

# **HPW** SERIES

Power Range	kW	kVA					
Standby	470 - 512	587 - 640	MODEL:	HPW - 515 T6			
Prime	467 - 469	584 - 586					
	STANDARD EQUIPMENT						
Open 1	Type Set		Accessories Availa	ble for HPW-515 T6			
Skid with integral day fuel to	ank (non-UL)		Mechanical Acce	essories Offered			
■ HIPOWER digital auto-start	control panel (P	age 4)	■ Road towing trailers to DOT	standards			
■ Dry-type replaceable eleme	nt air-cleaner		■ Critical grade exhaust muffle	ers			
<ul><li>Industrial muffler</li></ul>			■ UL double wall fuel tanks to customer specification				
■ Battery, battery rack, and ca	ables	■ Oil field type skid					
■ Fuel and lubrication oil repla	aceable element	filters	■ Flexible exhaust connection for open sets				
■ Stamford AVR brushless 12-wire reconnectable alternator		Oil pressure and engine temperature gauges					
■ Oil drain hand pump		■ Extended warranty coverage above the standard one year					
■ Vibration Isolators between	base and set as	sembly					
■ Main Line Circuit Breaker fo	or overload protec	ction	Generator End Accessories Offered				
■ Belt driven charging alterna	tor		■ PMG excitation for enhanced motor-starting				
■ Guards for shielding all rota	ting parts		<ul> <li>Anti-condensation heaters in alternator</li> </ul>				
■ Fuel cut-off solenoid and pr	otection switches	3	Electrical and Control Accessories Offered				
<ul><li>Radiator with pusher fan</li></ul>			<ul> <li>Automatic battery chargers 5 and 10 amp</li> </ul>				
<ul> <li>Operation and installation manuals</li> </ul>		■ NFPA 110 controls and remote annunciator					
Sound Attenuated Enclosure		<ul><li>Analog instrumentation in lieu of digital</li></ul>					
■ Fully sound attenuated enclosure (equipped as open set) ■ Transfer switch and paralleling control panels		ng control panels					
■ Powder Painted with finish	that exceeds 100	0-hr salt test	■ Water Jacket Heater				
<ul> <li>Rock wool insulation behind</li> </ul>	d protective barrie	er	■ Remote control from PC via hard and/or wireless link				
<ul><li>Curved edges and minimum</li></ul>	n outside fastene	rs	■ GPS for mobile sets				
■ Single lifting point			■ Digital Timer				

## **GENERATOR RATINGS**

				Standby	Rating	Prime	Rating
Alternator	Voltage	Ph	Hz	kW/kVA	Amps	kW/kVA	Amps
	120 / 208	3	60	470 / 587	1,633	467 / 584	1,623
	127 / 220	3	60	500 / 625	1,642	467 / 584	1,534
1101 5440	120 / 240	3	60	470 / 587	1,415	467 / 584	1,407
HCI 544D	139 / 240	3	60	512 / 640	1,541	469 / 586	1,411
	277 / 480	3	60	512 / 640	771	469 / 586	706
	347 / 600	3	60	512 / 640	617	469 / 586	565

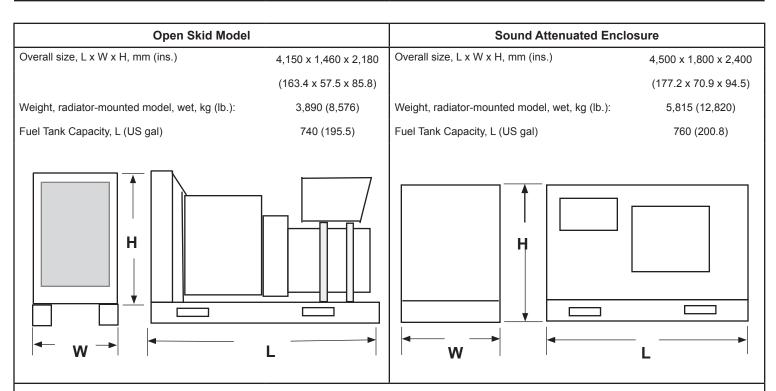
## **Application Data**

Manufacturer         Newage Stamford         Manufacturer         Perkins           Type         4-pole, rotating field         Engine model         2566C E15TAG3           Excitor type         Brushless, self excited, (PMG) option)         Engine model         2566C E15TAG3           Excitor type         Brushless, self excited, (PMG) option)         Engine type         4-cycla, Turbocharged After-cooled           Voltage regulator         Solid state, voltable and excitation overload protection         EPA Certification:         11ER 2           Image: Counting type         Cass H         Displacement, L (cu. in.)         152 (927)           Image: Counting regulator         Single bearing sealed         Compression ratio         18: 1           Coupling         Flexible disc         Plestion speed, mmin. (ft.min.)         815 (5,000)           Amortisaeur Windrings         # 1.0% (with PMG)         # 1.6% (with PMG)         # 1.0% (with PMG)	Alternator S	Specifications	Engine Mechanical Specification	
Exciter type	Manufacturer	Newage Stamford	Manufacturer	Perkins
Contact   Cont	Туре	4-pole, rotating field	Engine model	2506C E15TAG3
Voltage regulator overload protection overload	Exciter type	•	Engine type	
Displacement, L (cu. in.)   15.2 (927)	Leads: quantity, type	12, reconnectable	Cylinder arrangement	6 in line
Material	Voltage regulator		EPA Certification :	TIER 2
Bearing: quantity, type	Material			, ,
Amortisseur Windings         Full         Main bearings: quantity, type         7, replaceable insert           Voltage regulation, no-load to full load         ± 1.0% (with PMG) ± 1.5% (with Self Excited)         Rated rpm         1,800           Unbalanced load capability         100% of rated standby current         Max. power at rated rpm, kW (BHP)         568 (760)           Peak motor starting kVA: 480 V         (30% dip) self-excited series 4 - 1440 kVA PMG series. 3 - 1750 kVA         Wall bear of the strain of the series of the s	·	•	, , ,	` '
Voltage regulation, no-load to full load         ± 1.0% (with PMG) ± 1.5% (with Self Excited)         Rated rpm         1,800           Unbalanced load capability         100% of rated standby current         Max, power at rated rpm, kW (BHP)         568 (760)           Load acceptance         Per ISO - 8528         BMEP, gross, psi (Bar)         365.4 (25.2)           Peak motor starting kVA: 480 V         (30% dlp) self-excited series 4 - 1440 kVA PMG series, 3 - 1750 kVA         Exhaust Gas Flow, m³ /min (cfm)         112.9,955)           Engine Electrical System (24 Volt) 60 Hz         Exhaust Gas Flow, m³ /min (cfm)         112 (3,955)           Engine Electrical System (24 Volt) 60 Hz         Frequency regulation, no-load to full load         0.25%           Eattery charging alternator: Ground (negative/positive). Volts (DC)	Coupling	Flexible disc	Piston speed, m/min. (ft./min.)	615.6 (2,020)
Max. power at rated rpm, kW   568 (760)	Amortisseur Windings	Full	Main bearings: quantity, type	7, replaceable insert
BHP    BMEP, gross, psi (Bar)   365.4 (25.2)		,	Rated rpm	1,800
Peak motor starting kVA: 480 V 480 V 8elf-excited series 4 - 1440 kVA PMG series 3 - 1750 kVA  Engine Electrical Specifications  Engine Electrical System (24 Volt) 60 Hz  Eshaust Gas Flow, m³ /min (cfm) 112 (3,955) Exhaust gas temperature "C ("F) 550 (1022)  Frequency regulation, no-load to full load  Frequency regulation, no-load to full load  Governor: Type: Make: Standard: Standar	Unbalanced load capability	100% of rated standby current		568 (760)
### ABOV PMG series 3 - 1440 kVA PMG series 3 - 1750 kVA    Engine Electrical Specifications   Engine Electrical System (24 Volt) 60 Hz   Exhaust gas temperature °C (°F)   550 (1022)	Load acceptance	Per ISO - 8528	BMEP, gross, psi ( Bar )	365.4 (25.2)
Engine Electrical System (24 Volt) 60 Hz  Battery charging alternator: Ground (negative/positive). Volts (DC)	480 V	self-excited series 4 - 1440 kVA	Overall thermal efficiency	41.2%
Battery charging alternator: Ground (negative/positive). Volts (DC)	Engine Electrical Specifications		1 ' '	` ' /
Ground (negative/positive): Volts (DC): 24V Standard: Standard: ISO 3046-4 class A1  Ampere rating: 70A  Starter motor rated voltage (DC): 24V Frequency regulation, steady state ± 0.25%  Starter motor rated kW: 7.5 Kw 1250A Battery CCA rating: 1250A Battery & qty, AH rating: 2 x 128AH  Battery Voltage (DC): 24V Air cleaner type Dry  Remote Radiator System Fuel Consumption 60 Hz  Exhaust manifold type Connection sizes: 100% 34.9 (132) Water inlet ID hose, mm (in) 50% 20.9 (79)  Charge air cooling (CAC) Not Available Water outlet ID hose, mm (in)  Water outlet ID hose, mm (in)  Water outlet ID hose, mm (in)  Diesel gal/hr (L/hr) Prime Power Rating  Diesel gal/hr (L/hr) Prime Power Rating  Diesel gal/hr (L/hr) Prime Power Rating  Diesel gal/hr (L/hr) Standby Rating  25% 10.5 (39.6)  Diesel gal/hr (L/hr) Prime Power Rating  Diesel gal/hr (L/hr) Prime Power Rating  Diesel gal/hr (L/hr) Prime Power Rating  Diesel gal/hr (L/hr) Standard: 100%  Diesel gal/hr (L/hr) Prime Power Rating	Engine Electrical S	ystem (24 Volt) 60 Hz		
Starter motor rated kW: Battery CCA rating: 1250A 2 x 128AH  Battery Voltage (DC) 24V Air cleaner type Dry  Remote Radiator System Fuel Consumption 60 Hz  Exhaust manifold type Diesel gal/hr (L/hr) Standby Rating 100% 34.9 (132)  Water inlet ID hose, mm (in) 50% 27.9 (105.6)  Water outlet ID hose, mm (in) 50% 20.9 (79)  Charge air cooling (CAC) Not Available Water outlet ID hose, mm (in) Diesel gal/hr (L/hr) Prime Power Rating 100% 32.0 (121)  Static head allowable above engine, ft.H²O (kPa) Maximum CAC restriction H²O in.	Ground (negative/positive). Volts (DC)	24V	Make:	Perkins
Battery CCA rating: Battery & qty, AH rating:         1250A 2 x 128AH           Battery Voltage (DC)         24V         Air cleaner type         Dry           Fuel Consumption 60 Hz           Exhaust manifold type         Diesel gal/hr (L/hr)         Standby Rating           Connection sizes:         100%         34.9 (132)           Water inlet ID hose, mm (in)         75%         27.9 (105.6)           Water outlet ID hose, mm (in)         50%         20.9 (79)           Charge air cooling (CAC)         Not Available         25%         10.5 (39.6)           Water inlet ID hose, mm (in)         Diesel gal/hr (L/hr)         Prime Power Rating           Water outlet ID hose, mm (in)         100%         32.0 (121)           Static head allowable above engine, ft.H²O (kPa)         75%         25.4 (96)           Maximum CAC restriction H²O in.         50%         20.3 (77)	Starter motor rated voltage (DC)	24V	Frequency regulation, steady state	± 0.25%
Exhaust manifold type	Battery CCA rating:	1250A	Frequency	Fixed
Diesel gal/hr (L/hr)   Standby Rating	Battery Voltage (DC)	24V	Air cleaner type	Dry
Diesel gal/hr (L/hr)   Standby Rating	Remote Ra	diator System	Fuel Consum	nption 60 Hz
Water inlet ID hose, mm (in)       75%       27.9 (105.6)         Water outlet ID hose, mm (in)       50%       20.9 (79)         Charge air cooling (CAC)       Not Available       25%       10.5 (39.6)         Water inlet ID hose, mm (in)       Diesel gal/hr (L/hr)       Prime Power Rating         Water outlet ID hose, mm (in)       100%       32.0 (121)         Static head allowable above engine, ft.H²O (kPa)       75%       25.4 (96)         Maximum CAC restriction H²O in.       50%       20.3 (77)				i
Water outlet ID hose, mm (in)       50%       20.9 (79)         Charge air cooling (CAC)       Not Available       25%       10.5 (39.6)         Water inlet ID hose, mm (in)       Diesel gal/hr (L/hr)       Prime Power Rating         Water outlet ID hose, mm (in)       100%       32.0 (121)         Static head allowable above engine, ft.H²O (kPa)       75%       25.4 (96)         Maximum CAC restriction H²O in.       50%       20.3 (77)	Connection sizes:		100%	34.9 (132)
Charge air cooling (CAC)         Not Available         25%         10.5 (39.6)           Water inlet ID hose, mm (in)         Diesel gal/hr (L/hr)         Prime Power Rating           Water outlet ID hose, mm (in)         100%         32.0 (121)           Static head allowable above engine, ft.H²O (kPa)         75%         25.4 (96)           Maximum CAC restriction H²O in.         50%         20.3 (77)	Water inlet ID hose, mm (in)		75%	27.9 (105.6)
Charge air cooling (CAC) Water inlet ID hose, mm (in) Water outlet ID hose, mm (in)  Static head allowable above engine, ft.H²O (kPa)  Maximum CAC restriction H²O in.  Not Available  25% 10.5 (39.6)  Diesel gal/hr (L/hr) Prime Power Rating  100% 32.0 (121)  75% 25.4 (96)  20.3 (77)	Water outlet ID hose, mm (in)		50%	` ,
Water inlet ID hose, mm (in)  Water outlet ID hose, mm (in)  Static head allowable above engine, ft.H²O (kPa)  Maximum CAC restriction H²O in.  Diesel gal/hr (L/hr)  Prime Power Rating  100%  32.0 (121)  75%  25.4 (96)  20.3 (77)	Charge air cooling (CAC)	Not Available		· ·
Water outlet ID hose, mm (in)       100%       32.0 (121)         Static head allowable above engine, ft.H²O (kPa)       75%       25.4 (96)         Maximum CAC restriction H²O in.       50%       20.3 (77)	Water inlet ID hose, mm (in)	140t/Wallabic	Diesel gal/hr (L/hr)	, ,
Static head allowable above engine, ft.H2O (kPa)  Maximum CAC restriction H2O in.  50%  25.4 (96)  20.3 (77)	Water outlet ID hose, mm (in)			
3070 20.3 (11)			75%	25.4 (96)
Contact the HIPOWER distributor for special cooling options 25% 9.5 (36)	Maximum CAC restriction H <sup>2</sup> O in.		50%	20.3 (77)
	Contact the HIPOWER distri	butor for special cooling options	25%	9.5 (36)

## **Application Data**

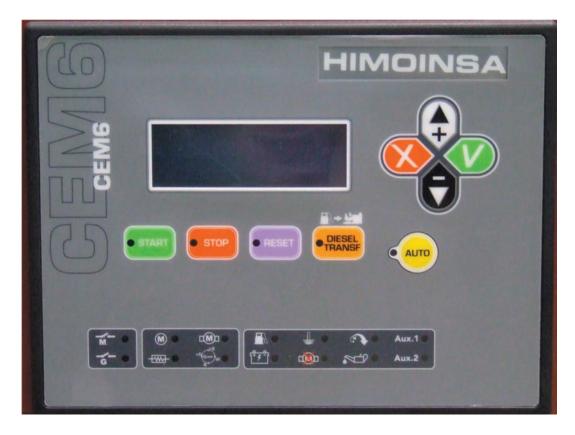
Cooling		Lubrication	
Radiator Systems	60 Hz	Lubricating System	60 Hz
Ambient temperature, °C (°F)	46 (115)	Туре	Full pressure
Engine jacket water capacity L (gal)	TBA	Oil pan capacity, L, (qt.) Recommended lube oil	53.0 (56.0) API CI-4
Radiator system capacity, including engine, L (gal.)	58 (15.3)	Oil pan capacity with filter, L (qt.)	60.0 (63.4)
Engine jacket water flow, L/min (g/min)	342 (90.3)	Oil filter: quantity, type	1, cartridge
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	190.0 (10,808)	Oil cooler Maximum oil temperature, °C(°F)	Oil to water 114 (237)
Heat rejected to charge cooler at rated kW, dry exhaust, kW (Btu/min.)	124.0 (7,053)	Ventilation and Air-Flow Requirements	
Water pump type	Centrifugal	Air Requirements	60 Hz
Fan, kWm (HP)	25.0 (33.5)	Radiator-cooled cooling air, m³/min. (scfm)	866 (30,583)
		Air density kg/m³ (ibm/ft³)	1.20 (0.075)
Max. restriction of cooling air, intake and discharge side of radiator, Pa (in. H²O)	62.2 (0.25)	Heat rejected to exhaust, kW (btu/min)	450 (25,597)
JD/A) J EVEL COUNT ATTENUATED EVOLOGE	70 40(4) @ 00 f	Heat radiated to surrounding air Engine: kW (Btu)	32.5 (1,849)
dB(A) LEVEL SOUND ATTENUATED ENCLOSED	76 dB(A) @ 23 feet	Combustion air, m³/min. (cfm)	42.0 (1,483)

## **Dimensions and Weights**



NOTE: The drawings above are only representative of the overall dimensions. For full detailed installation drawings please consult your local distributor or contact Himoinsa Power Systems @ www.hipowersystems.com

RATINGS: Power factor three-phase is 0.8 and single-phase unity. Standby Ratings: Standby ratings assume installation normally served by reliable utility power. The standby rating is available for varying loads for the length of the power outage. No overload is available with the standby rating. Ratings are in accordance with ISO-3046/1 and DIN 6271. Prime Power Ratings: Prime power ratings assume no or unreliable utility power. For varying loads the generator set has unlimited operating hours. A 10% overload capacity is available for any 1 hour in a 12 hour continous running period. Ratings are in accordance with ISO-3046/1 and DIN 6271. Consult Himoinsa for limited running time and base load ratings. Himoinsa reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. DERATION GUIDELINES: Altitude: Derate 1.3% per 100 m (328 ft) elevation above 1000 m (3280 ft). Temperature: Derate 1.0% per 10°C (18°F) temperature above 40°C (104°F).



### **CONTROLLER DISPLAY:**

- 1. Voltage between each Phase & Neutral
- 2. Voltage between Phases
- 3. Current (amps) on each Phase
- 4. Frequency
- 5. Active, Aparent & Reactive Power
- 6. Power Factor
- 7. Instant Power (KwH) and Accumulative power (day, month & year)
- 8. Fuel reserve
- 9. Oil pressure, coolant temperature
- 10. Battery voltage, battery charging alternator voltage
- 11. Engine Speed
- 12. Hours running

#### **ENGINE ALARMS:**

- 1. High coolant temperature
- 2. Low oil pressure
- 3. Emergency stop

- 4. Battery charging alternator failure
- 5. Low coolant level
- 6. Low fuel level
- 7. Over speed
- 8. Under speed
- 9. Battery low voltage

### **GENERATOR ALARMS:**

- 1. Over-load
- 2. Unbalanced voltage
- 3. Over-voltage
- 4. Under-voltage
- 5. Over-frequency
- 6. Under-frequency
- 7. Short-circuit
- 8. Inverse Power
- Incorrect phase sequence

## **Distributor:**





