





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.

J30U

Engine ref. 3029DFS29
Alternator ref. KH00630T
Performance class G3

GENERAL CHARACTERISTICS

Frequency (Hz)	60 Hz
Voltage (V)	480/277
Standard Control Panel	APM303
Optional control panel	TELYS
Optional Control Panel	M80
Optional control panel	NA

POWER					
Voltage	ES	SP	PRP		Standby Amps
voltage	kWe	kVA	kWe	kVA	Standby Amps
480/277	30	37,5	27,2	34	45
440/254	30	37,5	27,2	34	49
220/127	30	37,5	27,2	34	98
208/120	28	35	25,4	31,8	97

DIMENSIONS COMPACT VERSION	N	
Length (mm)	1700	
Width (mm)	896	
Height (mm)	1221	
Dry weight (kg)	750	
Tank capacity (L)	100	

DIMENSIONS SOUNDPROOFED V	ERSION	
Type soundproofing	M127	
Length (mm)	2080	
Width (mm)	960	
Height (mm)	1415	
Dry weight (kg)	980	
Tank capacity (L)	100	
Acoustic pressure level @1m in dB(A)	78	
Guaranteed acoustic power level (Lwa)		
Acoustic pressure level @7m in dB(A)	68	



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ENGINE CHARACTERISTICS

GENERAL ENGINE DATA	
Engine brand	JOHN DEERE
Engine ref.	3029DFS29
Air inlet system	Athmo
Cylinders configuration	L
Number of cylinders	3
Displacement (L)	2,91
Charge Air coolant	
Bore (mm) x Stroke (mm)	106 x 110
Compression ratio	17.2 : 1
Speed (RPM)	1800
Pistons speed (m/s)	6,60
Maximum stand-by power at rated RPM (kW)	35
Frequency regulation, steady state (%)	+/- 2.5%
BMEP (bar)	8,70
Governor type	Mechanical

COOLING SYSTEM	
Radiator & Engine capacity (L)	16,10
Fan power (kW) Fan air flow w/o restriction (m3/s) Available restriction on air flow (mm H2O) Type of coolant	1,20 2,22 20 Glycol-Ethylene

EMISSIONS	
Emission PM (g/kWh)	
Emission CO (g/kW.h)	
Emission HC+NOx (g/kWh)	0
Emission HC (mg/Nm3) 5% O2	30

EXHAUST	
Exhaust gas temperature @ ESP 60Hz (°C)	570
Exhaust gas flow @ ESP 60Hz (L/s)	102
Max. exhaust back pressure (mm H2O)	625
FUEL	
Fuel consumption 110% load (L/hr)	9
Fuel consumption 100% load (L/hr)	8
Fuel consumption 75% (L/h)	6,50
Fuel consumption 50% (L/h)	4,40
Maximum fuel pump flow (L/h)	108
OIL	
Oil capacity (L)	6
Min. oil pressure (bar)	1
Max. oil pressure (bar)	5
Oil consumption 100% ESP (L/h)	0,20
Oil sump capacity (L)	5,30
HEAT BALANCE	
Heat rejection to exhaust (kW)	31
Radiated heat to ambiant (kW)	7
Haet rejection to coolant HT (kW)	20
AIR INTAKE	
Max. intake restriction (mm H2O)	300
Intake air flow (L/s)	36



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ALTERNATOR CHARACTERISTICS

GENERAL DATA	
Alternator ref. Number of Phase Power factor (Cos Phi) Altitude (m) Overspeed (rpm) Number of pole Capacity for maintaining short circuit at 3 In for 10 s Insulation class T° class (H/125°), continuous 40°C T° class (H/163°C), standby 27°C Total Harmonic Distortion in no-load DHT (%) AVR Regulation Total Harmonic Distortion, on linear load DHT (%) Wave form: NEMA=TIF Wave form: CEI=FHT Number of bearing Coupling Voltage regulation at established rating	KH00630T Three phase 0,80 0 à 1000 2250 4 Yes H H / 125°K H / 163°K 3,3 Yes 2,1 <45 <2 1 Direct 1
. •	2001
Technology	Without collar or brush

OTHER DATA	
Continuous Nominal Rating 40°C (kVA) Standby Rating 27°C (kVA) Efficiencies 100% of load (%) Air flow (m3/s)	36 38,40 89,80 0.0970
Short circuit ratio (Kcc) Direct axis synchro reactance unsaturated (Xd) (%)	0,62 169,10
Quadra axis synchro reactance unsaturated (Xq) (%) Open circuit time constant (T'do) (ms) Direct axis transcient reactance saturated (X'd) (%)	72,80 930 13,40
Short circuit transcient time constant (T'd) (ms) Direct axis subtranscient reactance saturated (X"d) (%)	46 7,70
Subtranscient time constant (T"d) (ms) Quadra axis subtranscient reactance saturated (X"q) (%)	12 16,60
Subtranscient time constant (T"q) (ms) Zero sequence reactance unsaturated (Xo) (%)	12 2,87
Negative sequence reactance saturated (X2) (%) Armature time constant (Ta) (ms)	11,50 11
No load excitation current (io) (A) Full load excitation current (ic) (A) Full load excitation voltage (uc) (V)	0,55 1,90 20,10
Engine start (Delta U = 20% perm. or 30% trans.) (kVA)	104
Transcient dip (4/4 load) - PF : 0,8 AR (%) No load losses (W)	14,40 804 3271
Heat rejection (W) Unbalanced load acceptance ratio (%)	100

DIMENSIONS

Dimensions soundproofed version		Dimensions DW compact version	
Type soundproofing	M127	Type soundproofing	
Length (mm)	2080	Length (mm)	2160
Width (mm)	960	Width (mm)	966
Height (mm)	1415	Height (mm)	1388
Dry weight (kg)	980	Dry weight (kg)	932
Tank capacity (L)	100	Tank capacity (L)	230
Acoustic pressure level @1m in dB(A)	78	Acoustic pressure level @1m in dB(A)	
Guaranteed acoustic power level (Lwa)		Guaranteed acoustic power level (Lwa)	
Acoustic pressure level @7m in dB(A)	68	Acoustic pressure level @7m in dB(A)	
Dimensions DW soundproofed version		Dimensions DW 48h soundproofed v	ersion
Turne country of the	M407 DW	Turne accompliance of the st	M407 DW40

Dimensions DW soundproofed version		Dimensions DW 48h soundproofed version		
Type soundproofing	M127 DW	Type soundproofing	M127 DW48	
Length (mm)	2160	Length (mm)	2160	
Width (mm)	966	Width (mm)	966	
Height (mm)	1582	Height (mm)	1631	
Dry weight (kg)	1160	%PdnetE_5%	1165	
Tank capacity (L)	230	Tank capacity (L)	420	
Acoustic pressure level @1m in dB(A)	78	Acoustic pressure level @1m in dB(A)	78	

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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.

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.

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.

Basic terminal block



The control unit can be used as a basic terminal block for connecting a control box.

Offers the following functions:

emergency stop button, customer connection terminal block, CE.