

Heavy Duty Industrial DIESEL GENERATOR

MODEL

HDI-80F





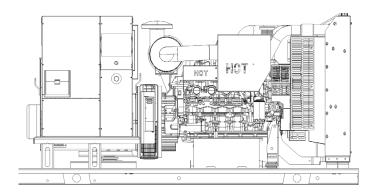




83kW/60Hz//1800RPM



60Hz STANDBY POWER RATINGS



VOLTAGE VAC	120/240V	120/208V	139/240V	277/480V	347/600V
RATING	Standby	Standby	Standby	Standby	Standby
PHASE	1	3	3	3	3
PF	1.0	0.8	0.8	0.8	0.8
HZ	60	60	60	60	60
KW	84	86	83	83	83
KVA	84	107	104	104	104
AMPS	349	298	250	125	100

Description

HIPOWER 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 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 FPT Diesel engine that meets current Environmental Protection Agency (EPA) TIER 3 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.

HIMOINSA POWER SYSTEMS, INC.

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 1400-hr 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. IBC seismic certified to the maximum force level requirements according to ICC-ES AC-156.

Codes and Standards Compliances used where applicable











Heavy Duty Industrial



APPLICATION DATA

Model	ENGINE SPECIFICATION		LUBRICATION SYSTEM	
EPA centified Tier 3 Oil cooler Liquid Crankshaft speed 1,800 rpm Recommended lubricating oil grade refer to owners manually Type Diesel, 4-stroke Oil consumption at full load < 0.1 % of fuel consumption injection Direct Oil consumption at full load < 0.1 % of fuel consumption injection Direct Oil consumption at full load < 0.1 % of fuel consumption injection Direct Power pass (APA) 72.6 (500) Apprintion Turborbarged aftercooled air/air Section 1,000 pp. 1,000 p	Manufacturer	FPT - Iveco	Oil pan capacity - gal (L)	3.4 (12.8)
Transishaft speed 1,800 rpm Recommended lubricating oil grade (effect to owners manual) Type Diesel, 4-stroke Oil consumption at full load 4,3 feet 10,940 rpm manual) Type Diesel, 4-stroke Oil consumption at full load 4,3 feet 10,940 rpm manual) Type Diesel Oil gressure — psi (RPA) 72,6 (900) Typesure — psi (RPA) 72,	Model	N45TM2X	Oil pan capacity with filter - gal (L)	2.2 (8.5)
Central speed Page Diesel, 4-stroke Oil consumption at full load < 0.11% of fuel consumption injection Direct Oil pressure - più (PA) 7.2 6 (500) Aspiration Turbocharged afferocoled air/air ENGINE ELECTRICAL SYSTEM Number of Cylinders 4	EPA certified	Tier 3	Oil cooler	Liquid
Injection Direct Oil pressure – pai (NPA) 72.6 (2001) Aspiration Turbocharged affercooled air/air SNORINE ELECTRICAL SYSTEM Number of Cylinders 4 Starting motor voltage 12 volt Cylinder arrangement In-line Cold Cranking Amps - minimum 650 Amp Displacement CID (liters) 275 (4.5) Battery charging Alternator 60 Amp Bare and Stroke ins (mm) 4.1 x 5.2 (104 x 132) Battery charging Alternator 60 CROUP SIZE 24F Nominal power 131.4 hp Cooling Liquid Governor Mechanical Governor Mechanical Governor Regulation Class 150 8528 Part 1 Class G3 Frequency Regulation Class 150 8528 Part 1 Class G3 Frequency Regulation Results of the start	Crankshaft speed	1,800 rpm	Recommended lubricating oil grade	
Aspiration Turbocharged aftercooled air/air ENGINE ELECTRICAL SYSTEM Number of Cylinders 4 4 Starting motor voltage 12 volt Quinder arrangement In-line Cold Cranking Amps - minimum 650 Amp Displacement CID (liters) 275 (4.5) Battery charging Afternator 60 Amp Bore and Stroke ins (mm) 4.1 x 5.2 (104 x 132) Battery capacity 650 CCA 850 CA 118 CC GROUP SIZE 24F Nominal power 131.4 hp Cooling Liquid 650 CAN 850 CA 118 CC GROUP SIZE 24F Nominal power Mechanical Governor Regulation Class ISO 6528 Part 1 Class G3 Frequency Regulation Class ISO 6528 Part 1 Class G3 Frequency Regulation 125.1 Air cleaner type Heavy duty - single cartridge 142 Class G4 Air cleaner type Watter 142 Class G4 Air cleaner type Watter 142 Class G4 Model 120/208V Three phase UC1274C Model 120/208V Three phase UC1274C Model 120/208V Three phase UC1274C Model 27748 DV Three phase UC1274C Model 347/600V Three phase UC1274C Model 347	Type	Diesel, 4-stroke	Oil consumption at full load	< 0.1% of fuel consumption
Number of Cylinders 4 Starting motor voltage 12 volt Cylinder arrangement In-line Cold Cranking Amps - minimum 650 Amp Displacement Cill (liters) 275 (4.5) Battery charging Alternator 60 Amp Bore and Stroke ins (mm) 4.1 x 5.2 (104 x 132) Battery capacity 6600CA 850CA 115RC GROUP SIZE 24F Nominal power 1314 hp Cooling Liquid Governor Mechanical Governor Mechanical Proop, Less than 5% Starting motor & alternator 12 Volt Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Manufacturer STAMFORD Model 120/2040 Vingle phase UC1224C Model 120/2040 Vince phase UC1224G Model 37/7060V Three phase UC124G Model 120/205 System Brushless Power fleator Qs Brushless Class H Windings - Temperature Rise Class H Class H Electron Class H Windings - Temperature Rise Class H Electron Compined Place Full Alternator Specification on load to full load with Mx331 AVR ** 1% MX331 AVR TIF Starting motor vibrag manufacture on load to full load with Mx331 AVR Tif Compensation compliance Meets requirements of most industrial and commercial applications	Injection	Direct	Oil pressure – psi (kPA)	72.6 (500)
In-line	Aspiration	Turbocharged aftercooled air/air	ENGINE ELECTRICAL SYSTEM	
Displacement CID (liters) 275 (4.5) Battery changing Alternator 60 Amp Bore and Stroke ins (mm) 4.1 x 5.2 (104 x 132) Battery capacity 650CCA 850CCA 115RC GROUP SIZE 24F Nominal power 131.4 hp Cooling Liquid 6 Governor Mechanical 7 Governor Mechanical 10 proop. Less than 5% 60 Amp 15% 650CCA 850CCA 115RC GROUP SIZE 24F Frequency Regulation Class 15O 8528 Part 1 Class G3 Frequency Regulation 125 12 Volt Compression ratio 125-1 Air cleaner type Heavy duty - single cartridge 14 ALLERNATOR SPECIFICATION 14 Manufacturer STAMFORD UCI224G Model 120/200V Three phase UCI224G Model 120/200V Three phase UCI224G Model 120/200V Three phase UCI224G Model 347/860V Three phase UCI224G Alternator Type Four pole, rotating field 12 leads, reconnectable 13 leads 14 le	Number of Cylinders	4	Starting motor voltage	12 volt
Section Stroke ins (mm)	Cylinder arrangement	In-line	Cold Cranking Amps - minimum	650 Amp
Store and Store in strims	Displacement CID (liters)	275 (4.5)	Battery charging Alternator	60 Amp
Cooling Liquid Governor Mechanical Governor Regulation Class ISO 8528 Part 1 Class G3 Frequency Regulation Mechanical Droop, Less than 6% Starting motor & alternator 12 Volt Compression ratio 175-1 Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION ALTERNATOR SPECIFICATION Model 120/240V Single phase UCI274C Model 120/240V Three phase UCI274C Model 277/850V Three phase UCI224G Model 347/650V Three phase UCI224G Model 347/60V Three phase UCI224G Multimator Brushless Excitation System Brushless Wind 1 2 Multimator Class H <td>Bore and Stroke ins (mm)</td> <td>4.1 x 5.2 (104 x 132)</td> <td>Battery capacity</td> <td></td>	Bore and Stroke ins (mm)	4.1 x 5.2 (104 x 132)	Battery capacity	
Governor Mechanical Governor Regulation Class ISO 8528 Part 1 Class G3 Frequency Regulation Mechanical Droop, Less than 5% Starting motor & alternator 12 Volt Compression ratio 175:1 Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Heavy duty - single cartridge Model 120/240V Single phase UC1274C Model 20/240V Single phase UC1274C Model 27/7/480V Three phase UC1224G Model 27/7/480V Three phase UC1224G Model 27/7/480V Three phase UC1224G Model 27/7/60V Three phase UC1224G Multernator 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 (125/40° C)	Nominal power	131.4 hp		
Governor Regulation Class ISO 8528 Part 1 Class G3 Frequency Regulation Mechanical Droop, Less than 6% Starting motor & alternator 12 Volt Compression ratio 175:1 Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Manufacturer STAMFORD Model 120/240V Single phase UCI274C Model 120/208V Three phase UCI224G Model 237/800V Three phase UCI224G Model 347/600V Three phase UCI224G 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 H (125/40° C) Enclosure IIEC-34-S) IP23 Bearing Sigle, esaled Coupling Filexible disc Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR ± 1% MX541 AVR Meets require	Cooling	Liquid		
Frequency Regulation Mechanical Droop, Less than 5% Starting motor & alternator 12 Volt Compression ratio 17.5:1 Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Manufacturer STAMFORD Model 120/240V Single phase UCI274C Model 120/240V Three phase UCI224G Model 277/480V Three phase UCI224G Model 277/600V Three phase UCI224G 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 H (125/40° C) Enclosure (IEC-34-S) IP23 Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Governor	Mechanical		
Starting motor & alternator 12 Volt	Governor Regulation Class	ISO 8528 Part 1 Class G3		
Compression ratio 17,5:1 Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Manufacturer STAMFORD Model 120/240V Single phase UC1274C Model 120/208V Three phase UC1224G Model 277/480V Three phase UC1224G Model 347/600V Three phase UC1224G 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 H (125/40° C) Enclosure (IEC-34-S) IP23 Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF < 50 Meets requirements of most industrial and commercial applications	Frequency Regulation			
Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Manufacturer STAMFORD Model 120/240V Single phase UC1274C Model 120/208V Three phase UC1224G Model 347/600V Three phase UC1224G Model 347/600V Three phase UC1224G 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 H (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 industrial and commercial applications	Starting motor & alternator	12 Volt		
Air cleaner type Heavy duty - single cartridge ALTERNATOR SPECIFICATION Manufacturer STAMFORD Model 120/240V Single phase UC1274C Model 120/208V Three phase UC1224G Model 377/480V Three phase UC1224G Model 377/600V Three phase UC1224G 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 H (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 industrial and commercial applications	Compression ratio	17.5:1		
Manufacturer STAMFORD Model 120/240V Single phase UCI274C Model 120/208V Three phase UCI224G Model 277/480V Three phase UCI224G Model 347/600V Three phase UCI224G 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 H (125/40° C) Enclosure (IEC-34-S) IP23 Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	,	Heavy duty - single cartridge		
Model 120/240V Single phase UCI274C Model 120/208V Three phase UCI224G Model 347/600V Three phase UCI224G Model 347/600V Three phase UCI224G 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 H (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	ALTERNATOR SPECIFICATION			
Model 120/208V Three phase UCI224G Model 277/480V Three phase UCI224G Model 347/600V Three phase UCI224G 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 H (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 industrial and commercial applications	Manufacturer	STAMFORD		
Model 120/208V Three phase UCI224G Model 277/480V Three phase UCI224G Model 347/600V Three phase UCI224G 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 H (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 industrial and commercial applications	Model 120/240V Single phase	UCI274C		
Model 277/480V Three phase UCl224G Model 347/600V Three phase UCl224G 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 H (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		UCI274C		
Model 347/600V Three phase UCI224G 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 H (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 industrial and commercial applications	<u> </u>	UCI224G		
Excitation System Brushless Power factor 0.8 Number of leads 12 leads, reconnectable Stator Pitch 2/3 Insulation Class H Windings – Temperature Rise Class H (125/40° C) Enclosure (IEC-34-S) IP23 Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF Addio Frequency Emissions compliance Redio Frequency Emissions compliance Brushless 12 leads, reconnectable 2/3 Leads, reconnectable 2/4 Leads, reconnectable 2/4 Leads, reconnectabl	Model 347/600V Three phase			
Number of leads 12 leads, reconnectable Stator Pitch 2/3 Insulation Class H Windings – Temperature Rise Enclosure (IEC-34-S) Bearing Single, sealed Coupling Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR TIF <50 Radio Frequency Emissions compliance Name of leads 12 leads, reconnectable 13 leads, reconnectable 14 leads, reconnectable 15 leads, reconnectable 16 leads 17 leads, reconnectable 18 leads, reconnectable 19 leads, reconnectable 2/3 Insulation 19 leads, reconnectable 19 leads, reconnectable 10 leads 10 leads 11 leads, reconnectable 10 leads 11 leads, reconnectable 10 leads 11 leads 12 leads, reconnectable 18 leads 19 leads 10 leads 10 leads 11 leads 12 leads, reconnectable 10 leads 11 leads 12 leads 13 leads 14 leads 15 leads 16 leads 17 leads 18 leads 18 leads 19 leads 19 leads 19 leads 10 leads 10 leads 10 leads 10 leads 11 leads 12 leads 13 leads 14 leads 15 leads 16 leads 17 leads 18 leads 19 leads 19 leads 10 leads 10 leads 10 leads 10 leads 11 leads 11 leads 12 leads 13 leads 14 leads 15 leads 16 leads 17 leads 18 leads 18 leads 19 leads 19 leads 10 leads 10 leads 11 leads 11 leads 11 leads 12 leads 13 leads 14 leads 16 leads 17 leads 18 leads 18 leads 19 leads 19 leads 10 leads	Alternator Type	Four pole, rotating field		
Number of leads Stator Pitch 2/3 Insulation Class H Windings – Temperature Rise Class H (125/40° C) Enclosure (IEC-34-S) Bearing Single, sealed Coupling Flexible disc Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Iz leads, reconnectable 12 leads, reconnectable 2/3 12 leads, reconnectable 12 leads, reconnectable 12 leads, reconnectable 12 leads, reconnectable 13 leads, reconnectable 14 leads, reconnectable 15 leads, reconnectable 16 leads 17 leads 18 leads H (125/40° C) 18 leads H (125/40° C) 19 leads H (125/40	Excitation System	Brushless		
Stator Pitch Insulation Class H Windings – Temperature Rise Class H (125/40° C) Enclosure (IEC-34-S) Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF <50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Power factor	0.8		
Insulation Class H Windings – Temperature Rise Class H (125/40° C) Enclosure (IEC-34-S) IP23 Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Number of leads	12 leads, reconnectable		
Windings – Temperature Rise Class H (125/40° C) Enclosure (IEC-34-S) Bearing Single, sealed Coupling Flexible disc Amortisseur windings Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Class H (125/40° C) IP23 Single, sealed Flexible disc Full ** ** ** ** ** ** ** ** **	Stator Pitch	2/3		
Enclosure (IEC-34-S) Bearing Single, sealed Coupling Flexible disc Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance IP23 Single, sealed Flexible disc Full ** ** ** ** ** ** ** ** **	Insulation	Class H		
Bearing Single, sealed Coupling Flexible disc Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Windings – Temperature Rise	Class H (125/40° C)		
Coupling Flexible disc Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR TIF < 50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Enclosure (IEC-34-S)	IP23		
Amortisseur windings Full Voltage regulation – no load to full load with MX341 AVR TIF <50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Bearing	Single, sealed		
Voltage regulation – no load to full load with # 1% MX341 AVR TIF	Coupling	Flexible disc		
MX3 ⁴ 1 AVR TIF < 50 Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Amortisseur windings	Full		
Radio Frequency Emissions compliance Meets requirements of most industrial and commercial applications	Voltage regulation – no load to full load with MX341 AVR	± 1%		
	TIF	<50		
Line harmonics 5% maximum	Radio Frequency Emissions compliance	Meets requirements of most ind	ustrial and commercial applications	
	Line harmonics	5% maximum		









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			
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

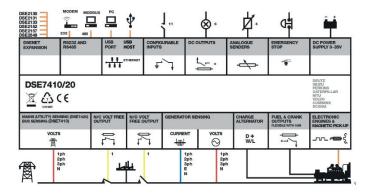
finding

• PLC editor allows user configurable

functions to meet specific application

requirements

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





CONFIGURABLE OPTIONS

ENCLOSURE	ENGINE SYSTEM	ELECTRICAL SYSTEM			
Open Skid	Oil heater	Battery Warmer			
Level 1 Sound attenuated	120V-1ph Water Jacket Heater (with Isolation Valves)	10A Battery Charger			
Level 2 Sound attenuated	208V-3ph Water Jacket Heater (with Isolation Valves)	6A Battery Charger			
	CIRCUIT BREAKER OPTIONS	10 Positions Load Center (100Amps)			
ALTERNATOR SYSTEM	Thermal-Magnetic trip 80% and 100% rated	Remote ESTOP with N3R break glass			
Anti-condensation heater	LS/I Electronic trip 80% and 100% rated	120V GFCI receptacle			
Alternator upsizing	LSI Electronic trip 80% and 100% rated	10A Relay common alarm			
Rheostat	LSIG Electronic trip 80% and 100% rated	10A Run Relay			
MX321 AVR	Shunt trip	8 Leds Remote Announciator on Surface mounted Box			
	Auxiliary Contacts for Main and Secondary Breaker	16 Leds Remote Announciator on Surface mounted Box			
	Second Main Line Circuit Breaker	24 Leds Remote Announciator on Surface mounted Box			
	Mechanical Lugs				
		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	GENERATOR 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 ModBus TCP/IP Communication Module	_
Custom type to meet State spec.	DSE892 - DSENet USB to Ethernet ModBus TCP/IP - SNMP Comm. Module	
Vent Extensions	DSE2520 - Remote Display Module	_
Overfill Protection Valve		_







Heavy Duty Industrial



OPERATING DATA

FUEL SYSTEM	
Recommended fuel	# 2 - ULSD
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)	TBD
Fuel filter	Secondary 5 Microns @ 98% Efficiency

FUEL CONSUMPTION		(Standby Power Rating)
100% load	US Gal/hr (L/hr)	6.8 (25.7)
75% load	US Gal/hr (L/hr)	5.1 (19.3)
50% load	US Gal/hr (L/hr)	3.4 (12.8)
25% load	US Gal/hr (L/hr)	1.7 (6.4)

COOLING SYSTEM		
Engine cooling air flow	cfm (m³/min)	6,356 (180)
Alternator cooling flow	cfm (m³/min)	1,307 (37)
Combustion air flow	cfm (m³/min)	303 (8.6)
Total cooling air flow (engine+alternator+combustion)	cfm (m³/min)	7,966 (225.6)
Total cooling capacity	US gallons (liters)	2.64 (10)
Max. Operating Temperature	°F (°C)	122 (50)

EXHAUST		
Exhaust gas flow	cfm (m³/min)	782 (22.1)
Max. Exhaust temp at full load degrees	°F (°C)	896 (480)
Max. permissible back pressure	in H2O (kPA)	20 (5)

Starting Capabilities (sKVA)

	120/240V (1PH)				277/480V			208/240V				347/600V								
Alternator	10%	15%	20%	25%	30%	10%	15%	20%	25%	30%	10%	15%	20%	25%	30%	10%	15%	20%	25%	30%
Standard	60	90	125	165	215	70	110	160	210	270	55	90	125	170	215	75	120	170	230	290
Upsized	75	120	170	225	290	90	140	200	265	340	65	105	150	200	250	90	140	200	270	345

Circuit Breaker

	120/240V (1PH)	277/480V	120/208V	120/240V	347/600V
Make and model	ABB T5N400TW	ABB XT1NU3125AFF000XXX	ABB T5N300TW	ABB XT4NU3250AFF000XXX	ABB XT1NU3100AFF000XXX
Amps	400 A	125 A	300 A	250 A	100 A

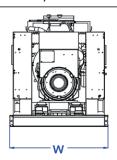


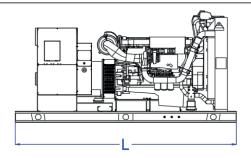


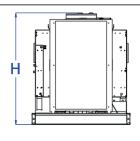




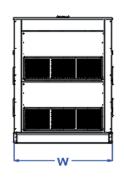
DIMENSIONS, WEIGHTS & SOUND LEVELS

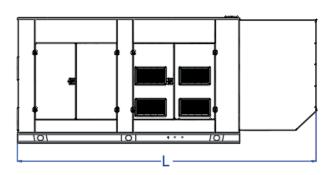


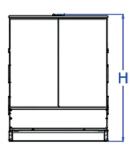




CONFIGURATION	RUNTIME (HOURS)	USABLE CAPACITY (Gal.)	L = Length	W = Width	H = Height	Weight lbs	dBA
	No Tank		85"	43"	51.5"	2261	
OPEN SET	24	163	139"	46.3"	11.5"	1200	N/A
-	48	325	139"	46.3"	21"	1500	

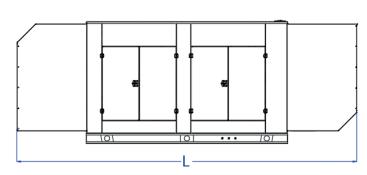






CONFIGURATION	RUNTIME (HOURS)	USABLE CAPACITY (Gal.)	L = Length	W = Width	H = Height	Weight lbs	dBA
LEVEL 1 ENCLOSURE	No Tank	=	113.9"	46.3"	60.1"	3160	- 71
	24	163	139"	46.3"	11.5"	1200	
	48	325	139"	46.3"	21"	1500	







CONFIGURATION	RUNTIME (HOURS)	USABLE CAPACITY (Gal.)	L = Length	W = Width	H = Height	Weight lbs	dBA
LEVEL 2 ENCLOSURE	No Tank	-	143"	46.3"	60.1"	3280	69
	24	163	167.5"	46.3"	11.5"	4480	
	48	325	167.5"	46.3"	21"	4780	

^{*} 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

HIMOINSA POWER SYSTEMS, INC.

16600 South Theden Street, Olathe, KS 66062
Tel: 913 495 5557 | Fax: 913 495 5575 | www. hipowersystems.com

REV-09











Codes and Standards Compliances used where applicable