## Hipower HDI Line Standby Diesel Generators





Global Power Supply is proud to present the new Hipower HDI Industrial Diesel Stationary Generator Line from 130 kW - 600 kW. Hipower heavy duty industrial diesel generators are an efficient, reliable, and versatile source of back-up electrical power. Designed to operate in the most extreme working conditions, all Hipower HDI industrial diesel generators combine an innovative design and easy to operate controls. Hipower generators are made in the USA of the highest quality materials, and provide the most dependable source of emergency backup power on the market today.

Model	Standby kW	EPA Rating	Voltage	Engine
HDI-130F	130	Tier 3	277/480	FPT - lveco
HDI-160F	160	Tier 3	277/480	FPT - lveco
HDI-180F	185	Tier 3	277/480	FPT - lveco
HDI-200F	200	Tier 3	277/480	FPT - Iveco
HDI-230F	230	Tier 3	277/480	FPT - Iveco
HDI-250F	250	Tier 3	277/480	FPT - lveco
HDI-400 T6U	400	Tier 3	277/480	VOLVO PENTA
HDI-515 T6U	515	Tier 2	277/480	VOLVO PENTA
HDI-600 T6U	600	Tier 2	277/480	VOLVO PENTA

#### **Empowering You**

We are a full service provider of new and used integrated power systems including diesel generators, natural gas generators, genset enclosures, fuel tanks, automatic transfer switches (ATS), and paralleling switchgear.



FOR MORE INFORMATION:

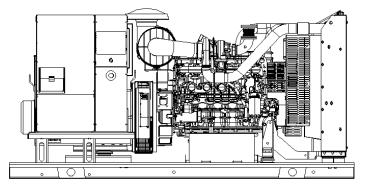
(800) 706-0906 info@globalpwr.com

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## **Heavy Duty Industrial DIESEL GENERATOR**

# HDI-180F

#### 60Hz STANDBY POWER RATINGS



## 

#### 185kW/60Hz//1800RPM

VOLTAGE VAC	120/240V	120/208V	139/240V	277/480V	347/600V
RATING	Standby	Standby	Standby	Standby	Standby
PHASE	N/A	3	3	3	3
PF	N/A	0.8	0.8	0.8	0.8
HZ	N/A	60	60	60	60
KW	N/A	186	186	185	180
KVA	N/A	232.5	232.5	231.2	225
AMPS	N/A	645	560	278	216.5

#### Description

HIPOWER<sup>®</sup> Heavy Duty Industrial generators are an efficient, reliable and versatile source of back-up electrical power that have been designed to operate in the most extreme working conditions. All HIPOWER<sup>®</sup> Heavy Duty Industrial generators combine an innovative design and the use of high quality materials that provide the user with the most dependable power that can be relied on for non-stop power with easy to operate controls.

Powered by a radiator-cooled, industrial VOLVO PENTA Diesel engine that meets current Environmental Protection Agency (EPA) TIER 2 exhaust emission regulations, driving a single bearing, four-pole, three-phase alternator, with IP23 protection. The Emergency Power kVA rating is given with a 125 degree °C alternator winding temperature rise.

### **HIPOWER®** Features and Benefits

**FTP** Diesel Engine: Long-life, heavy-duty, 4-cycle, direct injection engine for economy of operation and maximum reliability and durability.

Cooling: Radiator with belt driven pusher fan.

Air Filter: Heavy-duty replaceable element air-cleaner.

Alternator: Single bearing, rotating field, self-excited, self-ventilated, 12-wire reconnectable, 60Hz brushless alternator and Class H insulation. Automatic voltage regulator (AVR) providing close voltage regulation and skVA starting capability for electric motor loads. **Enclosure:** Fully sound attenuated enclosure, manufactured using 7-gauge steel and thicker for the base; 12-gauge and 14-gauge for the enclosure, Interpon

A4700 primer, in combination with Interpon 600 series coatings, are designed for exterior exposure and offers excellent light and weather resistance exceeding 1400hr salt spray test. A 1" thick layer of durable sound insulating, oil and fire resistant foam material is installed all around the inside of the enclosure to allow high-pressure water cleaning. Vertical air discharge for quiet operation. Wide steel lockable access doors with rubber seals, easy access for maintenance and service activities, lift off Die Cast Zinc hinges textured black powder coat and corrosion resistant hardware and fasteners.

Exhaust: Low noise, steel residential-type exhaust silencer with rain cap.

**Fuel Filtration:** Standard and secondary water separator with visible level on fuel filters.

**Controls:** Digital control panel with manual and automatic start and stop features. Many programmable automatic functions for local and remote controls with LED lights and tamper proof engine hour recorder.

Certification: Generator set is UL 2200 Listed and CSA certified and meets ISO 8528-5.

Codes and Standards Compliances used where applicable





## HDI180F - 185Kw Heavy Duty Industrial



## APPLICATION DATA

ENGINE SPECIFICATION		LUBRICATION SYSTEM	
Manufacturer	FPT - Iveco	Oil pan capacity - gal (L)	3.2 (12)
Model	N67TE2X	Oil pan capacity with filter - gal (L)	4.5 (17.2)
EPA certified	Tier 3	Ol cooler	Liquid
Crankshaft speed	1,800 rpm	Recommended lubricating oil grade	SAE 10W-30 / ACEA E3/E5 (refer to owners manual)
Туре	Diesel, 4-stroke	Oil consumption at full load	< 0.1% of fuel consumption
Injection	Direct	Oil pressure – psi (kPA)	72.6 (500)
Aspiration	Turbocharged aftercooled air/air	ENGINE ELECTRICAL SYSTEM	
Number of Cylinders	6	Starting motor voltage	12 volt
Cylinder arrangement	In-line	Cold Cranking Amps - minimum	650 Amp
Displacement CID (liters)	408.9 (6.7)	Battery charging Alternantor	90 Amp
Bore and Stroke ins (mm)	4.1 x 5.2 (104 x 132)	Battery capacity	650CCA 850CA 115RC GROUP SIZE 24F
Nominal power	268 hp		
Cooling	Liquid		
Governor	Electronic		
Governor Regulation Class	ISO 8528 Part 1 Class G3		
Frequency Regulation	Isochronous		
Starting motor & alternator	12 Volt		
Compression ratio	16.5:1		
Air cleaner type	Heavy duty - single cartridge		
ALTERNATOR SPECIFICATION			
Manufacturer	STAMFORD		
Model 120/240V Single phase	N/A		
Model 120/208V Three phase	UCI274H		
Model 277/480V Three phase	UCI274G		
Model 347/600V Three phase	UCI274G		
Alternator Type	Four pole, rotating field		
Excitation System	Brushless		
Power factor	0.8		
Number of leads	12 leads, reconnectable		
Stator Pitch	2/3		
Insulation	Class H		
Windings – Temperature Rise	Class F (125/40° C)		
Enclosure (IEC-34-S)	IP23		
Bearing	Single, sealed		
Coupling	Flexible disc		
Amortisseur windings	Full		
Voltage regulation – no load to full load with MX341 AVR	± 1%		
TIF	<50		
Radio Frequency Emissions compliance	Meets requirements of most ind	ustrial and commercial applications	
Line harmonics	5% maximum		

## HDI180F - 185Kw

#### Heavy Duty Industrial

#### STANDARD FEATURES



Enclosure (If selected)	Engine System	Fuel System
Rust-Proof Fastener with Nylon Washers Protect Finish	Oil Drain Extension	Primary Fuel Filter
High Performance Sound-Absorbing Material (L1)	Air Cleaner	Flexible fuel lines
Gasketed Doors	Fan Guard	Generator set
Air Discharge Hoods for Radiators- Upwards Pointing	Factory Filled Oil	80% Rated Main Line Circuit Breaker
Lift Off Door Hinges	Battery Charging Alternator	Separation of Circuits – Multiple Breakers (load center)
Stainless Steel Lockable Handles	Alternator Systems	Separation of Circuits – High / Low Voltage
Textured Polyester Powder Coat	12 Leads (3-Phase, Non 600V)	Internal Genset Vibration Isolation
Cooling System	Class H Insulation Material	Wrapped Exhaust Piping
Factory-Installed Radiator	Vented Rotor	Standard Factory Testing
Radiator Drain Extension	2/3 Pitch	2 Year/2000 hours Limited Warranty
50/50 Ethylene Glycol Antifreeze	Full Load Capacity Alternator	Silencer Mounted in the Discharged Hood (Enclosed Only)
Electrical Systems	Protective Thermal Switch	Emergency Stop
Battery Cables and Battery Tray	Permanent Magnet Excitation	
Batteries	Skewed Stator	

## CONTROL SYSTEM



- Charge alternator failure alarm
- 4-Line back-lit LCD text display
- Front panel editing with PIN protection
- Customizable status screens
- Power save mode
- 11 configurable inputs
- 8 configurable outputs
- Flexible sensor inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)

- "Protections disabled" feature
- kW protection
- Reverse power (kW) protection
- LED and LCD alarm indication
- Power monitoring (kWh, kVAr, kVAh, kVArh)
- Load switching (load shedding and dummy load outputs)
- Independent Earth Fault trip
- Fuel usage monitor and low fuel alarms
- Configurable display languages
- User selectable simultaneous RS232, RS485 & Ethernet communications
- MODBUS RTU & TCP support

- Configurable MODBUS pages
- Fully configurable via DSE
- Configuration Suite PC software
- Data logging to assist with fault

#### finding

- PLC editor allows user configurable
- funcions to meet specific application

#### requirements

- Licence-free PC software
- Multiple date and time scheduler
- DSENet® expansion compatible

DSE2130 DSE2131 DSE2133 DSE2152 DSE2152 DSE2548	232 485		∲ -	]"	& ∘	¢.	대	- i			
DSENET EXPANSION	RS232 AND RS485		USB CONFIG			ANALOGUE SENDERS	EMERGENCY STOP	DC POWER SUPPLY 8-35V			
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DSE7410/20											
MAINS (UTILITY) SEN BUS SENSING (DSE	ISING (DSE7420) 7410)	N/C VOLT FREE OUTPUT	N/O VOLT FREE OUTPUT	GENERATOR SE	NSING	CHARGE	FUEL & CRANK OUTPUTS FLEXIBLE WITH CAN	ELECTRONIC ENGINES & MAGNETIC PICK-UP			
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### Heavy Duty Industrial

## **CONFIGURABLE OPTIONS**



ENCLOSURE	ENGINE SYSTEM	ELECTRICAL SYSTEM
Open Skid	Oil heater	Battery Warmer
Weather Enclosure	120V-1ph Water Jacket Heater (with Isolation Valves)	10A Battery Charger
Level 1 Sound attenuated	208V-3ph Water Jacket Heater (with Isolation Valves)	6A Battery Charger
Level 2 Sound attenuated	CIRCUIT BREAKER OPTIONS	10 Positions Load Center (100Amps)
ALTERNATOR SYSTEM	LSI Electronic trip 80% and 100% rated	Remote ESTOP with N3R break glass
Anti-condensation heater	LSIG Electronic trip 80% and 100% rated	120V GFCI receptacle
Alternator upsizing	Second Main Line Circuit Breaker	10A Relay common alarm
Rheostat	Mechanical Lugs	10A Run Relay
MX321 AVR	Shunt trip	8 Leds Remote Anounciator on Surface mounted Box
	Auxiliary Contacts for Main and Secondary Breaker	16 Leds Remote Anounciator on Surface mounted Box

24 Leds Remote Anounciator on Surfacee mounted Box

#### GENERATOR SET Extended Factory Load Testing Extended Warranty Seismic Mounts

## **ENGINEERED OPTIONS**

ENCLOSURE	ENGINE SYSTEM	ELECTRICAL SYSTEM
Snow Hood (only with L2)	Fluid Containment Pan	AC/DC Enclosure Lighting Kit with Timer
Air Outlet Gravity dampers		Enclosure Heater
Air Inlet motorized dampers (only with L2)		240V Twist lock receptacle
CIRCUIT BREAKER OPTIONS	CONTROL SYSTEM	GEENRATOR SET
3rd Breaker system	Spare inputs (x4) / output (x4)	Special Testing
Shunt Trip on 3rd Breaker	DSE8610 - Parallel controller with motorized CB	ALTERNATOR SYSTEM
Auxiliary contact on 3rd Breaker	DSE2130 - DSENet Input Expansion Module	Tropical coating
FUELTANK	DSE2157 - DSENet Output Expansion Module	
Custom Size – 72hr and 96hr	DSE855 - DSENet USB to Ethernet ModBusTCP/ IP Communication Module	
Custom type to meet State spec.	DSE892 - DSENet USB to Ethernet ModBusTCP/ IP - SNMP Comm. Module	
	DSE2520 - Remote Display Module	

## HDI180F - 185Kw

Heavy Duty Industrial

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## **OPERATING DATA**

FUEL SYSTEM	
Recommended fuel	# 2 - ULSD - EN590
Fuel supply line, min. ID mm(in.)	9.5 - (3/8")
Fuel return line,min. ID, mm (in.)	9.5 - (3/8")
Max. lift, fuel pump, type, m (ft)	1 (3)
Fuel filter	Secondary 5 Microns @ 98% Efficiency

FUEL CONSUMPTION		(Standby Power Rating)
100% load	Gal/h (L/hr)	13.3 (50)
75% load	Gal/h (L/hr)	10 (38)
50% load	Gal/h (L/hr)	6.7 (25.4)
25% load	Gal/h (L/hr)	5 (19)

COOLING SYSTEM		
Engine cooling air flow	cfm (m³/min)	7,945 (225)
Alternator cooling flow	cfm (m³/min)	1,090 (31)
Combustion air flow	cfm (m³/min)	466 (13.2)
Total cooling air flow (engine+alternator+combustion)	cfm (m³/min)	9,501 (269.2)
Total cooling capacity	US gal (liters)	9.45 (33)
Max. Operating Temperature	° F (° C)	122 (50)

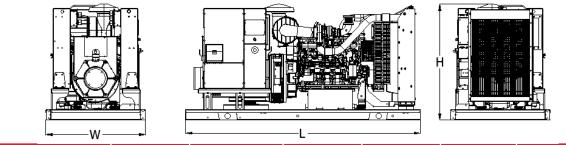
EXHAUST		
Exhaust gas flow	cfm (m³/min)	503 (12.7)
Max. Exhaust temp at full load degrees	°F (°C)	1040 (560)
Max. permissible back pressure	in H2O (kPA )	20 (5)

## Starting Capabilities (sKVA)

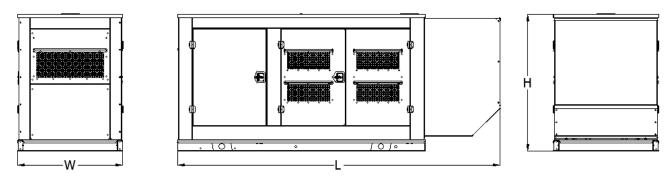
	120/240V (1PH)				277/480V				208/240V				347/600V							
	10%	15%	20%	25%	30%	10%	15%	20%	25%	30%	10%	15%	20%	25%	30%	10%	15%	20%	25%	30%
Standard	n/a	n/a	n/a	n/a	n/a	165	260	380	500	640	140	230	320	430	560	170	260	380	500	640
Upsized	n/a	n/a	n/a	n/a	n/a	190	300	420	570	720	130	210	300	395	510	180	280	400	530	680

## Circuit Breaker

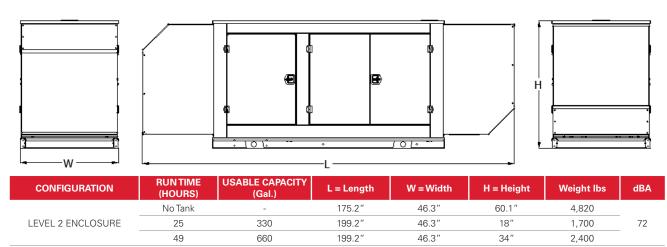
	120/240V (1PH)	277/480V	120/208V	120/240V	347/600V
Make and model	n/a	ABB T5N300TW	ABB T6N800TW	ABB T6N800TW	ABB XT4NU3250BFF000XXX
Amps	n/a	300 A	800 A	800 A	250 A



CONFIGURATION	RUN TIME (HOURS)	USABLE CAPACITY (Gal.)	L = Length	W = Width	H = Height	Weight Ibs	dBA
	No Tank	-	109″	46.3″	53″	3,320	
OPEN SET	25	330	166″	46.3″	18″	1,700	N/A
	49	660	166″	46.3″	34″	2,400	



CONFIGURATION	RUN TIME (HOURS)	USABLE CAPACITY (Gal.)	L = Length	W = Width	H = Height	Weight Ibs	dBA
	No Tank	-	142.1″	46.3"	60.1″	4,700 / 4,720	77 / 74
WEATHER ENCLOSURE / LEVEL 1 ENCLOSURE	25	330	166″	46.3″	18″	1,700	
	49	660	166″	46.3″	34″	2,400	



\* All measurements are approximate and for estimation purposes only. Weights are without fuel tank. Sound levels measured at 23ft (7m) and does not account for ambient site conditions.



**Intertek** Conforms to UL STD 2200 Certified to CSA STD C22.2#100 Certified to CSA STD C22.2#14