

# **HELIOS** SERIES

Power Range	kW	kVA
Standby	67.5 - 101.5	67.5 - 126.8
Prime	67.5 - 91	67.5 - 113.7

## MODELS:

GEHPW - 100

**GOHPW - 100** 

STANDARD EQUIPMENT				
Open Set Model: GOHPW-100	Accessories Available for GO/GEHPW-100			
<ul> <li>Skid with integral day fuel tank (non-UL)</li> </ul>	Mechanical Accessories Offered			
<ul> <li>Himoinsa digital auto-start control panel (Page 4)</li> </ul>	<ul> <li>Weather protective canopy (for Open Set)</li> </ul>			
<ul> <li>Dry-type replaceable element air-cleaner</li> </ul>	<ul> <li>Road towing trailers to DOT standards</li> </ul>			
<ul> <li>Industrial muffler</li> </ul>	<ul> <li>Critical grade exhaust mufflers</li> </ul>			
<ul> <li>Battery, battery rack, and cables</li> </ul>	<ul> <li>UL double wall fuel tanks to customer specification</li> </ul>			
<ul> <li>Fuel and lubrication oil replaceable element filters</li> </ul>	<ul> <li>Oil field type skid</li> </ul>			
Stamford AVR brushless 12-wire reconnectable alternator	<ul> <li>Flexible exhaust connection for open sets</li> </ul>			
<ul> <li>Oil drain hand pump</li> </ul>	<ul> <li>Oil pressure and engine temperature gauges</li> </ul>			
<ul> <li>Vibration Isolators between base and set assembly</li> </ul>	• Extended warranty coverage above the standard one year			
<ul> <li>Main Line Circuit Breaker for overload protection</li> </ul>	Generator End Accessories Offered			
<ul> <li>Belt driven charging alternator</li> </ul>	PMG excitation for enhanced motor-starting			
<ul> <li>Guards for shielding all rotating parts</li> </ul>	<ul> <li>Anti-condensation heaters in alternator</li> </ul>			
<ul> <li>Fuel cut-off solenoid and protection switches</li> </ul>	Electrical and Control Accessories Offered			
<ul> <li>Radiator with pusher fan</li> </ul>	Automatic battery chargers 5 and 10 amp			
<ul> <li>Operation and installation manuals</li> </ul>	NFPA 110 controls and remote annunciator			
Sound Attenuated Set Model: GEHPW-100	<ul> <li>Analog instrumentation in lieu of digital</li> </ul>			
<ul> <li>Fully sound attenuated enclosure (equipped as open set)</li> </ul>	<ul> <li>Transfer switch and paralleling control panels</li> </ul>			
<ul> <li>Powder Painted with finish that exceeds 1000-hr salt test</li> </ul>	<ul> <li>Water Jacket Heater</li> </ul>			
<ul> <li>Rock wool insulation behind protective barrier</li> </ul>	<ul> <li>Remote control from PC via hard and/or wireless link</li> </ul>			
<ul> <li>Curved edges and minimum outside fasteners</li> </ul>	<ul> <li>GPS for mobile sets</li> </ul>			
<ul> <li>Single lifting point</li> </ul>	<ul> <li>Digital Timer (Auto-start sets only)</li> </ul>			

#### **GENERATOR RATINGS**

			Standby Rating		Prime Rating		
Alternator	Voltage	Ph	Hz	kW/kVA	Amps	kW/kVA	Amps
	120 / 208	3	60	96 / 120	333	90 / 112.5	312
	127 / 220	3	60	101 / 126.2	331	90.8 / 113.5	298
	120 / 240	3	60	96 / 120	288	90 / 112.5	270
UCI 274C	139 / 240	3	60	101.5 / 126.8	305	91 / 113.7	273
	277 / 480	3	60	101.5 / 126.8	152	91 / 113.7	137
	347 / 600	3	60	101.5 / 126.8	122	91 / 113.7	109
	120 / 240	1	60	67.5	281	67.5	281

## **Application Data**

	Specifications	Engine Mechanic	al Specifications	
Manufacturer	Newage Stamford	Manufacturer	Perkins	
Туре	4-pole, rotating field	Engine model	1104D E44TAG2	
Exciter type	Brushless, self excited. (PMG option)	Engine type	4-cycle, Turbocharged After- cooled	
Leads: quantity, type	12, reconnectable	Cylinder arrangement	4 in line	
Voltage regulator	Solid state, volts/Hz and excitation overload protection	EPA Certification :	TIER 3	
Insulation: Material Temperature rise	Class H 150° C , standby	Displacement, L (cu. in.) Bore and stroke, mm (in.)	4.4 (269) 105 x 127 (4.13 x 5.0)	
Bearing: quantity, type	Single bearing sealed	Compression ratio	18.2 : 1	
Coupling	Flexible disc	Piston speed, m/min. (ft./min.)	457 (1,500)	
Amortisseur Windings	Full	Main bearings: quantity, type	5, 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)	112 (150)	
Load acceptance	Per ISO - 8528	BMEP, gross, psi ( Bar )	246.2 (17.0)	
Peak motor starting kVA: 480 V 480 V	(30% dip) self-excited series 4 - 345 kVA PMG series. 3 - 425 kVA	Overall thermal efficiency	38.7%	
Engine Electrical Specifications		Exhaust Gas Flow, m³ /min (cfm) Exhaust gas temperature °C (°F)	19.6 (692) 566 (1052)	
Engine Electrical System (12 Volt) 60 Hz				
Engine Electrical S	System (12 Volt) 60 Hz	Frequency regulation, no-load to full load	0.25%	
Engine Electrical S Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating	Negative 12V 65A		0.25% Electronic Isochronous Perkins ISO 3046-4 class A1	
Battery charging alternator: Ground (negative/positive). Volts (DC)	Negative 12V	load Governor: Type: Make:	Electronic Isochronous Perkins	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating	Negative 12V 65A	load Governor: Type: Make: Standard:	Electronic Isochronous Perkins ISO 3046-4 class A1	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating:	Negative 12V 65A 12V 3.0 Kw 810A	load Governor: Type: Make: Standard: Frequency regulation, steady state	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5%	
Battery charging alternator: Ground (negative/positive). Volts (DC)Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC)	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry	
Battery charging alternator: Ground (negative/positive). Volts (DC)Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC)	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) Remote Ra	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) Remote Rate Exhaust manifold type	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr)	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) Remote Ra Exhaust manifold type Connection sizes:	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100%	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating 7.9 (29.86)	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) <b>Remote Ra</b> Exhaust manifold type Connection sizes: Water inlet ID hose, mm (in)	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75%	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating 7.9 (29.86) 5.9 (22.30)	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) Remote Ra Exhaust manifold type Connection sizes: Water inlet ID hose, mm (in) Water outlet ID hose, mm (in)	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75% 50%	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating 7.9 (29.86) 5.9 (22.30) 4.1 (15.50)	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) Remote Ra Exhaust manifold type Connection sizes: Water inlet ID hose, mm (in) Water outlet ID hose, mm (in) Charge air cooling (CAC)	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75% 50% 25%	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating 7.9 (29.86) 5.9 (22.30) 4.1 (15.50) 2.4 (9.07)	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) <b>Remote Ra</b> Exhaust manifold type Connection sizes: Water inlet ID hose, mm (in) Water outlet ID hose, mm (in) Charge air cooling (CAC) Water inlet ID hose, mm (in)	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75% 50% 25% Diesel gal/hr (L/hr)	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry Dry Dry Dry Dry Dry Dry Dry Dry Dry	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery & qty, AH rating: Battery Voltage (DC) <b>Remote Ra</b> Exhaust manifold type Connection sizes: Water inlet ID hose, mm (in) Water outlet ID hose, mm (in) Charge air cooling (CAC) Water inlet ID hose, mm (in) Water outlet ID hose, mm (in) Static head allowable above	Negative 12V 65A 12V 3.0 Kw 810A 1 x 90AH 12V 12V	load Governor: Type: Make: Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75% 50% 25% Diesel gal/hr (L/hr) 100%	Electronic Isochronous Perkins ISO 3046-4 class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating 7.9 (29.86) 5.9 (22.30) 4.1 (15.50) 2.4 (9.07) Prime Power Rating 7.1 (26.83)	

### **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)	7.0 (1.8)	Oil pan capacity, L, (qt.) Recommended lube oil	5.5 (5.8) API CH4	
Radiator system capacity, including engine, L (gal.)	12.6 (3.3)	Oil pan capacity with filter, L (qt.)	8.0 (8.5)	
Engine jacket water flow, L/min (g/min)	170 (44.9)	Oil filter: quantity, type	1, cartridge	
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	60.7 (3,452)	Oil cooler Normal oil temperature, °C(°F)	Oil to water 110 (230)	
Heat rejected to charge cooler at rated kW, dry exhaust, kW (Btu/min.)	13.1 (745)	Ventilation and Air-Flow Requirements		
Water pump type	Centrifugal	Air Requirements	60 Hz	
Fan, kWm (HP)	6.0 (8.0)	Radiator-cooled cooling air, m³/min. (scfm)	268.5 (9,429)	
		Air density kg/m³ (ibm/ft³)	1.20 (0,075)	
Max. restriction of cooling air, intake and discharge side of radiator, Pa (in. $\ensuremath{\text{H}}^2\ensuremath{\text{O}}\xspace)$	62.2 (0.25)	Heat rejected to exhaust, kW (btu/min)	94.5 (5,374)	
	Within (under) 70dBA	Heat radiated to surrounding air Engine: kW (Btu)	8.9 (508)	
dBA LEVELS SOUND ATTENUATED ENCLOSED	@ 21 feet	Combustion air, m³/min. (cfm)	8.9 (313)	

#### **Dimensions and Weights**

