

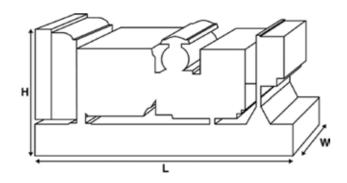
## **Output Ratings**

Voltage, Frequency	Prime	Standby
k\	/A 24	26
k۱	W 24	26
kV	/A	
k\	W	



#### Ratings at 1 power factor.

Please refer to the output ratings technical data section for specific generator set outputs per voltage.



Dimensions and Weights						
Length	mm	1570 (61.8)				
Width	mm	760 (29.9)				
Height	mm	1231 (48.5)				
Weight (Dry)	kg	695 (1532)				
Weight (Wet)	kg	708 (1561)				

Ratings in accordance with ISO 8528, ISO 3046, IEC 60034, BS5000 and NEMA MG-1.22.

Generator set pictured may include optional accessories.

### **Prime Rating**

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

#### Standby Rating

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO 8528-3).

#### **Standard Reference Conditions**

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

Pegc power solutions offer a range of optional features to allow you to tailor our generator sets to meet your power needs. Options available include:

- Upgrade to CE Certification
- A wide range of Sound Attenuated Enclosures
- · A variety of generator set control and synchronising panels
- · Additional alarms and shutdowns
- A selection of exhaust silencer noise levels

For further information on all of the standard and optional features accompanying this product please contact your local Dealer or visit:

www.pegcpowersolutions.com



Ratings and Performance Data	
Engine Make	Perkins
Engine Model:	1103A-33G1
Alternator Make	
Alternator Model:	20050-M
Control Panel:	100
Base Frame:	Heavy Duty Fabricated Steel
Circuit Breaker Type:	3 Pole MCCB
Frequency:	50 HZ 60 HZ
Engine Speed: RPM rpm	1500
Fuel Tank Capacity: litres (US gal)	71 (18.76)
Fuel Consumption Prime litres (US gal)/hr	6.8 (1.8)
Fuel Consumption Standby litres (US gal)/hr	7.4 (2)
Posto a Pasto to L Bara	
Engine Technical Data	3
No. of Cylinders	IN LINE
Alignment	4 STROKE
Cycle	105 (4.1)
Bore mm (in)	127 (5)
Stroke mm (in) Induction	NATURALLY ASPIRATED
	WATER
Cooling Method	MECHANICAL
Governing Type	ISO 8528 G2
Governing Class	19.25:1
Compression Ratio	
Displacement L (cu. in)	3.3 (201.4)
Moment of Inertia: kg m² (lb/in²)	1.14 (3896)
Voltage	12
Ground	Negative
Battery Charger Amps	65
Engine Weight Dry kg (lb)	341 (752)
Engine Weight Wet kg (lb)	348 (767)
Engine Performance Data	50 Hz 60 Hz
Engine Speed rpm	1500
Gross Engine Power Prime kW (hp)	28.2 (38)
Gross Engine Power Standby kW (hp)	31 (42)
BMEP Prime kPa (psi)	684 (99.2)
BMEP Standby kPa (psi)	752 (109)

Exhaust Gas Temperature: Standby

°C (°F)



Fuel System							
				Ronla	ceable Eler	nent	
Fuel Filter Type:					A2 Diesel	nenc	
Recommended Fuel: Fuel Consumption at			110 % Load		% Load	75 % Load	50 % Load
·	1 /hm (110 mal /hm	<b>.</b>					
50 Hz Prime:	l/hr (US gal/hr)		7.4 (2)	6.8 (1		5.1 (1.3)	3.8 (1)
50 Hz Standby	l/hr (US gal/hr)	•	-	7.4 (2	2)	5.5 (1.5)	4 (1.1)
60 Hz Prime	l/hr (US gal/hr)						
60 Hz Standby	l/hr (US gal/hr	·	-				
(Based on diesel fuel with a spec	cific gravity of 0.	84 and conforming t	to BS2869 classA2	2,EN590			
Air System			Į.	50 Hz		60 Hz	
Air Filter Type:						Replaceable Eleme	nt
Combustion Air Flow Prime	l l	m³/min (cfm)	2	2.1 (75)			
Combustion Air Flow Standb	y .	m³/min (cfm)	2	2.2 (76)			
Max. Combustion Air Intake I	Restriction I	kPa	6	5.5 (26.1)			
Cooling System				50 Hz		60 Hz	
Cooling System Capacity		l (US gal)		10.2 (2.7)			
Water Pump Type:						Centrifugal	
Heat Rejected to Water & Lub	e Oil: Prime	kW (Btu/min)	1	16 (910)			
Heat Rejected to Water & Lub		kW (Btu/min)		18 (1024)			
Heat Radiation to Room*: Pri	•	kW (Btu/min)		7.5 (427)			
Heat Radiation to Room*: Sta	ındby	kW (Btu/min)		3.7 (495)			
Radiator Fan Load:		kW (hp)		0.3 (0.4)			
Radiator Cooling Airflow:		m³/min (cfm)	6	52.6 (2211)			
External Restriction to Coolin	g Airflow:	Pa (in H2O)		125 (0.5)			
*: Heat radiated from engine and Designed to operate in ambient Contact your local Pegc power so conditions.	l alternator conditions up to	50°C (122°F).	pecific site				
<b>Lubrication System</b>							
Oil Filter Type:						Spin-On, Full Flow	
Total Oil Capacity:	US gal)					8.3 (2.2)	
Oil Pan Capacity:	US gal)					7.8 (2.1)	
Oil Type:						API CG4 / CH4 15W	/-40
Oil Cooling Method:						WATER	
<b>Exhaust System</b>			ţ	50 Hz		60 Hz	
Maximum Allowable Back Pr	essure: kPa	(in Hg)	8	3 (2.4)			
Exhaust Gas Flow: Prime	m³/	/min (cfm)	6	5 (212)			
Exhaust Gas Flow: Standby		/min (cfm)	6	5 (212)			
Exhaust Gas Temperature: Pri	ime °C (	(°F)	ŗ	500 (932)			
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512 (954)



<b>Alternator Physical</b>	Data							
No. of Bearings:					1			
Insulation Class:					Н			
Winding Pitch:					2/3			
Winding Code					M			
Wires:					3			
Ingress Protection Rating:					IP23			
Excitation System:					SHUNT			
AVR Model:					R121			
dependant on voltage code selected	d							
Alternator Operatin	ng Data				2250			
Overspeed: rpm		0/			2250 +/- 1.0			
Voltage Regulation: (Steady	state)	%						
Wave Form NEMA = TIF:		•			100			
Wave Form IEC = THF:			%			2		
Total Harmonic content LL/LN:		%	%			3.5		
Radio Interference:						EN61000-6		
Radiant Heat: 50 Hz			kW (Btu/min)			2.7 (154)		
Radiant Heat: 60 Hz		kW (Btu/min)	kW (Btu/min)					
Alternator Performa	ance Da	ata 50 Hz:						
Voltage Code			240 V	230 V	220 V			
Motor Starting Capability*	kVA		59	56	54			
Short Circuit Capacity**	%		270	270	270	270		
Reactances	Xd		1.496	1.629	1.78			
	X'd		0.165	0.18	0.196			
	X"d		0.09	0.09	0.098			
Alternator Performa	ance Da	ata 60 Hz						
Voltage Code								

0

0

0

0

270

0

0

0

270

0

0

0

0

270

270

Reactances shown are applicable to prime ratings.

Motor Starting Capability\*

Short Circuit Capacity\*\*

Reactances

kVA

%

Xd X'd

X"d

270

<sup>\*</sup>Based on 30% voltage dip at 0.9 power factor.

<sup>\*\*</sup> With optional independant excitation system (PMG / AUX winding)



<b>Output Ratings</b>	50 Hz					
		Prime		Standby		
Voltage Code	kVA	kW	kVA	kW		
415/240V						
400/230V						
380/220V						
230/115V						
220/127V						
220/110V						
200/115V						
240V	24	24	26	26		
230V	24	24	26	26		
220V	24	24	26	26		
Output Ratings	60 Hz					
		Prime		Standby		
Voltage Code	kVA	kW	kVA	kW		
480/277V						
440/254V						
416/240V						
400/230V						
380/220V						
240/139V						
240/120V						
230/115V						
220/127V						
220/110V						
208/120V						
240/120						
220/110						





Dealer Contact Details							

#### **Documentation**

Operation and maintenance manual including circuit wiring diagrams. \\

### **Generator Set Standards**

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

### **Warranty**

6.8 - 750 kVA electric power generation products in prime applications the warranty period is 12 months from date of start-up, unlimited hours (8760). For standby applications the warranty period is 24 months from date of start-up, limited to 500 hours per year.

730 - 2500 kVA electric power generation products in prime applications the warranty period is 12 months from date of start-up, unlimited hours (8760 hours) or 24 months from date of start-up, limited to 6000 hours. For standby applications the warranty period is 36 months from date of start-up, limited to 500 hours per year.

### PEGC Power Solutions manufactures product in the following locations:

Lahore Karachi Islamabad Multan

With headquarters in Lahore, PEGC Power Solutions operates through a Global Dealer Network. To contact your local Sales Office please visit the PEGC Power Solutions website at www.pegcpowersolutions.com.

PEGC Power Solutions is a trading name of Public Electric Generator Concern (PEGC Power Solutions & Engineering Services (Pvt) Ltd.).