

SHELL G20PS

50Hz@1500RPM 400/230V 3PH

GENMAC
POWER PRODUCTS



Picture for illustration purposes only

General features

Ultrasilent generator with following specifications:

Frame:

- Heavy duty fabricated welded base plate
- High quality steel with sandblasting and cathaphoresis treatment sealed with powder coat paint
- High precision sheet cutting with nitrogen laser technology to avoid oxidation
- Heavy duty rubber anti-vibration mountings
- Fuel tank with drain plug and retention basin
- Feet and four lifting points

Canopy:

- Small foot print and vertical shape to facilitate installation even in narrow spaces
- Two Full length doors for easy access for service and maintenance
- Electro-galvanized sheet DC01+ZE25/25 (EN 10152: 2009) (Optional SHELL-INOX Stainless Steel AISI 304 sheet)
- Weatherproof sealed joints
- Lockable handles in each door
- RAL 9010 "orange peel" specific powder coat paint for outdoor usage
- Rain cap on exhaust outlet
- Easy access for Coolant refilling
- Fuel filler outside enclosure
- Ecological Sound foam: 100% Recyclable, 35mm thickness, fire-proof self-extinguishing class1 fire-reaction compliant washable, mechanically fixed to the frame

Muffler:

- Supersilent, Residential type
- integrated in the canopy

Control Panel:

- Metal Control panel with protective back cover
- Dedicated area to make easier the electrical connection to the load

All units and components are prototype tested, factory build and production tested. A specific control procedure during the several stages of production ensures long life and reliability.

Overall performance

G20PS

PRP Continuous power kVA	20
PRP Continuous power kW	16
LTP Stand-by power kVA	22
LTP stand-by power kW	18
Power factor cos ϕ	0.8
Voltage VAC	400/230
Frequency Hz	50
Ampere PRP/LTP	29 / 32
Speed RPM	1500

Dimensions and noise level

Length mm	1180
Width mm	700
Height mm	1650
Net Weight kg	700
Gross Weight kg	-
Sound pressure at 7 mt dBA	56.00

Data reference

Standard reference conditions temperature 25°C, altitude 1-1000m asl, relative humidity 30%, atmospheric pressure 100 kPa (1 bar), power factor 0.8 lag, balanced load - non distortional. Fuel consumption is nominal and refers to specific weight 0.850 gr/lt. Power performance data as quoted can be obtained after the initial running-in period of the engine, during which one has to follow the instructions of the engine manufacturer as stated in the use and maintenance manual of the specific engine. The tolerance shown by the engine manufacturer is +/- 5%. Sound power values refer to free field conditions: the installation site may influence the values. Dimensions, weights and other specifications contained in the technical data sheet and related attachments are nominal, subject to tolerances and refer to the model with standard equipment; any optional and additional equipment/accessories can modify weight, dimensions, performance.P.R.P. Prime Power-Continuous power at variable load: The power that a genset can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer. according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the Manufacturer.L.T.P. Limited-time running power-Limited power: The maximum power that a genset can supply for a limited time respecting the maintenance intervals established in the environmental conditions stated by the Manufacturer according to ISO 8528-1.The number of hours per year is stated by the Manufacturer. Overload is not permitted.*For reasons of transport and/or storage, liquids (oil and antifreeze) and batteries might not be included in the delivery.



Engine general data

Engine brand	Perkins
Model	404A-22G1
PRP Power kW	18.40
LTP Power kW	20.30
Fuel	Diesel
Nr. cylinders	4
Air intake	Aspirated
Cooling	Water
Cubic capacity l.	2.22
Speed regulation	Mechanical
Performance Class - steady state regulator accuracy +/- %	G2 - 0.75
Load Step G1 - KWe	-
Load Step G2 - KWe	-
Load Step G3 - KWe	-
Voltage VDC	12
Emissions	-

Alternator general data

Alternator brand	Mecc-Alte
Model	NPE32-2M/4C
Type of excitation	Self-excited
Type of regulation	AVR
Regulator precision +/- %	1.00

Structure data

Type of structure	SHELL
Tank capacity l.	90
Retention basin	yes
Exhaust diameter mm	50

Control panel features

QFIA-4520

Protection cover
Circuit breaker
AMF controller DSE4520
- Voltmeter, Frequncymeter, Ammeter
- Generator power (kW, kV Ar, kV A & pf) monitoring
- Hour meter
- Fuel level meter
- Overload (kW & kV Ar) protection
- Low oil pressure protection
- High coolant temperature protection
- Low fuel level protection
- Battery charger alternator fault
- Rpm protection
Emergency stop button
Terminal board for ATS connection
Battery charger
On/off switch

Fuel consumption

Consumption 25% l./h	-
Consumption 50% l./h	2.90
Consumption 75% l./h	4.00
Consumption 100% l./h	5.30
Autonomy at 75% of load h.	≈ 23 h

Engine liquids and equipment

Type of lubricant	Oil SAE 15W40
Lubrication capacity l.*	10.60
Type of coolant	Antifreeze liquid
Coolant capacity l.*	12.50
Air intake filter	Paper cartridge
Battery capacity Ah	50
Number of batteries*	1

Fuel system and energy balance

AC pump suction head kPa	1
Combustion air flow volume LTP m3/min	1.45
Cooling air capacity LTP m3/min	40.20
Exhaust gas flow-density LTP m3/min	3.94
Exhaust gas temperature LTP °C	505.00
Brake mean effective pressure kPa	10.20
Energy to exhaust LTP kWt	16.60
Energy to coolant LTP kWt	19.60
Energy to radiation LTP kWt	4.40



Dealer