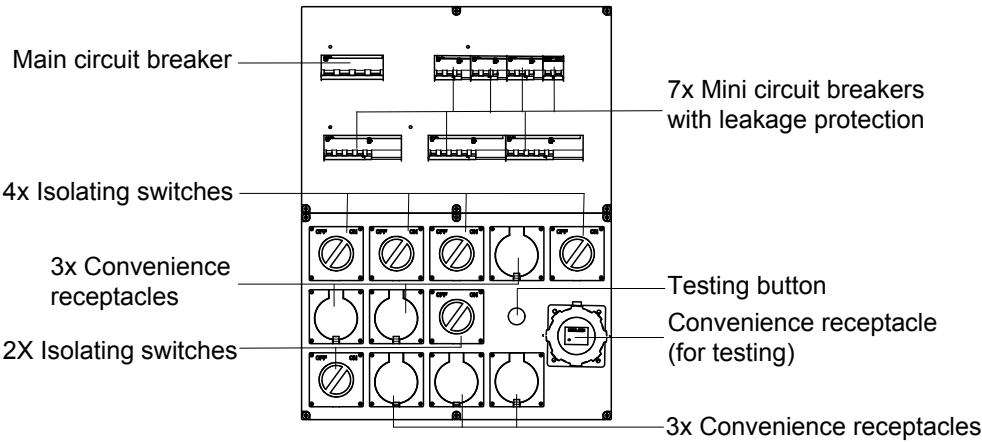


# 5 Control System



Control & field wiring cabinet

| 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                       |



Convenience receptacle box