

Curved edges and minimum outside fasteners

Single lifting point

HFW SERIES

Power Range kW **kVA** MODEL: HFW - 150 T6 Standby 108.8 - 152 108.8 - 190 108.8 - 139 Prime 108.8 - 174 STANDARD EQUIPMENT **Open Type Set** Accessories Available for HFW-150 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 Generator End Accessories Offered Main Line Circuit Breaker for overload protection Belt driven charging alternator ■ PMG excitation for enhanced motor-starting Anti-condensation heaters in alternator Guards for shielding all rotating parts 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 ■ Analog instrumentation in lieu of digital **Sound Attenuated Enclosure** Fully sound attenuated enclosure (equipped as open set) Transfer switch and paralleling control panels Water Jacket Heater Powder Painted with finish that exceeds 1000-hr salt test Rock wool insulation behind protective barrier ■ Remote control from PC via hard and/or wireless link GPS for mobile sets

GENERATOR RATINGS

Digital Timer

				Standby	Rating	Prime F	Rating
Alternator	Voltage	Ph	Hz	kW/kVA	Amps	kW/kVA	Amps
	120 / 208	3	60	150 / 187.5	520	138.2 / 173	480
	127 / 220	3	60	152 / 190	500	138.6 / 173	455
	120 / 240	3	60	150 / 187.5	451	138.2 / 173	416
UCI 274F	139 / 240	3	60	150 / 187.5	452	139 / 173.7	418
	277 / 480	3	60	150 / 187.5	226	139 / 173.7	209
	347 / 600	3	60	150 / 187.5	181	139 / 173.7	167
	120 / 240	1	60	108.8 / 108.8	453	108.8 / 108.8	453

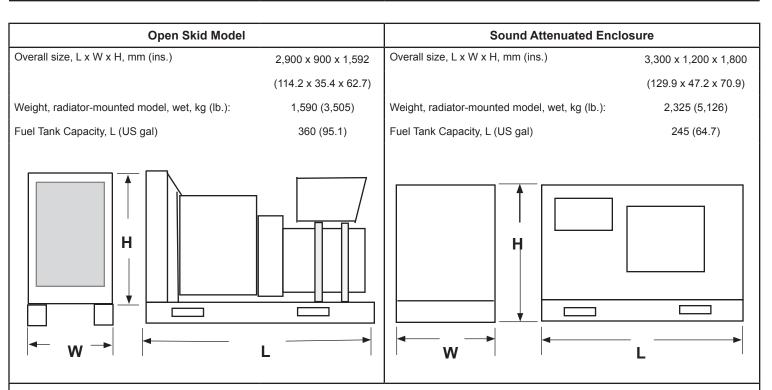
Application Data

Alternator S	pecifications	Engine Mechanical Specifications		
Manufacturer	Newage Stamford	Manufacturer	Iveco Aifo	
Туре	4-pole, rotating field	Engine model	NEF67 TM3	
Exciter type	Brushless, self excited. (PMG option)	Engine type	4-cycle, Turbocharged aftercooled	
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: Material Temperature rise	Class H 150° C , standby	Displacement, L (cu. in.) Bore and stroke, mm (in.)	6.7 (409) 104 x 132 (4.09 x 5.20)	
Bearing: quantity, type	Single bearing sealed	Compression ratio	17.5 : 1	
Coupling	Flexible disc	Piston speed, m/min. (ft./min.)	475.2 (1,559)	
Amortisseur Windings			7, replacement 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)	165 (221.2)	
Load acceptance	Per ISO - 8528	BMEP, gross, psi (Bar)	237.1 (16.35)	
Peak motor starting kVA: 480 V 480 V	(30% dip) self-excited series 4 - 525 kVA PMG series. 3 - 680 kVA	Overall thermal efficiency	37.4%	
Engine Electrica	al Specifications	Exhaust Gas Flow, m³ /min (cfm) Exhaust gas temperature °C (°F)	34.7 (1,225) 541 (1,006)	
Engine Electrical Sy	vstem (12 Volt) 60 Hz	Frequency regulation, no-load to full load	4.5%	
Battery charging alternator: Ground (negative/positive).	Negative	Governor: Type: Make:	Mechanical Stanadyne	
Volts (DC)	12V 90A	Standard:	ISO 3046-4 Class A1	
	12V		,	
Ampere rating	12V 90A	Standard:	ISO 3046-4 Class A1	
Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating:	12V 90A 12V 3 Kw 800A	Standard: Frequency regulation, steady state	ISO 3046-4 Class A1 ± 0.5%	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah	Standard: Frequency regulation, steady state Frequency Air cleaner type	ISO 3046-4 Class A1 ± 0.5% Fixed Dry	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah	Standard: Frequency regulation, steady state Frequency	t 0.5% Fixed Dry ption 60 Hz	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah	Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum	± 0.5% Fixed Dry ption 60 Hz Standby Rating	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah	Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr)	t 0.5% Fixed Dry ption 60 Hz	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah	Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100%	± 0.5% Fixed Dry ption 60 Hz Standby Rating 11.62 (44.0)	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah 12V Siator System	Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75%	by Standby Rating 11.62 (44.0) 9.30 (35.2)	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah	Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75% 50%	ISO 3046-4 Class A1 ± 0.5% Fixed Dry ption 60 Hz Standby Rating 11.62 (44.0) 9.30 (35.2) 6.10 (23.1)	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah 12V Siator System	Standard: Frequency regulation, steady state Frequency Air cleaner type Fuel Consum Diesel gal/hr (L/hr) 100% 75% 50% 25%	ISO 3046-4 Class A1 ± 0.5% Fixed Dry Iption 60 Hz Standby Rating 11.62 (44.0) 9.30 (35.2) 6.10 (23.1) 3.49 (13.2)	
Ampere rating	12V 90A 12V 3 Kw 800A 1 x 100 Ah 12V Siator System	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)	ESO 3046-4 Class A1 ± 0.5% Fixed Dry Deption 60 Hz Standby Rating 11.62 (44.0) 9.30 (35.2) 6.10 (23.1) 3.49 (13.2) Prime Power Rating	
Ampere rating Starter motor rated voltage (DC) Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating: Battery Voltage (DC) Remote Race 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	12V 90A 12V 3 Kw 800A 1 x 100 Ah 12V Siator System	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%	ISO 3046-4 Class A1 ± 0.5% Fixed Dry Intrinsic Standby Rating 11.62 (44.0) 9.30 (35.2) 6.10 (23.1) 3.49 (13.2) Prime Power Rating 10.57 (40.0)	

Application Data

Cooling		Lubrication		
Radiator Systems	60 Hz	Lubricating System	60 Hz	
Ambient temperature, °C (°F)	50 (122)	Туре	Full pressure	
Engine jacket water capacity L (gal)	10.5 (2.77)	Oil pan capacity, L, (qt.) Recommended lube oil	15.8 (16.7) ACEA E3-ES	
Radiator system capacity, including engine, L (gal.)	40.5 (10.70)	Oil pan capacity with filter, L (qt.)	17.2 (18.2)	
Engine jacket water flow, L/min (g/min)	169 (44.6)	Oil filter: quantity, type	1, cartridge	
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	83.4 (4,743)	Oil cooler Maximum oil temperature, °C (°F)	Oil to water 120 (248)	
Heat rejected to charge cooler at rated kW, dry exhaust, kW (Btu/min.) 21.0 (1,196)		Ventilation and Air-Flow Requirements		
Water pump type	Centrifugal	Air Requirements	60 Hz	
Fan, kWm (HP)	7.8 (10.5)	Radiator-cooled cooling air, m³/min. (scfm)	438 (15,468)	
		Air density kg/m³ (ibm/ft³)	1.20 (0.075)	
Max. restriction of cooling air, intake and discharge side of radiator, Pa (in. H²O)	61.25 (0.25)	Heat rejected to exhaust, kW (btu/min)	124 (7,053)	
dP/A) I EVEL COUND ATTENUATED ENCLOSED	70 dD(A) @ 22 foot	Heat radiated to surrounding air Engine: kW (But)	6.5 (367)	
dB(A) LEVEL SOUND ATTENUATED ENCLOSED	70 dB(A) @ 23 feet	Combustion air, m³/min. (cfm)	12.1 (426)	

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
- 9. Incorrect phase sequence







