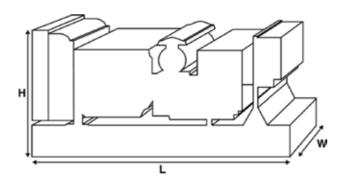


Output Ratings

Voltage, Frequency		Prime	Standby	
		kVA	13	14
		kW	13	14
240/1	20 V 60 H 7	kVA	14.5	16
240/12	240/120 V, 60 Hz	kW	14.5	16

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	1550 (61)			
Width	mm	620 (24.4)			
Height	mm	1020 (40.2)			
Weight (Dry)	kg	370 (816)			
Weight (Wet)	kg	377 (831)			

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



Engine Make		Perkins		
Engine Model:		404D-22G1		
Alternator Make				
Alternator Model:		10040		
Control Panel:		100		
Base Frame:		Heavy Duty Fabricated	Steel	
Circuit Breaker Type:		3 Pole MCB		
Frequency:		50 HZ	60 HZ	
Engine Speed: RPM	rpm	1500	1800	
Fuel Tank Capacity:	litres (US gal)			
Fuel Consumption Prime	litres (US gal)/hr	4.3 (1.1)	4.8 (1.3)	
Fuel Consumption Standby	litres (US gal)/hr	4.6 (1.2)	5.3 (1.4)	

Engine Technical Data

No. of Cylinders		4			
Alignment		IN LINE			
Cycle		4 STROKE			
Bore	mm (in)	84 (3.3)			
Stroke	mm (in)	100 (3.9)			
Induction		NATURALLY ASPIRATED			
Cooling Method		WATER			
Governing Type		MECHANICAL			
Governing Class		ISO 8528			
Compression Ratio		23.3:1			
Displacement L (cu. in)		2.2 (135.2)			
Moment of Inertia:	kg m² (lb/in²)	2.724 (9308)			
Voltage		12			
Ground		Negative			
Battery Charger Amps		65			
Engine Weight Dry	kg (lb)	242 (534)			
Engine Weight Wet	kg (lb)	251 (554)			
Engine Performa	nce Data	50 Hz	60 Hz		
Engine Speed	rpm	1500	1800		
Gross Engine Power Prim	ne kW (hp)	16.2 (22)	19.4 (26)		
Gross Engine Power Stan	dby kW (hp)	18 (24)	21.5 (29)		
BMEP Prime	kPa (psi)	585 (84.8)	583 (84.6)		
BMEP Standby	kPa (psi)	649 (94.2)	647 (93.8)		



Fuel System					
Fuel Filter Type:			Replaceable Eler	ment	
Recommended Fuel:			Class A2 Diesel		
Fuel Consumption at		110 % Load	100 % Load	75 % Load	50 % Load
50 Hz Prime:	l/hr (US gal/hr)	4.6 (1.2)	4.3 (1.1)	3.4 (0.9)	2.6 (0.7)
50 Hz Standby	l/hr (US gal/hr)	-	4.6 (1.2)	3.6 (1)	2.7 (0.7)
60 Hz Prime	l/hr (US gal/hr)	5.3 (1.4)	4.8 (1.3)	3.8 (1)	3 (0.8)
60 Hz Standby	l/hr (US gal/hr)	-	5.3 (1.4)	4.1 (1.1)	3.2 (0.8)

(Based on diesel fuel with a specific gravity of $0.84\ \text{and}$ conforming to BS2869, class A2

Air System		50 Hz	60 Hz
Air Filter Type:			Replaceable Element
Combustion Air Flow Prime	m ³ /min (cfm)	1.5 (51)	1.7 (61)
Combustion Air Flow Standby	m ³ /min (cfm)	1.5 (51)	1.7 (61)
Max. Combustion Air Intake Restriction	kPa	3 (12)	3 (12)
Cooling System		50 Hz	60 Hz
Cooling System Capacity	l (US gal)	6.5 (1.7)	6.5 (1.7)
Water Pump Type:			Centrifugal
Heat Rejected to Water & Lube Oil: Prime	kW (Btu/min)	13.7 (779)	15.5 (881)
Heat Rejected to Water & Lube Oil: Stand	oy kW (Btu/min)	15.2 (864)	17.2 (978)
Heat Radiation to Room*: Prime	kW (Btu/min)	4.9 (279)	5.7 (324)
Heat Radiation to Room*: Standby	kW (Btu/min)	5.6 (318)	6.1 (185)
Radiator Fan Load:	kW (hp)	0.2 (0.3)	0.4 (0.5)
Radiator Cooling Airflow:	m ³ /min (cfm)	33 (1165)	41.4 (1462)
External Restriction to Cooling Airflow: Pa (in H2O)		125 (0.5)	125 (0.5)
*: Heat radiated from engine and alternator Designed to operate in ambient conditions up t Contact your local Pegc power solutions Dealer conditions.		site	
Lubrication System			
Oil Filter Type:			Spin-on, Full flow
Total Oil Capacity: l (US gal)			10.6 (2.8)
Oil Pan Capacity: l (US gal)			8.9 (2.4)
Oil Type:			API CH4 15W-40
Oil Cooling Method:			N/A
Exhaust System		50 Hz	60 Hz
Maximum Allowable Back Pressure: kF	Pa (in Hg)	10.2 (3)	10.2 (3)
Exhaust Gas Flow: Prime m	³ /min (cfm)	3 (105)	3.9 (138)
Exhaust Gas Flow: Standby m	³ /min (cfm)	3.2 (114)	4.3 (151)
Exhaust Gas Temperature: Prime °C	(°F)	364 (687)	396 (745)
Exhaust Gas Temperature: Standby °C	(°F)	413 (776)	459 (858)



Alternator Physical	Data					
No. of Bearings:					1	
Insulation Class:					Н	
Winding Pitch:					2/3	
Winding Code					Μ	
Wires:					3	
Ingress Protection Rating:					IP23	
Excitation System:					SHUNT	
AVR Model:					R121	
dependant on voltage code selected	đ					
Alternator Operatin	ig Data					
Overspeed: rpm					2250	
Voltage Regulation: (Steady	state)	%			+/- 1.0	
Wave Form NEMA = TIF:					50	
Wave Form IEC = THF:		%			2	
Total Harmonic content LL/L	_N:	%	3.5			
Radio Interference:					EN61000-6	
Radiant Heat: 50 Hz		kW (Btu/min)	2.5 (142)			
Radiant Heat: 60 Hz		kW (Btu/min)	2.9 (165)			
Alternator Performa	ance Da	ata 50 Hz:				
			240 V	230 V	220 V	
Voltage Code						
Motor Starting Capability*	kVA		28	27	25	
Short Circuit Capacity**	%		0	0	0	0
Reactances	Xd		1.67	1.82	1.99	
	X'd		0.27	0.29	0.32	
	X"d		0.147	0.147	0.161	
Alternator Performa	ance Da	ata 60 Hz				
Voltage Code						
			220/110 V	240/120 V		
Motor Starting Capability*	kVA		22	25	23	
Short Circuit Capacity**	%	0	0	0	0	0
Reactances	Xd		2.48	2.24	0	
			0.4	0.36	0	
	X'd		0.4	0.30	0	

Reactances shown are applicable to prime ratings.

*Based on 30% voltage dip at 0.9 power factor.

** With optional independant excitation system (PMG / AUX winding)



Output Ratings 50 Hz					
		Prime	5	Standby	
Voltage Code	kVA	kW	kVA	kW	
415/240V					
400/230V					
380/220V					
230/115V					
220/127V					
220/110V					
200/115V					
240V	13	13	14	14	
230V	13	13	14	14	
220V	13	13	14	14	

Output Ratings 60 Hz

		Prime	S	tandby	
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	14.5	14.5	16	16	
220/110	13.5	13.5	14.9	14.9	





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 <u>www.pegcpowersolutions.com</u>.

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

In line with our policy of continuous product development, we reserve the right to change specification without notice.