





#### DESCRIPTIVE

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for core temperature of 48/50°C max with mechanical fan
- Protective grille for fan and rotating parts (CE option)
- 9 dB(A) silencer supplied separately
- Charger DC starting battery with electrolyte
- → 12 V charge alternator and starter
- Delivered with oil and coolant -30°C
- Manual for use and installation

#### **POWER DEFINITION**

PRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1. ESP: The standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

### **TERMS OF USE**

According to the standard, the nominal power assigned by the genset is given for 25°C Air Intlet Temperature, of a barometric pressure of 100 kPA (100 m A.S.L), and 30 % relative humidity. For particular conditions in your installation, refer to the derating table.

### **ASSOCIATED UNCERTAINTY**

For the generating sets used indoor, where the acoustic pressure levels depends on the installation conditions, it is not possible to specify the ambient noise level in the exploitation and maintenance instructions. You will also find in our exploitation and maintenance instructions a warning concerning the air noise dangers and the need to implement appropriated preventive measures.

## **J200K**

Engine ref. 6068HF120-183
Alternator ref. KH01100T
Performance class G3

### **GENERAL CHARACTERISTICS**

Frequency (Hz) 50 Hz

Voltage (V) 400/230

Standard Control Panel APM303

Optional control panel APM403

Optional Control Panel M80

Optional control panel TELYS

POWER					
Voltage	ESP		PI	RP	Standby Amps
Voltage	kWe	kVA	kWe	kVA	Standby Amps
415/240	160	200	146	182	278
400/230	160	200	146	182	289
380/220	160	200	146	182	304
200/115	160	200	146	182	577
240 TRI	160	200	146	182	481
230 TRI	160	200	146	182	502
220 TRI	160	200	146	182	525

DIMENSIONS COMPACT VER	RSION
Length (mm)	2370
Width (mm)	1114
Height (mm)	1470
Dry weight (kg)	1726
Tank canacity (L)	340

#### **DIMENSIONS SOUNDPROOFED VERSION** Type soundproofing M226 Length (mm) 3508 Width (mm) 1200 1830 Height (mm) Dry weight (kg) 2336 Tank capacity (L) 340 Acoustic pressure level @1m in dB(A) 76 Sound power level guaranteed (Lwa) 95

Acoustic pressure level @7m in dB(A)

65



# **J200K**

## **ENGINE CHARACTERISTICS**

GENERAL ENGINE DATA	
Engine brand	JOHN DEERE
Engine ref.	6068HF120-183
Air inlet system	Turbo
Cylinders configuration	L
Number of cylinders	6
Displacement (L)	6,72
Charge Air coolant	Air/Air DC
Bore (mm) x Stroke (mm)	106 x 127
Compression ratio	17 : 1
Speed (RPM)	1500
Pistons speed (m/s)	6,35
Maximum stand-by power at rated RPM (kW)	183
Frequency regulation, steady state (%)	+/- 2.5%
BMEP at Max Power (bar)	21,80
Governor type	Mechanical

COOLING SYSTEM	
Radiator & Engine capacity (L)	25,80
Fan power (kW)	3,40
Fan air flow w/o restriction (m3/s)	4,60
Available restriction on air flow (mm H2O)	20
Type of coolant	Glycol-Ethylene

EMISSIONS	
Emission PM (mg/Nm3) 5% O2	80
Emission CO (mg/Nm3) 5% O2	180
Emission HC+NOx (g/kWh) Emission HC (g/kW.h)	0

EXHAUST	
Exhaust gas temperature @ ESP 50Hz (°C)	565
Exhaust gas flow @ ESP 50 Hz (L/s)	457
Max. exhaust back pressure (mm H2O)	750
FUEL	
Consumption @ 110% load (L/h)	45,20
Consumption @ 100% load (L/h)	40,80
Consumption @ 75% load (L/h)	31,30
Consumption @ 50% load (L/h)	20,50
Maximum fuel pump flow (L/h)	108
OIL	
Oil system capacity including filters (L)	32
Min. oil pressure (bar)	1
Max. oil pressure (bar)	5
Oil consumption 100% ESP (L/h)	0,92
Oil sump capacity (L)	31,50
HEAT BALANCE	
Heat rejection to exhaust (kW)	
Radiated heat to ambiant (kW)	23
Heat rejection to coolant HT (kW)	76
AIR INTAKE	
Max. intake restriction (mm H2O)	625
Intake air flow (L/s)	205



# **J200K**

## **ALTERNATOR CHARACTERISTICS**

GENERAL DATA		OTHER DATA	
Alternator ref.	KH01100T	Continuous Nominal Rating 40°C (kVA)	180
Number of Phase	Three phase	Standby Rating 27°C (kVA)	200
Power factor (Cos Phi)	0,80	Efficiencies 100% of load (%)	91,90
Altitude (m)	0 à 1000	Air flow (m3/s)	0,48
Overspeed (rpm)	2250	Short circuit ratio (Kcc)	0,3450
Number of pole	4	Direct axis synchro reactance unsaturated (Xd) (%)	366
Capacity for maintaining short circuit at 3 In for 10 s	No	Quadra axis synchro reactance unsaturated (Xq) (%)	187
Insulation class	Н	Open circuit time constant (T'do) (ms)	2276
T° class (H/125°), continuous 40°C	H / 125°K	Direct axis transcient reactance saturated (X'd) (%)	16,10
T° class (H/163°C), standby 27°C	H / 163°K	Short circuit transcient time constant (T'd) (ms)	100
Total Harmonic Distortion in no-load DHT (%)	<2.5	Direct axis subtranscient reactance saturated (X"d) (%)	12,80
AVR Regulation	Yes	Subtranscient time constant (T"d) (ms)	10
Total Harmonic Distortion, on linear load DHT (%)	<2.5	Quadra axis subtranscient reactance saturated (X"q) (%)	16,80
Wave form : NEMA=TIF	<50	Subtranscient time constant (T"q) (ms)	10
Wave form : CEI=FHT	<2	Zero sequence reactance unsaturated (Xo) (%)	0,60
Number of bearing	Single Bearing	Negative sequence reactance saturated (X2) (%)	14,88
Coupling	Direct	Armature time constant (Ta) (ms)	15
Voltage regulation at established rating		No load excitation current (io) (A)	0,70
(+/- %)	0,50	Full load excitation current (ic) (A)	2,99
Recovery time (Delta U = 20%	500	Full load excitation voltage (uc) (V)	40,90
transcient) (ms) Indication of protection	IP 23	Engine start (Delta U = 20% perm. or 30% trans.) (kVA)	407,60
Technology	Brushless	Transcient dip (4/4 load) - PF: 0,8 AR (%)	14
		No load losses (W)	3035,69
		Heat rejection (W)	12607,7 8
		Unbalanced load acceptance ratio (%)	100

### **DIMENSIONS**

Dimensions soundproofed version		Dimensions DW compact version	
Type soundproofing	M226	Type soundproofing	
Length (mm)	3508	Length (mm)	3560
Width (mm)	1200	Width (mm)	1180
Height (mm)	1830	Height (mm)	1832
Dry weight (kg)	2336	Dry weight (kg)	2196
Tank capacity (L)	340	Tank capacity (L)	868
Acoustic pressure level @1m in dB(A)	76	Acoustic pressure level @1m in dB(A)	
Sound power level guaranteed (Lwa)	95	Sound power level guaranteed (Lwa)	
Acoustic pressure level @7m in dB(A)	65	Acoustic pressure level @7m in dB(A)	
<b>Dimensions DW soundproofed version</b>		Dimensions DW 48h soundproofed	version
Type soundproofing	M226 DW	Type soundproofing	M226 DW48
Length (mm)	3560	Length (mm)	3560
Width (mm)	1200	Width (mm)	1200
Height (mm)	2182	Height (mm)	2182
Dry weight (kg)	2796	%PdnetE_5%	2964
Tank capacity (L)	868	Tank capacity (L)	1630

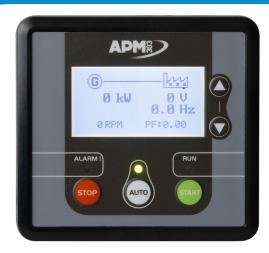
Acoustic pressure level @1m in dB(A)	76	Acoustic pressure level @1m in dB(A)	76
Sound power level guaranteed (Lwa)	95	Sound power level guaranteed (Lwa)	95
Acoustic pressure level @7m in dB(A)	65	Acoustic pressure level @7m in dB(A)	65



## **J200K**

### **CONTROL PANEL**

### APM303, comprehensive and simple



The APM303 is a versatile unit which can be operated in manual or automatic mode. It offers the following features: Measurements:

phase-to-neutral and phase-to-phase voltages, fuel level (In option : active power currents, effective power, power factors, Kw/h energy meter, oil pressure and coolant temperature levels)

Supervision:

Modbus RTU communication on RS485

Reports:

(In option: 2 configurable reports)

Safety features:

Overspeed, oil pressure, coolant temperatures, minimum and maximum voltage, minimum and maximum frequency (Maximum active power P<66kVA)

Traceability:

Stack of 12 stored events

For further information, please refer to the data sheet for the APM303.

# APM403, basic generating set and power plant control



The APM403 is a versatile control unit which allows operation in manual or automatic mode

Measurements : voltage and current

kW/kWh/kVA power meters

Standard specifications: Voltmeter, Frequency meter.

Optional : Battery ammeter. J1939 CAN ECU engine control

Alarms and faults: Oil pressure, Coolant temperature, Overspeed, Start-up failure, alternator min/max, Emergency stop button.

Engine parameters: Fuel level, hour counter, battery

voltage

Optional (standard at 24V): Oil pressure, water temperature. Event log/ Management of the last 300 genset events.

Mains and genset protection

Clock management

USB connections, USB Host and PC, Communications: RS485 INTERFACE

ModBUS protocol /SNMP

Optional: Ethernet, GPRS, remote control, 3G, 4G,

Websupervisor, SMS, E-mails

### M80, transfer of information



The M80 is a dual-function control unit. It can be used as a basic terminal block for connecting a control box and as an instrument panel with a direct read facility, with displays giving a global view of your generating set's basic parameters.

Offers the following functions:

Engine parameters: tachometer, working hours counter, coolant temperature indicator, oil pressure indicator, emergency stop button, customer connection terminal block, CE.

### TELYS, ergonomic and user-friendly



The highly versatile TELYS control unit is complex yet accessible, thanks to the particular attention paid to optimising its ergonomics and ease of use. With its large display screen, buttons and scroll wheel, it places the accent on simplicity and communication.

The TELYS offers the following functions:

Electrical measurements: voltmeter, frequency meter, ammeter.

Engine parameters: working hours counter, oil pressure, coolant temperature, fuel level, engine speed, battery voltage.

Alarms and faults: oil pressure, coolant temperature, failure to start, overspeed, alternator min./max., battery voltage min./max., emergency stop, fuel level.

Ergonomics: wheel for navigating around the various menus.

Communication: remote control and operation software, USB connections, PC connection.

For more information on the product and its options, please refer to the sales documentation.