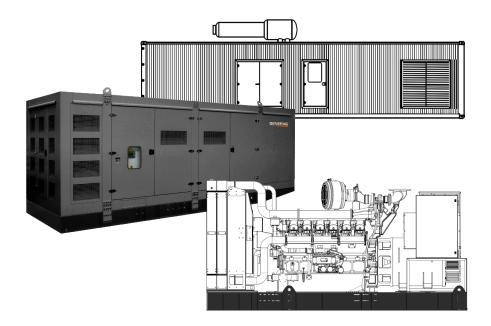
## GENERA

### **PME1780**



Power Rating		
Emergency Standby Power ESP	kVA	1800
Emergency Standby Power ESP	kW	1440
Prime Power PRP	kVA	1650
Prime Power PRP	kW	1320
Voltage	V	400/230
Frequency	Hz	50
Power factor	cos ф	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 maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP.

PRP - Prime Power:

this 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.

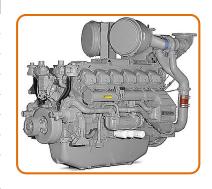
# Gensets are compliant with EC mark which includes the following directives: • 2006/42/CE Machinery safety. • 2014/30/UE Electromagnetic compatibility.

- 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		4012-46TAG3A
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 aftercooled
Speed governor		Electronic
Maximum gross power LTP ESP	kW	1643
Prime gross power PRP	kW	1500
Fan consumption	kW	64
Cooling fan air flow rate	m³/min	1920
Oil capacity	1	177
Coolant capacity	1	207
Fuel		Diesel
Specific fuel consumption 75% PRP	g/kWh	206
Starting system		Electric
Starting engine capability	kW	16.4
Electric circuit	V	24



Alternator Specifications		
Alternator		Mecc Alte
Model		ECO46-1.5S/4
Windings connection		Parallel Star
Frequency	Hz	50
Voltage	V	400
Phases		3
Power factor	cos ф	0.8
Emergency peak power 163°/27°	kVA	1800
Efficiency @ 75% load	%	96.5
Туре		Brushless
Poles		4
Voltage regulation system		Electronic
Standard AVR		DER1
Voltage tolerance	%	0.5
Class		Н
IP protection		23
Cooling air	m³/s	2.25

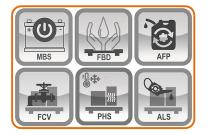


Genset Equipment - Basic Configurations Available		
Battery	n	4
Battery Capacity	Ah	200
INTEGRATED FUEL TANK - VERSIONS AVAILABLE		:
IFT1 - Integrated Fuel Tank (steel)	I	500
IFT2 - Integrated Fuel Tank (steel)	I	1000



#### 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	2180
Exhaust gas flow	m³/min	350
Exhaust gas temperature	°C	480
Fuel consumption 100% PRP	l/h	355.26
Fuel consumption 75% PRP	l/h	267.29
IFT1 - Running time 75% PRP	h	1.87
IFT2 - Running time 75% PRP	h	3.74



Electrical Data		
Battery Voltage	V	24
Genset Voltage	V	400/230
Frequency	Hz	50
Phases		3
Power Factor	cos ф	0.8
Nominal current	Α	2382
Max current	Α	2598
Circuit breaker	Α	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



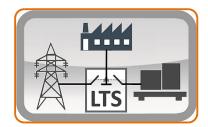
#### **ACP - Power Panel - Breakers Available:**

GCB1 - Genset Circuit Breaker 3-pole	А	2500
GCB2 - Genset Circuit Breaker 4-pole	Α	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	Α	2500
GMB2 - Genset Circuit Breaker 4-pole motorized	Α	2500
ETB - External Terminal Board (with GMB)		Standard



#### **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	2610



Weight	Kg	11561
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#### **OPTIONS AVAILABLE (ONLY FOR OPEN VERSION)**

Industrial Exhaust System	IES
Residential Exhaust System	RES



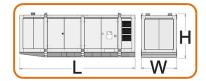
#### **CANOPY VERSION**

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	13796
3		

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

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

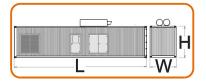
Air inlet and exhaust openings air outlet for genset cooling.

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	17616
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#### **Noise Level Container Version**

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