



# KP / Series

## Powered by Perkins Engines

### KP45/KP50E

### Diesel Generating Set

### 50Hz

Prime Rating	Standby Rating	Dimensions (L×W×H mm)	Weight (Kg)	Fuel - Hours of Run-time
45.3kVA/36.3kW	49.8kVA/40kW	1600×760×1310	860	6-8h

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

#### Generating Set Output Rating

Voltage (V)	Hz	Phase	PF	Max. Current (A)	Prime (kVA/kW)	Standby (kVA/kW)
415/240	50	3	0.8	69.3	45.3/36.3	49.8/40
400/230	50	3	0.8	72	45.3/36.3	49.8/40
380/220	50	3	0.8	75.7	45.3/36.3	49.8/40

#### Engine Technical Data

Model:	1103A-33TG1	Max. Power (kW):	45.6
Induction System:	Turbo-charged	Displacement (L):	3.3
Cylinder Arrangement:	In Line, 4-cycle	Bore (mm) × Stroke (mm):	105×127
Number of Cylinders:	3	Compression Ratio:	17.25:1
Governor Type:	Mechanical	Speed (RPM):	1500

#### Induction System

Combustion Air Flow (M <sup>3</sup> /min):	Prime: 2.9	Standby: 3.1
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#### Air system

Combustion Gas Flow (M <sup>3</sup> /min):	7.0/7.7	Max. Back Pressure (kPa):	10.0
Exhaust Gas Temperature (°C):	≤537	Exhaust Outlet Size (mm):	60

#### Lubrication System

Total Oil Capacity (L):	8.3	Oil Consumption 100% Load (L/h):	0.011/0.012
Normal Oil Temperature (°C):	125	Recommended Oil:	API CF-4 15W/40

#### Cooling System

Cooling System Capacity (L):	10.2	Max. Coolant Temperature (°C):	110
Thermostat Operation Range (°C):	82-93	Radiator Fan Drive Type:	Shaft drive
Radiator Cooling Air Flow (M <sup>3</sup> /min):	53	Radiator Power (kW):	0.9



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## Fuel System

Fuel Injection Pump:	Rotary	Recommended Fuel:	BS2869:1998 , Class A2 Diesel
Fuel Consumption 100% Load (L/h):	7.2	Fuel Consumption 110% Load (L/h):	8.1

## Engine Electrical System

Voltage:	12Vdc
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## Alternator Physical Data

Model:	ECP32-1M/4B	Rated Power (kVA):	56
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 (M <sup>3</sup> /s):	0.196	Efficiency:	88.9%

## 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
- PMG
- 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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