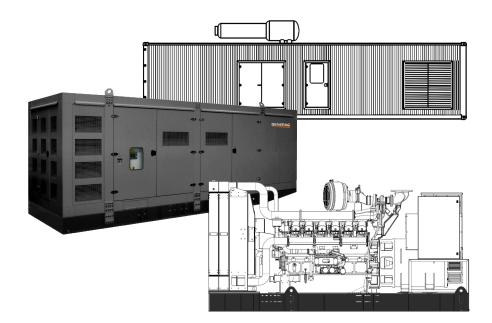


# **PME1520**



Power Rating		
Emergency Standby Power ESP	kVA	1519
Emergency Standby Power ESP	kW	1215
Prime Power PRP	kVA	1382
Prime Power PRP	kW	1106
Voltage	V	400/230
Frequency	Hz	50
Power factor	cos φ	0.8
Phase		3
Fuel		Diesel



#### Ratings definition (ISO-8528)

ESP - Emergency Standby Power:

It is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP.

PRP - Prime Power: It is defined as being the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The

permissible average power output over 24 h of operation shall not exceed 70 % of the prime power. G2 class load acceptance in accordance with ISO 8528-5:2013 Higher performance

classes check upon request. Gensets are compliant with EC mark which includes the following directives:

2006/42/CE Machinery safety.
2014/30/UE Electromagnetic compatibility.

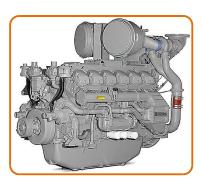
2014/35/UE electrical equipment designed for use within certain voltage limits
 2000/14/EC Sound Power level. Noise emissions outdoor equipment. (amended by 2005/88/EC) - If applicable

• 97/68/EC Emissions of gaseous and particulate pollutants. (amended by 2002/88/EC & 2004/26/EC) – If applicable • EN 12100, EN 13857, EN 60204

Company with quality certification ISO 9001



Engine specifications		
Engine Brand		Perkins
Model		4012-46TWG3A
Operating Speed-Nominal	rpm	1500
Engine cooling system		Water
[50Hz] Exhaust emission level		Unregulated
Nr. of cylinder and disposition		12 V
Displacement	cm³	45842
Aspiration		Turbocharged
Speed governor		Electronic
Maximum gross power LTP ESP	kW	1314
Prime gross power PRP	kW	1200
Fan consumption	kW	51
Cooling fan air flow rate	m³/min	1320
Oil capacity	I	177
Coolant capacity	I	196
Fuel		Diesel
Specific fuel consumption 75% PRP	g/kWh	212
Starting system		Electric
Starting engine capability	kW	16.4
Electric circuit	V	24



ModelECO43-VLN/4Windings connectionParallel StatFrequencyHzVoltageV400Phases3Power factorcos \$\$Cos \$\$0.8Emergency peak power 163°/27°kVAEfficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Alternator Specifications		
Windings connectionParallel StateFrequencyHz50VoltageV400Phases3Power factorcos \$\$\phi\$0.8Emergency peak power 163°/27°kVA1520Efficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Alternator		Mecc Alte
FrequencyHz50VoltageV400Phases3Power factorcos \$\$0.8Emergency peak power 163°/27°kVA1520Efficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Model		ECO43-VLN/4
VoltageV400Phases3Power factorcos \$\phi\$Emergency peak power 163°/27°kVAEfficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Windings connection		Parallel Star
Phases3Power factorcos \$\phi\$Emergency peak power 163°/27°kVAEfficiency @ 75% load%96.4TypeBrushlessPoles2Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Frequency	Hz	50
Power factorcos \$\phi\$0.8Emergency peak power 163°/27°kVA1520Efficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Voltage	V	400
Emergency peak power 163°/27°kVA1520Efficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Phases		3
Efficiency @ 75% load%96.4TypeBrushlessPoles4Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Power factor	cos φ	0.8
TypeBrushlessPoles2Voltage regulation systemElectronicStandard AVRDER1Voltage tolerance%0.5	Emergency peak power 163°/27°	kVA	1520
Poles     Z       Voltage regulation system     Electronic       Standard AVR     DERI       Voltage tolerance     %	Efficiency @ 75% load	%	96.4
Voltage regulation systemElectronicStandard AVRDERIVoltage tolerance%0.5	Туре		Brushless
Standard AVR     DER1       Voltage tolerance     %	Poles		4
Voltage tolerance % 0.5	Voltage regulation system		Electronic
	Standard AVR		DER1
Class	Voltage tolerance	%	0.5
	Class		Н
IP protection 23	IP protection		23
Cooling air m <sup>3</sup> /s 1.5	Cooling air	m³/s	1.5



Genset Equipment - Basic Configurations Available				
Battery	n	4		
Battery Capacity	Ah	200		
INTEGRATED FUEL TANK - VERSIONS AVAILABLE		:		
IFT1 - Integrated Fuel Tank (steel)	I	500		
IFT2 - Integrated Fuel Tank (steel)	I	1000		



### Supplements available:

MBS - Manual Battery Switch	•
FBD - Fully bunded base frame	•
LDS - Leakage detection sensor (only with FBD)	•
FCV - Fuel Cut Off Valve	•
AFP - Automatic Fuel Pump	•
DFP - Double Automatic Fuel Pump	•
PHS - Coolant Pre-Heating System	•
ALS - Automatic Lube Oil Top Up System with lube oil tank	•
Other Configurations and-or special versions available on requests	



Installation data		
Total air flow	m³/min	1518
Exhaust gas flow	m³/min	240
Exhaust gas temperature	°C	474
Fuel consumption 100% PRP	l/h	301.43
Fuel consumption 75% PRP	l/h	229.91
IFT1 - Running time 75% PRP	h	2.17
IFT2 - Running time 75% PRP	h	4.35



Electrical Data		
Battery Voltage	V	24
Genset Voltage	V	400/230
Frequency	Hz	50
Phases		3
Power Factor	cos φ	0.8
Nominal current	А	1994
Max current	Α	2192
Circuit breaker	A	2500



Control panel - Options Available:	
AUTOMATIC CONTROL PANEL	ACP
MODULAR PARALLEL PANEL	MPP

### ACP - AUTOMATIC CONTROL PANEL

Auto Mains Failure (AMF) function Gen-set controller for single genset operating in standby or prime power modes Full gen-set monitoring and protection

Detailed event and performance log with time and date Wide range of remote control modules available as option Wide range of I/O expansion modules available as option

Power supply by terminal bus bar

#### ACP - Power Panel - Breakers Available:

GCB1 - Genset Circuit Breaker 3-pole	А	2500
GCB2 - Genset Circuit Breaker 4-pole	А	2500
ETB - External Terminal Board (with GCB)		Standard

# LTS - Load Transfer Switch [Accessories for ACP Automatic Control Panel]

The Load Transfer Switch (LTS) panel operates the power supply changeover between the generator and the Mains in stand-by applications, guaranteeing load supply in a short period of time. LTS fit inside a sturdy standalone cabinet which can be installed separate from the generating set. The logic control of LTS is operated by the Automatic Control Panel (ACP) of the generating set.

#### **MPP - MODULAR PARALLEL PANEL**

Modular parallel panel allows the genset to work in parallel (up to 32 gensets)

7" full colour display

Easy switching between parallel to mains or multiple genset applications Full gen-set monitoring and protection

Detailed event and performance log with time and date

Wide range of communication and connection capabilities available

Power supply by terminal bus bar

#### **MPP - Power Panel - Breakers Available:**

GMB1 - Genset Circuit Breaker 3-pole motorized	А	2500
GMB2 - Genset Circuit Breaker 4-pole motorized	А	2500
ETB - External Terminal Board (with GMB)		Standard

## 

GCB2

GCB1

6				
			(1502)	
U	•	0	à a'	•











#### **OPEN VERSION**

Baseframe made of welded steel profile Anti-vibration mountings properly sized Lifting points on the baseframe for handling by crane Moving and rotating parts protection against accidental contact Grounding point to connect all metal parts to ground

#### **Dimensional data Open Version**

Length	(L) mm	5004
Width	(W) mm	2200
Height	(H) mm	2574

Weight	Kg	11000

#### **OPTIONS AVAILABLE (ONLY FOR OPEN VERSION)**

Industrial Exhaust System	IES
Residential Exhaust System	RES

#### **CANOPY VERSION**

-

Weatherproof Enclosure made of galvanized sheet metal allows to protect genset from corrosion and aggressive condition Soundproofed enclosure tanks to high quality soundproof material and residential silencer, allows to have low noise emission level Big large lateral doors allows an easy service and maintenance operation Doors equipped with key lockable handles Baseframe made of welded steel profile Anti-vibration mountings properly sized Moving and rotating parts protection against accidental contact Grounding point to connect all metal parts to ground Lifting points on the enclosure for handling by crane

#### **Dimensional data Canopy Version**

Length	(L) mm	7800
Width	(W) mm	2424
Height	(H) mm	3000

Weight	Kg	12827

#### **Noise Level Canopy Version**

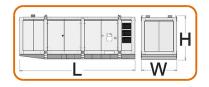
Noise pressure level @ 7 m	dB(A)	82
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IES









RES

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#### **CONTAINER VERSION**

Soundproofed Container adaptable to meet all your requirements and needs, equipped with residential silencer positioned inside or on the roof. Sturdy structure similar to shipping containers: upper and lower corner castings, monolithic structure, walls and roof made of corrugated steel sheet.

Reinforced floor structure covered with teardrop patterned steel sheet High resistance to the atmospheric agents.

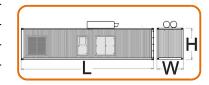
Air inlet and exhaust openings air outlet for genset cooling.

Large lateral doors allows an easy service and maintenance operation. Doors fixed by sturdy steel hinges equipped with lever bolt locks and panic bars.



#### **Dimensional data Container Version**

Length	(L) mm	12190
Width	(W) mm	2438
Height	(H) mm	2896



Weight	Kg	16647

#### **Noise Level Container Version**

Noise pressure level @ 7 m	dB(A)	77+/-3
		•

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