

GENERATOR Kohler-SDMO J 110



1. General characteristics of the Kohler-SDMO J 110 genset :

Producer	Kohler - SDMO
Model	J 110
Country of origin	FRANCE
Performance class	G3 (maxim)
Electric power:	
- in emergency mode	110 kVA – 88 kW
- continuously	100 kVA – 80 kW
Voltage supplied	400 / 230V
Maximum intensity	159 A
Frequency	50 Hz
Speed	1500 root / min

2. General description :

2.1 John Deere 4045HSG20 engine technical data :

Model	JOHN DEERE
Tip	4045HSG20
Country of origin	France
Maximum engine power	103 kW / 140 hp
displacement	4.48 L
Number of cylinders	4 in line
Compression ratio	17:1
Piston speed	6.35 m/s
Combustible	DIESEL
Consumption at 100% load	23.8 l/h
Consumption at 75% load	17.9 l/h
Consumption at 50% load	12.6 l/h
Cooling system	radiator and mechanical fan
Mechanical fan power	2.5 kW
Air flow rate displaced by the fan	3.7 m ³ /s
Type of coolant	ethylene-glycol
Cooling system capacity	23.5 L
Type of oil used	15W - 30
Oil consumption at 100% load	0.024 L/h
Oil bath capacity	13.5 L
Allowed air flow for engine cooling	130 L/s
Exhaust gas flow	313 L/s
Exhaust gas temperature	525 C

2.2 Kohler-SDMO KH00753T alternator technical data :

Model	Kohler-SDMO KH00753T
Country of origin	FRANCE
Alternator manufacturer	Leroy Somer
COUPLER	Direct
Excitation	AVR brushless self-excited
Insulation class	CLASS H
Continuous power at 40 °C	100 kVA
Degree of protection	IP 23
Number of phases / Number of poles	3 phases / 4 poles
Yield at 100% load	90.8%
Power factor COS φ	0.8

2.3 Constructive elements:

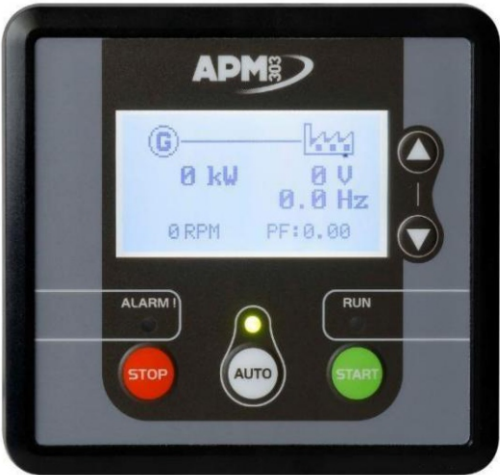
- 190 l tank integrated in the genset chassis for at least 8 hours of **autonomy** ;
- preheating resistance of the cooling liquid for an easy start in cold weather;
- 12V starting system;
- rectifier for charging the battery for the period when the generator is not working;
- alternator for charging the battery while the engine is running;
- shock absorbers for vibrations between the chassis and the engine-alternator assembly.

2.4 **Schneider Compact NSX** 160A 4-pole manual **circuit breaker** with protection to overload and short circuit is mounted in a metal case on the chassis of the genset:



3. Controler digital tip APM 303 (Easy to be used by any user):

The control panel contains:



3.1 Measuring instruments:

- Measurement of voltages between phases;
- Measurement of voltages between phase and zero;
- Current intensity;
- Active power measurement;
- Power factor measurement;
- Battery voltage measurement
- Frequency measurement;
- Battery voltage;
- Measurement of active and effective power;
- Indication of the number of rotations/min;
- Indication of operating hours;
- Indication in percentage of the fuel level in the tank

3.2 Signaling devices for:

- General failure Alarm
- Emergency stop button pressed
- The control panel works

3.3 Command keys:

- Button for using the group in auto mode
- Buttons for manual start/stop
- Buttons for displaying engine and alternator parameters;

3.4 Safety stop devices and indicators for:

- Engine start failure
- Too high/low engine speed
- Alternator voltage too low/high;
- Active power too high;
- Frequency too low/high
- High coolant temperature;
- Low oil pressure;
- Low fuel level in the tank;
- Problems with the alternator to charge the battery;
- Emergency stop button pressed.

3.5 Modbus communication on the RS485 system



4. M138 type soundproof hood:



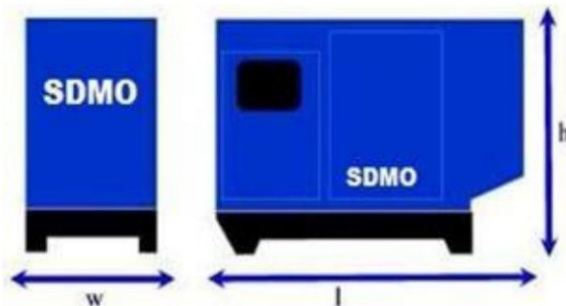
4.1 Characteristics of the soundproof housing:

- ÿ Simultaneously realizes sound insulation and protection against atmospheric agents;
- ÿ All groups in the soundproof range are made in accordance with CE recommendations
- ÿ Large doors allow easy access to any part of the equipment for easy maintenance
- ÿ Pipes for emptying liquids (cooling, diesel, oil) directly outside the casing;
- ÿ Stop button on the soundproofing case
- ÿ **Reduces the noise level to 80 dB at 1 m, and at 7 m it is 68 dB.**

5. Soundproof generator dimensions:

L 2572 x W 1126 x h 1571 mm

Group weight without diesel: 1,335 kg
 Group mass with diesel: 1 487 kg



Use:

The genset has ISO 9001 certifications

, ISO 14001 and CE mark, being entirely manufactured in France.