



KP / Series

Powered by Perkins Engines

KP19.5/KP21E Diesel Generating Set

50Hz

Prime Rating	Standby Rating	Dimensions (L×W×H mm)	Weight (Kg)	Fuel - Hours of Run-time
19.5kVA/15.6kW	21.2kVA/17kW	1300×650×1130	507	6-8 hr

Standard Configuration	Test Condition and Standards
<ul style="list-style-type: none"> Engine (Perkins) Channel Steel Base 12V Charging Alternator GE Circuit Breaker 12V Starter Battery and Connecting Cable Flexible Pipe, Exhaust Elbow, Industrial Silencer, etc. 	<ul style="list-style-type: none"> Ambient Temperature: ≤27°C Relative Humidity: ≤60%, Altitude: ≤1000m Engine: ISO3046, DIN6271, BS5514 Alternator: VDE0530, BS5000, NEMA MG1-32, IEC34 Generator: ISO8528, GB2820 Generator O&M Manuals

Generating Set Output Rating

Voltage (V)	Hz	Phase	PF	Max. Current (A)	Prime (kVA/kW)	Standby (kVA/kW)
415/240	50	3	0.8	29.5	19.5/15.6	21.2/17
400/230	50	3	0.8	30.6	19.5/15.6	21.2/17
380/220	50	3	0.8	32.2	19.5/15.6	21.2/17

Engine Technical Data

Model:	404D-22G	Max. Power (kW):	20.3
Induction System:	Naturally Aspirated	Displacement (L):	2.216
Cylinder Arrangement:	In Line, Four Cycle	Bore (mm) × Stroke (mm):	84×100
Number of Cylinders:	4	Compression Ratio:	23.3:1
Governor Type:	Mechanical	Speed (RPM):	1500

Air System

Combustion Air Flow (M ³ /min):	Standby: 1.45
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Exhaust System

Combustion Gas Flow (M ³ /min):	3.64/3.94	Max. Back Pressure (kPa):	10.2
Exhaust Gas Temperature (°C):	≤505	Exhaust Outlet Size (mm):	42

Lubrication System

Total Oil Capacity (L):	10.6	Oil Consumption 100% Load (L/h):	0.008/0.009
Normal Oil Temperature (°C):	125	Recommended Oil:	API CF-4 15W/40

Cooling System

Cooling System Capacity (L):	7.0	Max. Coolant Temperature (°C):	112
Thermostat Operation Range (°C):	82-95	Radiator Fan drive type:	Shaft Drive
Radiator Cooling Air Flow (M ³ /min):	29.4	Radiator power (kW):	0.3



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Fuel System

Fuel Injection Pump:	Cassette type	Recommended Fuel:	BS2869:1998 Class A2 Diesel
Fuel Consumption 100% Load (L/h):	5.3	Fuel Consumption 110% Load (L/h):	6.1

Engine Electrical System

Voltage:	12Vdc
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Alternator Physical Data

Model:	ECP28-M/4A	Rated Power (kVA):	21.5
Phase:	3	No. of Bearings:	1
Excitation System:	Self-Excited and Brushless	AVR:	DSR
Connection:	3P 4W, Series star	Insulation Class/Temp Rise:	H/H
Power Factor:	0.8	Wave form NEAM=TIF:	<40
Ingress Protection Rating:	IP23	Wave form IEC=THF:	<2%
Winding Pitch:	2/3	Voltage Regulation:	±1%
Cooling Air (M³/s):	0.088	Efficiency:	87.4%

Option

Engine

- ☐ Jacket Water Heater
- ☐ Heavy Duty Air Filter
- ☐ Lube Oil Heater
- ☐

Control Panel

- ☐ Auto Control Panel
- ☐ Intelligent Remote Control Panel
- ☐ Intelligent Paralleling Control Panel
- ☐ Buzzer, Space Heater Control Panel

Alternator

- ☐ Leroy Somer
- ☐ Marathon
- ☐ Cooltech
- ☐ EBS
- ☐ Anti-condensation Heater

ATS

- ☐ ATS (G+M)
- ☐ ATS (G+G)
- ☐ ATS (G+G+M)
- ☐ ATS Controller
- ☐

Accessory

- ☐ Hybrid Silencer
- ☐ Residential Silencer
- ☐ Day Tank
- ☐
- ☐

Canopy

- ☐ Soundproof (Container/Enclosure)
- ☐ Trailer
- ☐ Truck/Lighting Truck
- ☐ Container Protected
- ☐

Spare Parts

- | | |
|--|--|
| <input type="checkbox"/> 500h Spare Parts | <input type="checkbox"/> 2000h Spare Parts |
| <input type="checkbox"/> 1000h Spare Parts | <input type="checkbox"/> 3000h Spare Parts |
| <input type="checkbox"/> 1500h Spare Parts | <input type="checkbox"/> |

Warranty

The standard warranty period: One year after ex-works from factory or 1500 operation hours whichever occurs first.

Please refer to COOLTECH warranty manual for details.

Consumable parts (air filter, fuel filter, lube oil filter, fan belt), this warranty does not apply to malfunctions caused by damage, misuse, repair or service by unauthorized person. Cooltech Global must authorize any and all warranty repairs prior to commencement.

* The model name and output rating figures are base on 400V and may have a 2% deviation
* Specifications subject to change without prior notice



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