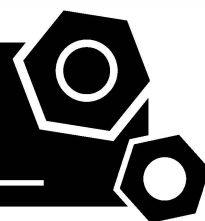


Generator set
Sound-proof type
GMS45KS

SPECIFICATIONS



SK series

GMS45KS, Tier 2

50 Hz @ 1500rpm,3-phase/4-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
- AS 3000-2018
- AS 3010-2017

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.

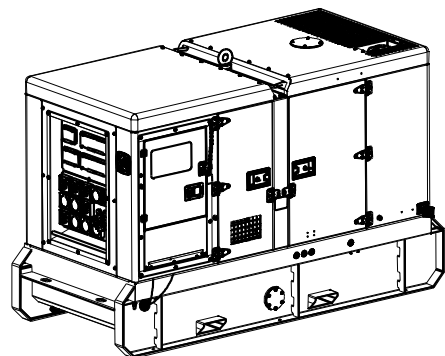
2 General Features

- Kubota engine V3800DI-T-BG
- Close coupled to LSA alternator LSA42.3M7
- Microprocessor control module MRS15
- SCHNEIDER main circuit breaker: 125A
- Rotate speed governor: Mechanical governor
- Excitation System: Self excited
- A.V.R
- 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 forklifts
- 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

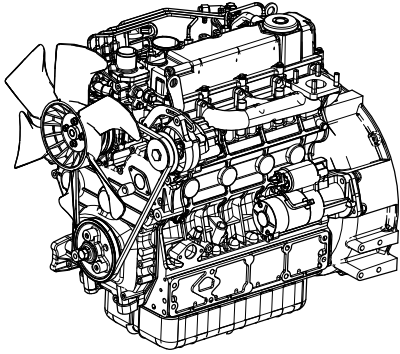
General technical data



Model.....	GMS45KS
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

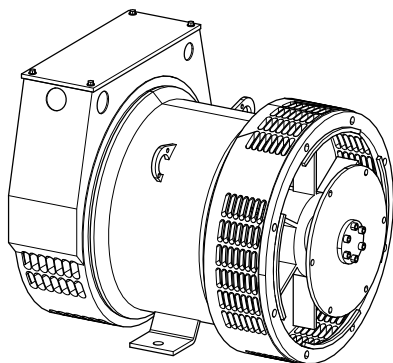
Voltage	380V	400V	415V	440V	
Ampere	68.4A	65.0A	62.6A	59.0A	
Genset Fuel Consumption					
Frequency/Load	25%	50%	75%	100%	110%
50Hz (L/h)	N/A	5.4	8.2	10.7	11.8

Diesel engine



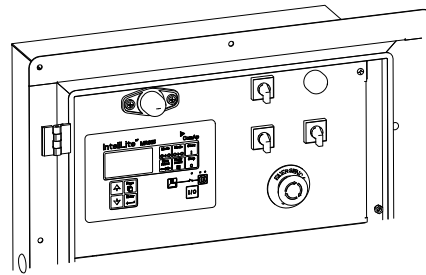
Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	V3800DI-T-BG
Dimensions L×W×H.....	745×549×794mm
Dry Weigh (approx.)	288kg
Number of Cylinders.....	4
Bore.....	100mm
Stroke.....	120mm
Displacement.....	3.769L
Compression Ratio	19.0
Type of Injection	Direct injection
Intake System.....	Turbocharged
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

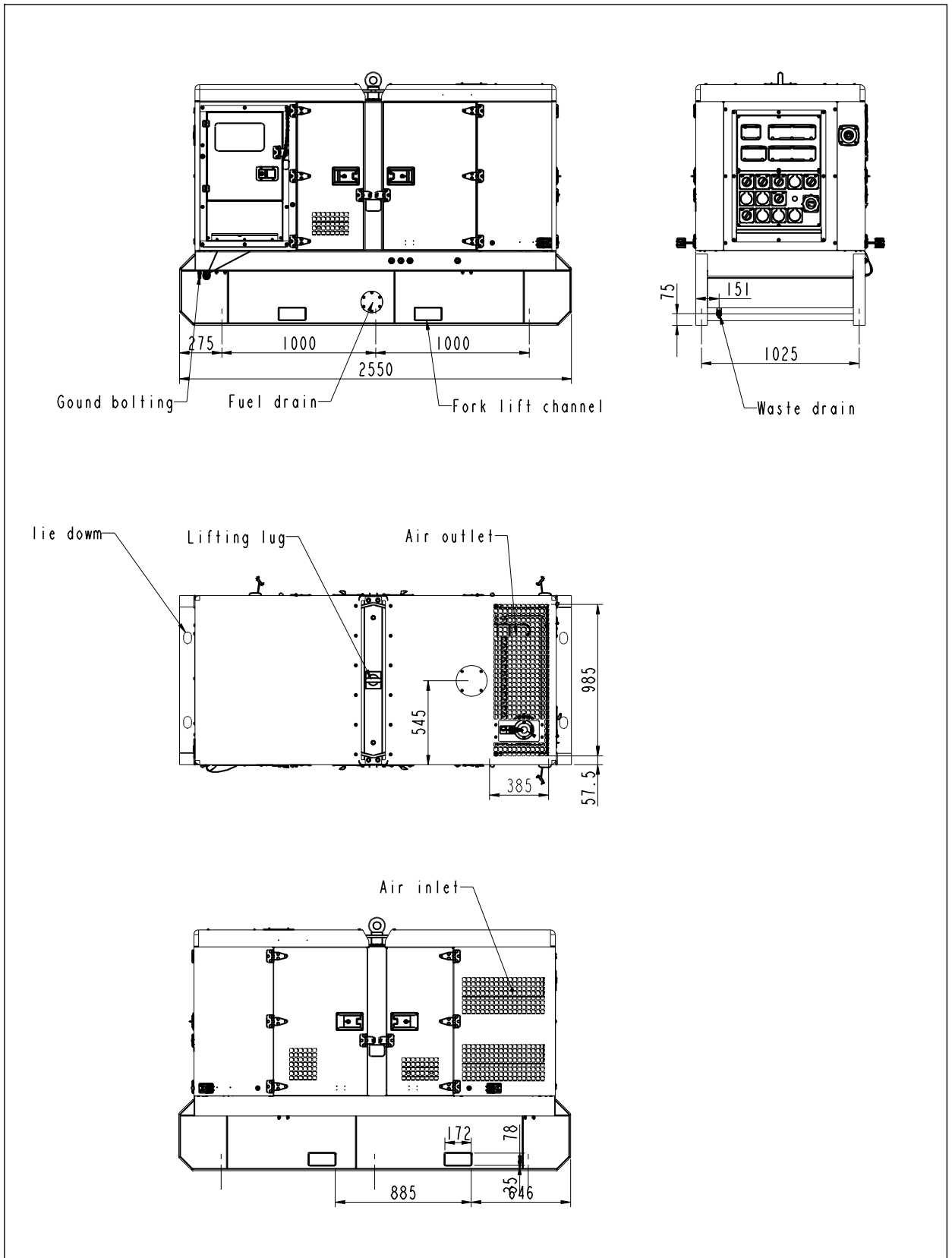
MRS Control System



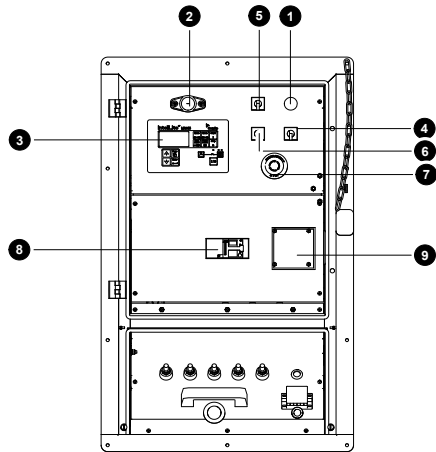
MRS is an advanced control module based on micro-processor, containing all necessary functions for protection of the genset and the breaker control. It can monitor the mains supply, and automatically start the engine when the mains is abnormal. Accurately measure various operational parameters and display all values and alarms information on the LCD. In addition, the control module can automatically shut down the engine and indicate the engine failure.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the mains supply and genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- Real time clock for time and date display, overall runtime display, 200 log entries
- Overall power output display
- Integral speed/frequency detecting, telling status of start, rated operation, overspeed etc.
- Communication with PC via RS485 OR RS232 interface, using MODBUS protocol

4 Overall Dimensions

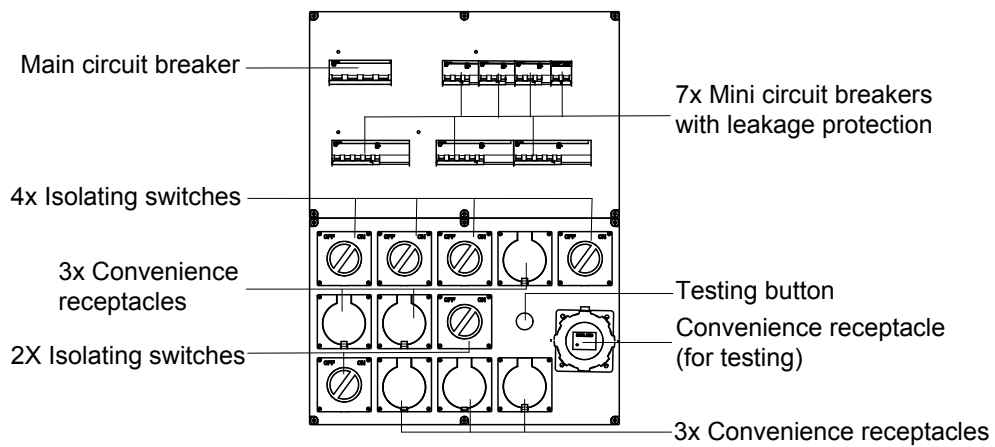


5 Control System



Ref.	Description
1	Not ready indicaton
2	Panel light
3	Control module
4	Control power switch
5	Panel light switch
6	Mode switch
7	Emergency stop button
8	Main circuit breaker
9	ELR

Control cabinet



Convenience receptacle box