

Power Range	kW	kVA	
Standby	184 - 184.8	229.8 - 231	
Prime	167 - 168	208.7 - 210	

MODEL: HFW - 200 T6

STANDARD EQUIPMENT				
Open Type Set Accessories Available for HFW-200 T6				
<ul> <li>Skid with integral day fuel tank (non-UL)</li> </ul>	Mechanical Accessories Offered			
<ul> <li>HIPOWER digital auto-start control panel (Page 4)</li> </ul>	Road towing trailers to DOT standards			
<ul> <li>Dry-type replaceable element air-cleaner</li> </ul>	<ul> <li>Critical grade exhaust mufflers</li> </ul>			
<ul> <li>Industrial muffler</li> </ul>	UL double wall fuel tanks to customer specification			
<ul> <li>Battery, battery rack, and cables</li> </ul>	<ul> <li>Oil field type skid</li> </ul>			
Fuel and lubrication oil replaceable element filters	<ul> <li>Flexible exhaust connection for open sets</li> </ul>			
<ul> <li>Stamford AVR brushless 12-wire reconnectable alternator</li> </ul>	<ul> <li>Oil pressure and engine temperature gauges</li> </ul>			
<ul> <li>Oil drain hand pump</li> </ul>	Extended warranty coverage above the standard one year			
<ul> <li>Vibration Isolators between base and set assembly</li> </ul>				
<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 Enclosure	Analog instrumentation in lieu of digital			
Fully sound attenuated enclosure	Transfer switch and paralleling control panels			
<ul> <li>Powder Painted with finish that exceeds 1000-hr salt test</li> </ul>	Water Jacket Heater			
<ul> <li>Rock wool insulation behind protective barrier</li> </ul>	Remote control from PC via hard and/or wireless link			
<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</li> </ul>			

### **GENERATOR RATINGS**

				Standby	Rating	Prime F	Rating
Alternator	Voltage	Ph	Hz	kW/kVA	Amps	kW/kVA	Amps
	120 / 208	3	60	183.8 / 229.8	639	167 / 208.7	580
	127 / 220	3	60	184.8 / 231	607	167 / 208.7	549
	120 / 240	3	60	183.8 / 229.8	553	167 / 208.7	502
UCI 274H	139 / 240	3	60	184.8 / 231	556	168 / 210	506
	277 / 480	3	60	184.8 / 231	278	168 / 210	253
	347 / 600	3	60	184.8 / 231	223	168 / 210	202

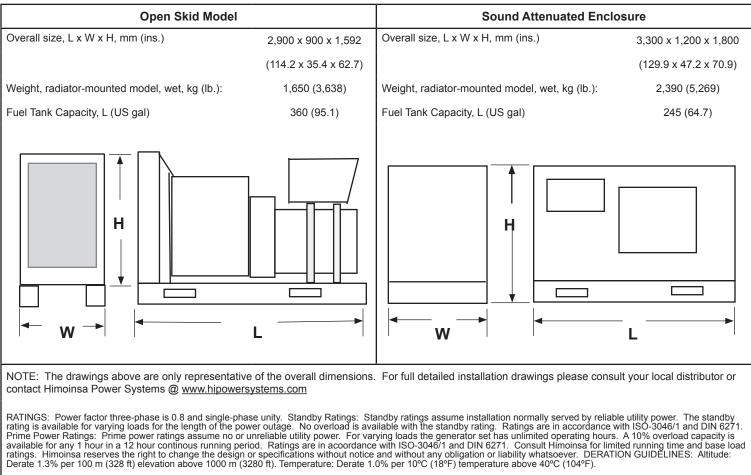
# **Application Data**

Alternator S	Specifications	Engine Mechanical Specifications		
Manufacturer	Newage Stamford	Manufacturer	Iveco Aifo	
Туре	4-pole, rotating field	Engine model	NEF67 TE2	
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 3	
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	16.5 : 1	
Coupling	Flexible disc	Piston speed, m/min. (ft./min.)	474 (1,555)	
Amortisseur Windings	Full	Main bearings: quantity, type	7, precision 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)	200 (268)	
Load acceptance	Per ISO - 8528	BMEP, gross, psi ( Bar )	298.7 (20.6)	
Peak motor starting kVA: 480 V 480 V	(30% dip) self-excited series 4 - 740 kVA PMG series. 3 - 920 kVA	Overall thermal efficiency	40.9%	
Engine Electrical Specifications		Exhaust Gas Flow, m³ /min (cfm) Exhaust gas temperature °C (°F)	37.9 (1,338) 560 (1,040)	
Engine Electrical System (12 Volt) 60 Hz		Frequency regulation, no-load to full load	0.25 %	
Battery charging alternator: Ground (negative/positive). Volts (DC) Ampere rating	Negative 14V 90A	Governor: Type: Make: Standard:	Electronic Isochronous Bosch EDC7 ISO 3046-4 Class A1	
Starter motor rated voltage (DC)	12V	Frequency regulation, steady state	± 0.5%	
Starter motor rated kW: Battery CCA rating: Battery & qty, AH rating:	3 Kw 1200A 1 x 185 AH	Frequency	Fixed	
Battery Voltage (DC)	12V	Air cleaner type	Dry	
Remote Ra	diator System	Fuel Consumption 60 Hz		
Exhaust manifold type				
		Diesel gal/hr (L/hr)	Standby Rating	
Connection sizes:		Diesel gal/hr (L/hr) 100%	Standby Rating 13.5 (51.0)	
Connection sizes: Water inlet ID hose, mm (in)			13.5 (51.0)	
		100%	13.5 (51.0) 11.1 (42.2)	
Water inlet ID hose, mm (in)	Not Available	100% 75%	13.5 (51.0) 11.1 (42.2) 6.9 (26.3)	
Water inlet ID hose, mm (in) Water outlet ID hose, mm (in)	Not Available	100% 75% 50% 25%	13.5 (51.0) 11.1 (42.2)	
Water inlet ID hose, mm (in) Water outlet ID hose, mm (in) Charge air cooling (CAC)	Not Available	100% 75% 50%	13.5 (51.0) 11.1 (42.2) 6.9 (26.3) 4.7 (17.9)	
Water inlet ID hose, mm (in) Water outlet ID hose, mm (in) Charge air cooling (CAC) Water inlet ID hose, mm (in)	Not Available	100% 75% 50% 25% Diesel gal/hr (L/hr)	13.5 (51.0) 11.1 (42.2) 6.9 (26.3) 4.7 (17.9) Prime Power Rating	
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	Not Available	100% 75% 50% 25% Diesel gal/hr (L/hr) 100%	13.5 (51.0) 11.1 (42.2) 6.9 (26.3) 4.7 (17.9) Prime Power Rating 12.4 ( 47.0)	

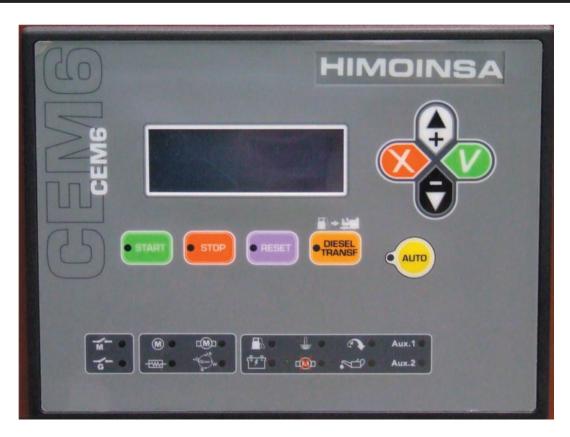
# **Application Data**

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 (2.8)	Oil pan capacity, L, (qt.) Recommended lube oil	15 (15.9) ACEA E3/E5	
Radiator system capacity, including engine, L (gal.)	43.5 (11.5)	Oil pan capacity with filter, L (qt.)	17 (18.0)	
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.)	88.3 (5,025)	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.)	32.1 (1,825)	Ventilation and Air-Flow Requirements		
Water pump type	Centrifugal	Air Requirements	60 Hz	
Fan, kWm (HP)	8.6 (11.5)	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. $\ensuremath{H}^2\ensuremath{O})$	61.25 (0.25)	Heat rejected to exhaust, kW (btu/min)	149.4 (8,500)	
	71 dB(A) @ 23 feet	Heat radiated to surrounding air Engine: kW (Btu)	14.3 (812)	
dB(A) LEVEL SOUND ATTENUATED ENCLOSED		Combustion air, m³/min. (cfm)	13.3 (468)	

## **Dimensions and Weights**



### HIPOWER CEM6 Autostart Digital Controller



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

### **Distributor:**

