



DESCRIPTIVE

- REG_MECA
- CHASSIS
- DISJ
- RAD50
- GRILLE
- SIL9SEP
- BATTERIE
- DEM_ACHA12
- HUILE_REF
- MANUEL

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.

J20UM

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

GENERAL CHARACTERISTICS

Frequency (Hz)	60
Voltage (V)	T61M1
Standard Control Panel	A303
Optional control panel	T100
Optional Control Panel	M80
Optional control panel	NA

POWER

Voltage	ESP		PRP		Standby Amps
	kWe	kVA	kWe	kVA	
240 MONO-BI	20	20	18,2	18,2	83

DIMENSIONS COMPACT VERSION

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

DIMENSIONS SOUNDPROOFED VERSION

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



J20UM

ENGINE CHARACTERISTICS

GENERAL ENGINE DATA

Engine brand	JD
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	MECA

COOLING SYSTEM

Radiator & Engine capacity (L)	16,10
Fan power (kW)	1,20
Fan air flow w/o restriction (m ³ /s)	2,22
Available restriction on air flow (mm H ₂ O)	20
Type of coolant	GLYCOL

EMISSIONS

Emission PM (g/kWh)	
Emission CO (g/kW.h)	
Emission HC+NO _x (g/kWh)	0
Emission HC (g/kW.h)	1

EXHAUST

Exhaust gas temperature @ ESP 60Hz (°C)	570
Exhaust gas flow @ ESP 60Hz (L/s)	102
Max. exhaust back pressure (mm H ₂ O)	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 ambient (kW)	7
Heat rejection to coolant HT (kW)	20

AIR INTAKE

Max. intake restriction (mm H ₂ O)	300
Intake air flow (L/s)	36

GENERAL DATA

Alternator ref.	KH00630T
Number of Phase	1
Power factor (Cos Phi)	1
Altitude (m)	0-1000
Overspeed (rpm)	2250
Number of pole	4
Capacity for maintaining short circuit at 3 In for 10 s	1
Insulation class	H
T° class (H/125°), continuous 40°C	H-125
T° class (H/163°C), standby 27°C	H-163
Total Harmonic Distortion in no-load DHT (%)	3,3
AVR Regulation	1
Total Harmonic Distortion, on linear load DHT (%)	2,1
Wave form : NEMA=TIF	<45
Wave form : CEI=FHT	<2
Number of bearing	1
Coupling	D
Voltage regulation at established rating (+/- %)	1
Recovery time (Delta U = 20% transient) (ms)	200
Indication of protection	IP23
Technology	BRUSHLESS

OTHER DATA

Continuous Nominal Rating 40°C (kVA)	21
Standby Rating 27°C (kVA)	23
Efficiencies 100% of load (%)	83,70
Air flow (m3/s)	0,0970
Short circuit ratio (Kcc)	0,59
Direct axis synchro reactance unsaturated (Xd) (%)	198,10
Quadra axis synchro reactance unsaturated (Xq) (%)	91,70
Open circuit time constant (T'do) (ms)	930
Direct axis transient reactance saturated (X'd) (%)	21,10
Short circuit transient time constant (T'd) (ms)	46
Direct axis subtransient reactance saturated (X''d) (%)	12,10
Subtransient time constant (T''d) (ms)	12
Quadra axis subtransient reactance saturated (X''q) (%)	26,10
Subtransient time constant (T''q) (ms)	12
Zero sequence reactance unsaturated (Xo) (%)	3,46
Negative sequence reactance saturated (X2) (%)	18,10
Armature time constant (Ta) (ms)	11
No load excitation current (io) (A)	0,35
Full load excitation current (ic) (A)	2,20
Full load excitation voltage (uc) (V)	23,10
Engine start (Delta U = 20% perm. or 30% trans.) (kVA)	53
Transient dip (4/4 load) - PF : 0,8 AR (%)	12
No load losses (W)	592,01
Heat rejection (W)	3798
Unbalanced load acceptance ratio (%)	100

DIMENSIONS

CAPOT

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

CAPOT-DW

Type soundproofing	M127-DW
Length (mm)	2160
Width (mm)	966
Height (mm)	1582
Dry weight (kg)	1160
Tank capacity (L)	230
Acoustic pressure level @1m in dB(A)	78

BASE-DW

Type soundproofing	
Length (mm)	2160
Width (mm)	966
Height (mm)	1388
Dry weight (kg)	932
Tank capacity (L)	230
Acoustic pressure level @1m in dB(A)	
Guaranteed acoustic power level (Lwa)	
Acoustic pressure level @7m in dB(A)	

Guaranteed acoustic power level (Lwa)
Acoustic pressure level @7m in dB(A)

68

DCOF_PPR_A303_ET



DCOF_PPR_A303

DCOF_PPR_T100_ET



DCOF_PPR_T100

DCOF_PPR_M80_ET



DCOF_PPR_M80

DCOF_PPR_NA_ET



DCOF_PPR_NA