





3 PHASE OUTPUTS						
GENERATOR SET	RATING	50HZ		60HZ		
MODEL		KVA	KW	KVA	KW	
WPSP-715S	STAND-BY	715	572	687	550	
	PRIME	650	520	625	500	

Ratings at 0.8 pf - Generator designed to operate in ambient temperatures up to 50 °C

Standard Voltages 380 - 415 Volts 3 Phase 50HZ

**RATING DEFINITIONS:** 

# **PRIME POWER**

These ratings are applicable for supplying continuous 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 POWER**

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 rating. When used at standby rating the alternator will be peak continuous rated (according to ISO3046)

TECHNICAL DATA (50HZ)						
Engine model:	2	2806A-E18TAG2	Cooling system:		Water cooled	
Engine manufacturer:		Perkins	Total coolant capacity:	(liters)	61	
Emissions statement	Stage II & Tier 4		Total lubrication system capacity:	lubrication system capacity: (liters)		
Number of cylinders:	6		Engine rotation (viewed facing flywheel):		Anti-clockwise	
Cylinder arrangement	\	/ertical in-line	Engine speed:	RPM	1500	
Aspiration:	Turb	ocharged air to air	Output rated(prime) power:	KW	520	
	(	aftercooled				
Combustion system	Direct injection		Fuel consumption at: 50% load	L/h	66	
Compression ratio		14.5:1	75% load:	L/h	97	
Bore x stroke:	mm.	145 x 183	100% load:	L/h	132	
Displacement:	liters 18.13		Specific lube oil consumption:	Max 0.8% of fuel Consumptio		

# **STANDARD SPECIFICATION WPSP-715S**

#### 1. ENGINE

Perkins heavy duty diesel engine.

#### 1.1Governor

Electronic, compliance with ISO8528, Class G2.

## 2. COOLING RADIATOR

Radiator and cooling fan complete with protection guards, designed to cool the engine in ambient temperatures up to 50° C.



The radiator is mounted on the base frame to avoid vibrations coming from the engine.

#### 3. FILTRATION SYSTEM

Cartridge type air filter with security element. Cartridge fuel filter and full lube oil filter. All filters have replaceable elements.

#### 4. EXHAUST SYSTEM

Heavy-duty industrial silencer.

#### 5. ELECTRICAL SYSTEM

24 Volt DC system with battery charging alternator, Starter motor, High-capacity maintenance free lead acid battery, battery rack mounted on the generating set base frame, and heavy-duty interconnecting cables with terminations.

6. ALTERNATOR Screen protected and drip-proof, self-exciting, selfregulating brush-less alternator. Four poles, STAR winding connection, suitable for tropical, humid and saline climates. H class insulation IP23.

# 7. AUTOMATIC VOLTAGE REGULATOR

Static electronic design voltage regulator. Steady voltage precision within + 1 % from no load to full load including cold and hot variations, at any Power factor between 0.8 and unity.

#### 8. MOTOR STARTING

An overload capacity equivalent to between 160% to 300%

of full load impedance at zero power factor can be sustained for 10 seconds

## 9. MOUNTING ARRANGEMENT

#### 9.1Base Frame

The complete generating set is mounted on heavy duty steel fabricated base frame Which is anti rust coated.

#### 9.2Coupling

Engine and alternator are directly coupled by means of SAE flange so there is no possibility of misalignment after prolong use. The engine fly wheel is flexibly coupled to the alternator rotor.

## 9.3Anti Vibration Mounting Pads

Anti vibration pads are fitted between engine-alternator base frame ensuring complete vibration isolation of rotating assemblies.

# 10. FUEL SYSTEM

Metal Fuel tank of 1056 litres capacity. The fuel tank is easy to clean and is equipped with visual fuel level indicator.

# 11. DIMENSIONS

#### **Open Type**

Length	3750 mm
Width	1510 mm
Height	2200 mm
Weight	4950 Kg

## Silent type

cit type	
Length	4840 mm
Width	1950 mm
Height	2550 mm
Weight	7200 Kg

#### 12. CONTROL PANEL

The manual starting control panel (DSE7320) has been designed and built to combine all the instruments control and the warning lights for engine and alternator. The sheet steel made panel is carefully painted for tropical climates and is designed for a dusty environment. Includes following equipment Ammeter with selector switch water temperature meter - oil pressure meter- moulded case three pole circuit breaker with thermal and magnetic release automatic shut down in case of HWT, LOP and over speed - starting key and stop push button acoustical signal - warning light for high cooling water temperature, low oil pressure, battery charging hours meter



Automatic starting control board versions are available as option.

# 13. DOCUMENTATION

A full set of operation and maintenance manual are provided.

# 14. FACTORY TESTS

Generating set is subject to a strict load test before delivery. A test certificate can be provided as optional.

# **15. QUALITY STANDARDS**

Generating set meets the following standards ISO 8528, IEC 34.1, CEI 2.3, VDE 0530, BS 4999-5000, NF51-100. Perkins is fully accredited ISO 9001 company.

#### **16. WARRANTY**

Generating set is guaranteed for a period of 12 months from date of commissioning or 18 months from date of shipment which ever occurs earlier.

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