SDMO°





DESCRIPTIVE

- Mechanic governor
- Mechanically welded chassis with antivibration suspension
- Main line circuit breaker
- Radiator for wiring 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 UNCERTAINLY

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.

J150U

Engine ref. Alternator ref. Performance class	6068HF120-153 AT01340T G3
GENERAL CHARACTERISTICS	
Frequency (Hz)	60
Voltage (V)	480/277
Standard Control Panel	APM303
Optional control panel	TELYS

Standby Amps	
Stanuby Amps	
226	
247	
493	
514	
181	

DIMENSIONS COMPACT VERSION	
Length (mm)	2370
Width (mm)	1114
Height (mm)	1480
Dry weight (kg)	1578
Tank capacity (L)	340

DIMENSIONS SOUNDPROOFED VERS	ION
Commercial reference of the enclosure	M226
Length (mm)	3508
Width (mm)	1200
Height (mm)	1830
Dry weight (kg)	2168
Tank capacity (L)	340
Acoustic pressure level @1m in dB(A)	80
Sound power level guaranteed (Lwa)	0
Acoustic pressure level @7m in dB(A)	69

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ENGINE CHARACTERISTICS

GENERAL ENGINE DATA

Engine model	JOHN DEERE
Engine ref.	6068HF120-153
Air inlet	Turbo
Cylinders arrangement	L
Number of cylinders	6
Displacement (C.I.)	6.72
Air coolant	Air/Air DC
Bore (mm) x Stroke (mm)	106 x 127
Compression ratio	17 : 1
Speed (RPM)	1800
Pistons speed (m/s)	7.62
Maximum stand-by power at rated RPM (kW)	166
Frequency regulation (%)	+/- 2.5%
BMEP (bar)	15
Governor type	Mechanical

COOLING SYSTEM

Radiator & Engine capacity (L)	25.80
Max water temperature (°C)	105
Outlet water temperature (°C)	93
Fan power (kW)	5.20
Fan air flow w/o restriction (m3/s)	5
Available restriction on air flow (mm Water Column)	20
Type of coolant	Glycol-Ethylene
Thermostat (°C)	82-94

EMISSIONS

Emission PM (g/kWh) Emission CO (g/kW.h) Emission HCNOx (g/kWh) Emission HC (g/kW.h)

EXHAUST	
Exhaust gas temperature (°C)	600
Exhaust gas flow (L/s)	473
Max. exhaust back pressure (mm EC)	750
FUEL	
Fuel consumption 110% load (L/hr)	41.50
Fuel consumption 100% load (L/hr)	38
Fuel consumption 75% (L/h)	29
Fuel consumption 50% (L/h)	20.50
Maximum fuel pump flow (L/h)	112
OIL	
Oil capacity (L)	21.50
Min. oil pressure (bar)	1
Max. oil pressure (bar)	5
Oil consumption 100% load (L/h)	0.04
Carter oil capacity (L)	20.60
HEAT BALANCE	
Heat rejection to exhaust (kW)	105
Radiated heat to ambiant (kW)	17.50
Haet rejection to coolant (kW)	59

Max. intake restriction (mm EC)	625
Intake air flow (L/s)	213

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OTHER DATA

ALTERNATOR CHARACTERISTICS

GENERAL DATA

Alternator ref.	AT01340T
Number of Phase	Three phase
Power factor (Cos Phi)	0.80
Altitude (m)	0 to 1000
Overspeed (rpm)	2250
Number of pole	4
Capacity for maintaining short circuit at 3 In for 10 s	No
Insulation class	Н
T° class, continuous 40°C	H / 125°K
T° class, standby 27°C	H / 163°K
AVR Regulation	Yes
Total Harmonic Distortion in no-load DHT (%)	<2
Total Harmonic Distortion, on load DHT (%)	<5
Wave form : NEMA=TIF	<50
Wave form : CEI=FHT	
Number of bearing	1
Coupling	Direct
Voltage regulation at established rating (+/- %)	
Recovery time (Delta U = 20% transcient) (ms)	500
Indication of protection	IP 23
Technology	Without collar or brush

OTHER DATA	
Continuous Nominal Rating 40°C (kVA)	188
Standby Rating 27°C (kVA)	206
Efficiencies 100% of load (%)	93.30
Air flow (m3/s)	0.30
Short circuit ratio (Kcc)	0.46
Direct axis synchro reactance unsaturated (Xd) (%)	317
Quadra axis synchro reactance unsaturated (Xq) (%)	190
Dpen circuit time constant (T'do) (ms)	2077
Direct axis transcient reactance saturated (X'd) (%)	15.30
Short circuit transcient time constant (T'd) (ms)	100
Direct axis subtranscient reactance saturated (X"d) (%)	9.10
Subtranscient time constant (T"d) (ms)	10
Quadra axis subtranscient reactance saturated (X"q) %)	18.10
Subtranscient time constant (T"q) (ms)	
Zero sequence reactance unsaturated (Xo) (%)	0.13
Negative sequence reactance saturated (X2) (%)	13.66
Armature time constant (Ta) (ms)	15
No load excitation current (io) (A)	0.66
Full load excitation current (ic) (A)	2.36
Full load excitation voltage (uc) (V)	29
Engine start (Delta U = 20% perm. or 50% trans.) (kVA)	427
Transcient dip (4/4 load) - PF : 0,8 AR (%)	13.80
No load losses (W)	4121
Heat rejection (W)	10663
Uphalanced load acceptance ratio (%)	

Unbalanced load acceptance ratio (%)

DIMENSIONS

Containment DW	
Commercial reference of the enclosure	M226 DW
Length (mm)	3560
Width (mm)	1200
Height (mm)	2182
Dry weight (kg)	2561
Tank capacity (L)	868
Acoustic pressure level @1m in dB(A)	80
Sound power level guaranteed (Lwa)	0
Acoustic pressure level @7m in dB(A)	69

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J150U

CONTROL PANEL

APM303, comprehensive and simple



The APM303 is a versatile unit which can be operated in manual or automatic mode. Equipped with an LCD screen, the user-friendly APM303 offers high-quality basic functions to guarantee simple, reliable operation and supervision of your generating set. It offers the following features: Measurements:

phase-to-neutral and phase-to-phase voltages, active power currents, effective power, power factors, Kw/h energy meter Fuel, oil pressure and coolant temperature levels Supervision:

Modbus RTU communication on RS485 Reports: 2 configurable reports Safety features: Overspeed, oil pressure Coolant temperatures Minimum and maximum voltage Minimum and maximum frequency Maximum current Maximum active power Phase sequence Traceability: Stack of 12 stored events For further information, please refer to the data sheet for the APM303.

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.

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