

HPW SERIES

Power Range kW kVA

Standby / Prime 555 / 515 694 / 640

MODEL:

HPW - 555 T6

STANDARD EQUIPMENT				
Open Type Set	Accessories Available for HPW-555 T6			
■ Skid with integral day fuel tank (non-UL)	Mechanical Accessories Offered			
■ HIPOWER digital auto-start control panel (Page 4)	■ Road towing trailers to DOT standards			
■ Dry-type replaceable element air-cleaner	■ Critical grade exhaust mufflers			
■ Industrial muffler	■ UL double wall fuel tanks to customer specification			
■ Battery, battery rack, and cables	■ Oil field type skid			
■ Fuel and lubrication oil replaceable 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 assembly				
■ Main Line Circuit Breaker for overload protection	Generator End Accessories Offered			
■ Belt driven charging alternator	■ PMG excitation for enhanced motor-starting			
■ Guards for shielding all rotating parts	■ Anti-condensation heaters in alternator			
■ Fuel cut-off solenoid and protection switches	Electrical and Control Accessories Offered			
Radiator with pusher fan	■ Automatic battery chargers 5 and 10 amp			
 Operation and installation manuals 	■ NFPA 110 controls and remote annunciator			
Sound Attenuated Enclosure	Analog instrumentation in lieu of digital			
■ Fully sound attenuated enclosure	■ Transfer switch and paralleling control panels			
■ Powder Painted with finish that exceeds 1000-hr salt test	■ Water Jacket Heater			
■ Rock wool insulation behind protective barrier	■ Remote control from PC via hard and/or wireless link			
■ Curved edges and minimum outside fasteners	■ GPS for mobile sets			
■ Single lifting point	■ Digital Timer			

GENERATOR RATINGS

				Standby	Rating	Prime l	Rating
Alternator	Voltage	Ph	Hz	kW/kVA	Amps	kW/kVA	Amps
	120 / 208	3	60	555 / 694	1,929	515 / 640	1,929
	127 / 220	3	60	555 / 694	1,823	515 / 640	1,823
HCI 544E	120 / 240	3	60	555 / 694	1,671	515 / 640	1,671
HCI 344E	139 / 240	3	60	555 / 694	1,626	515 / 640	1,626
	277 / 480	3	60	555 / 694	835	515 / 640	835
	347 / 600	3	60	555 / 694	650	515 / 640	650

Application Data

Alternator S	Specifications	Engine Mechanical Specifications		
Manufacturer	Newage Stamford	Manufacturer	Perkins	
Туре	4-pole, rotating field	Engine model	2506C E15TAG4	
Exciter type	Brushless, self excited. (PMG option)	Engine type	4-cycle, Turbocharged After- cooled	
Leads: quantity, type	12, reconnectable	Cylinder arrangement	6 in line	
Voltage regulator	Solid state, volts/Hz and excitation overload protection	EPA Certification :	TIER 2	
Insulation:	Class II	Displacement, L (cu. in.)	15.2 (927)	
Material Temperature rise	Class H 150° C , standby	Bore and stroke, mm (in.)	137 x 171 (5.39 x 6.73)	
Bearing: quantity, type	Single bearing sealed	Compression ratio	16 : 1	
Coupling	Flexible disc	Piston speed, m/min. (ft./min.)	615.6 (2,020)	
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, kWm (BHP)	623 (834.6)	
Load acceptance	Per ISO - 8528	BMEP, gross, psi (Bar)	401.7 (27.7)	
Peak motor starting kVA: 480 V 480 V	(30% dip) self-excited series 4 - 1685 kVA PMG series. 3 - 2075 kVA	Overall thermal efficiency	40.0%	
Engine Electrical Specifications		Exhaust Gas Flow, m³ /min (cfm) Exhaust gas temperature °C (°F)	120 (4,238) 550 (1,022)	
Engine Electrical S	Engine Electrical System (24 Volt) 60 Hz		0.25%	
Battery charging alternator: Ground (negative/positive). Volts (DC)	Negative 24V 70A	Governor: Type: Make: Standard:	Electronic Isochronous Perkins ISO 3046-4 class A1	
Starter motor rated voltage (DC)	24V	Frequency regulation, steady state	± 0.25%	
Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating:	7.5 Kw 1250A 2 x 128AH	Frequency	Fixed	
Battery Voltage (DC)	24V	Air cleaner type	Dry	
Remote Ra	diator System	Fuel Consumption 60 Hz		
Exhaust manifold type		Diesel gal/hr (L/hr)	Standby Rating	
Connection sizes:		100%	38.6 (146)	
Water inlet ID hose, mm (in)		75%	30.9 (117)	
Water outlet ID hose, mm (in)		50%	23.1 (87.6)	
Charge air cooling (CAC)	Not Available	25%	13.5 (51)	
Water inlet ID hose, mm (in)	NUL AVAIIADIE	Diesel gal/hr (L/hr)	Prime Power Rating	
Water outlet ID hose, mm (in)		100%		
Static head allowable above engine, ft.H²O (kPa)		75%	Not Available	
Maximum CAC restriction H ² O in.		50%	NOT AVAIIABLE	
Contact the HIPOWER distri	butor for special cooling options	- 25%		
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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)	420 (111.0)	Oil filter: quantity, type	1, cartridge	
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	195.0 (11,092)	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.)	140.0 (7,964)	Ventilation and Air-Flow Requirements		
Water pump type	Centrifugal	Air Requirements	60 Hz	
Fan, kWm (HP)	26.0 (34.8)	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)	540 (30,717)	
4D/A) LEVEL COUNT ATTENUATED ENGLOSES	76 dB(A) @ 23 feet	Heat radiated to surrounding air Engine: kW (Btu)	26.5 (1,507)	
dB(A) LEVEL SOUND ATTENUATED ENCLOSED		Combustion air, m³/min. (cfm)	42.0 (1,483)	

Dimensions and Weights

Open Skid Model		Sound Attenuated Enclosure		
Overall size, L x W x H, mm (ins.)	4,150 x 1,460 x 2,180	Overall size, L x W x H, mm (ins.)	4,500 x 1,800 x 2,400	
	(163.4 x 57.5 x 85.8)		(177.2 x 70.9 x 94.5)	
Weight, radiator-mounted model, wet, kg (lb.):	4,020 (8,863)	Weight, radiator-mounted model, wet, kg (lb.):	5,945 (13,107)	
Fuel Tank Capacity, L (US gal)	740 (195.5)	Fuel Tank Capacity, L (US gal)	760 (200.8)	
H W		H W		

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
- 9. Incorrect phase sequence







