



Image shown may not reflect actual package

DPX-2100P - Perkins 20 kVA - Super Silent

The compact self-supporting modular enclosure, are designed to guarantee 55db(A) at 7 meters in a free field, and optimum performance in all the condition. Fully designed on modular principles, the enclosure permits a full easy on-site repair, thanks to the easy interchangeable panels.

The enclosure, fully made in cold galvanized steel sheet, fixed with steel bolts and rivets. The absence of welding in all the components of the enclosure and the high resistance epoxy powder painting, allowing extreme durability, robustness and high resistance to corrosion over the time still in the outdoor installation.

The low noise emission level, fully comply the European Community Directive 2005/88/CE, thanks to the continuous investment in research, and the development by our specialist engineers.

All enclosure are fully weatherproof and incorporate internally the full exhaust silencing system.

About the Security and Safety, all the gensets incorporate a control panel viewing via large viewing window in lockable enclosure door, an Emergency stop push button mounted on enclosure exterior above the control panel, and all the electrical components fully guarded.

All the insulation material used, are made with sound absorbing materials with Euroclass A1 fire resistance certificate.

Standard reference conditions: temperature 25°C, altitude 100m 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 diesel specific weight 0,850kg/l and conforming to BS2869, Class A2. 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.

General Information

Automatic Diesel Generator Set Model: DPX-21000P

Voltage / Frequency	r.p.m.	PRP (Prime Power)*	LTP (Standby)*
230/400V-50Hz	1500	20,1 kVA/16,1 kW	22,4 kVA/17,8kW
	/	/	/

*Ratings at 0.8 power factor

Weights: kg

Net (only generator)	1430
Wet (+ lube oil & coolant)	/
Fuel, lube oil & coolant	/

Dimension: mm

Canopy Model	Enclosed
Length	2200
Width	1200
Height	1840
Tank	500 L

Engine Information

Engine Brand	PERKINS	
Engine Model	404J-22G	
Cylinders	4	
Speed	1500	R.p.m.
Displacement	2,2	L
Air Intake	NATURALLY ASPIRATED	
Standard Voltage	12	V
Cooling	WATERCOOLED	
Flywheel P.R.P. Power	-	kWm
Flywheel L.T.P. Power	-	kWm
Fuel Cons. at 100% (L.T.P.)	/	g/kWh
Fuel Cons. at 100% (P.R.P.)	251	g/kWh
Fuel Cons. at 75% (P.R.P.)	243	g/kWh
Fuel Cons. at 50% (P.R.P.)	264	g/kWh
Fuel Cons. at 25% (P.R.P.)	/	g/kWh
Engine Speed Regulator	ELECTRONICAL	
Governing Class	ISO 8528-G3	
Emission Class	STAGE V	



Definitions

P.R.P.

Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12.

Overload operation cannot exceed 25 hours per year.

L.T.P.

Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Standard on the engine

- Dry filters on the intake,
- Feed pump,
- Oil and diesel filters,
- Radiator with thermostatic valve,
- Electric start with starter motor, alternator and voltage regulator,
- Switch for low oil pressure alarm,
- Switch for high water temperature alarm,
- Manual pump emptying oil from the cup,
- Standard radiator,
- Lead acid battery,
- Residential exhaust muffler

Alternator Information

Alternator Brand	MECCALTE	
Model	ECP28-L/4	
P.R.P. Power	25	kVA
Phase	3 Phase	
Precision	+/- 0.5%	
Insulation Class	H	
IP Protection	23	
Pole	4	
Power Factor	0.8	cosfi

Definitions

Continuous rating 40°C – IEC 60034-1

Running at constant load limited to the insulation class; permissible overload 1 hour in 12.

Standby rating 40°C

Running at constant load **without** over load, for a limited duration of maximum 500h/year, with a permissible increase of the temperature rise above class H.

Standby rating 27°C

Same conditions than standby duty 40°C but with acceptance of a lower ambient temperature (27°C) that allows to increase the rating and the temperature rise for the same level of temperature in the alternator.



General Features

Compliance with internationally recognized standard

All the range and brand of the alternator that we use on our generator complies with international standards and regulations: IEC 60034 and derivative.

All the range and brand of the alternator that we use on our generator are designed, manufactured and marketed in an ISO 9001 and ISO 14001 environment.

Electrical features

- **Frequency**

All the alternator used in our generator may operate either 50 or 60 Hz.

- **Power factor P.F.**

All the alternator used in our generator are designed to operate between 0.8 and 1 power factor.

- **Waveform**

Total harmonic distortion (THD), at no load or linear load is less than 5% according to IEC.

TIF/Telephone influence factor according to NEMA is less than 50.

- **Transient features**

Transient voltage dip for rated step load at 0.8 power factor is less than 18%.

Recovery time for a 20% transient voltage dip is less than 0.5s.

- **Overload acceptance**

All the alternator used in our generator can be overloaded according to NEMA.

- **EMI suppression**

All the alternator used in our generator are provided with an EMI suppression device in accordance with EN 55011.



Mechanical features

- **Enclosure**

Standard enclosure is IP23.

- **Balancing**

All the rotors are dynamically balance according to ISO 1940 and NFC 51-111.

- **Overspeed**

The maximum overspeed is 2250 min.

- **Insulation and protection**

All the alternator used in our generator are class H insulated. The standard winding protection can accept up to 95% relative humidity.

- **Mechanical structure**

Steel frame. Aluminium, cast iron or steel housing and flanges depending on the model.

AMF Brand	ComAp	
AMF Model	InteliLite AMF25	
Standard Characteristic	<ul style="list-style-type: none"> • Single gen-set controller for Stand-by and Primepower applications • Direct communication with EFI engines • Total remote monitoring and control • Easy to install, configure and use • Wide range of communication capabilities including: <ul style="list-style-type: none"> • connection via RS232, RS485, CAN and on board USB • internet access using Ethernet, GPRS or 4G • support for Modbus and SNMP protocols • Internal PLC support with PLC editor and monitor included in LiteEdit • Cloud-based monitoring and control via WebSupervisor • Active SMS and emails in different languages • SNMP traps • Geofencing and tracking via WebSupervisor • 2x 10 A binary outputs for cranking and fuel solenoid • Option for up to 16 additional binary inputs/outputs • Flexible event based history with up to 350 events • Load shedding, dummy load capability • Tier 4 final support • Automatic temperature based cooling/heating • Comprehensive gen-set protections • Multipurpose flexible timers • True RMS measurement • Available also in low temperature (LT) version 	

Ambient conditions

- Operating temperature: -30 to +70°C
- Storage temperature: -30 to +80°C
- Relative humidity: <80% (IEC/EN 60068-2-78)
- Maximum pollution degree: 2
- Overvoltage category: 3
- Measurement category: III
- Climatic sequence: Z/ABDM (IEC/EN 60068-2-61)
- Shock resistance: 15g (IEC/EN 60068-2-27)
- Vibration resistance: 0.7g (IEC/EN 60068-2-6)

Housing

- Version: Flush mount
- Material: Polycarbonate
- Degree of protection: IP65 on front, IP 20 terminals

Certifications and compliance

- Certifications obtained: cULus, EAC
- UL Marking:
 - Use 60°C/75°C copper (CU) conductor only
 - AWG Range: 24 - 12 AWG stranded or solid
 - Field Wiring Terminals Tightening Torque: 5lb.in
- Comply with standards: IEC/EN 61010-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL508, CSA C22.2 N°14