

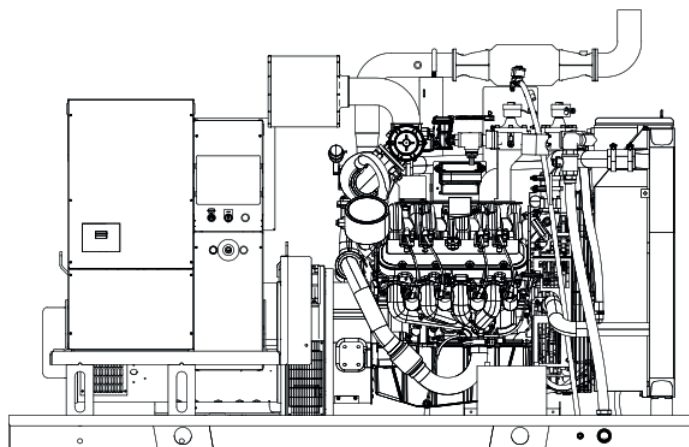
MODEL

# HNI-125

60Hz STANDBY POWER RATINGS



125kW/60Hz/1800RPM



| 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          | 125      | 125      | 125      | 125      | 125        |
| KVA         | 125      | 156      | 156      | 156      | 156        |
| AMPS        | 521      | 434      | 376      | 188      | 151        |

## 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 PSI Spark Ignited engine that meets current Environmental Protection Agency (EPA) 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

**PSI Engine:** Spark Ignited Engine: Long-life, heavy-duty, 4-cycle, direct injection engine for economy of operation and maximum reliability and durability. Capable of full rated load acceptance in one step.

**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 re-connectable, 60Hz brushless alternator with Class H insulation. Automatic voltage regulator (AVR) providing close voltage regulation and skVA starting capability for electric motor loads.

## HIPOWER® Features and Benefits

**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:** Effective low noise, steel catalytic converter with rain cap.

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

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

**HIMOinsa POWER SYSTEMS, INC.**

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Codes and Standards Compliances used where applicable



## APPLICATION DATA

| ENGINE SPECIFICATION                                     |                                                                                         | LUBRICATION SYSTEM                     |                                     |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------|
| Manufacturer                                             | PSI Heavy Duty                                                                          | Oil pan capacity - qts (L)             | 8 (7.57)                            |
| Model                                                    | 8.8LTCAC                                                                                | Oil pan capacity with filter - qts (L) | 8 (7.57)                            |
| EPA certified                                            | Yes                                                                                     | Oil cooler                             | Liquid                              |
| Crankshaft speed                                         | 1,800 rpm                                                                               | Recommended lubricating oil grade      | SAE 5W-30 API RATING OF SM OR NEWER |
| Type                                                     | LPG/NG fueled, 4-stroke                                                                 | Oil consumption at full load           | n/a                                 |
| Ignition                                                 | Spark Plug                                                                              | Oil pressure – psi (kPa)               | 56 (386)                            |
| Aspiration                                               | Turbocharged                                                                            | ENGINE ELECTRICAL SYSTEM               |                                     |
| Number of Cylinders                                      | 8                                                                                       | Starting motor voltage                 | 12 volt                             |
| Cylinder arrangement                                     | V-Type                                                                                  | Cold Cranking Amps - minimum           | N/A                                 |
| Displacement CID (liters)                                | 535 (8.8)                                                                               | Battery charging Alternator            | 60 Amp                              |
| Bore and Stroke ins (mm)                                 | 4.35 x 4.5 (110.5 x 114.3)                                                              | Battery capacity                       | 650CCA 850CA 115RC GROUP SIZE 24F   |
| Nominal power                                            | 261.47 hp                                                                               |                                        |                                     |
| Cooling                                                  | Liquid                                                                                  |                                        |                                     |
| Governor                                                 | Electronic                                                                              |                                        |                                     |
| Governor Regulation Class                                | ISO 8528 Part 1 Class G1                                                                |                                        |                                     |
| Frequency Regulation                                     | Isochronous                                                                             |                                        |                                     |
| Starting motor & alternator                              | 12 Volt                                                                                 |                                        |                                     |
| Compression ratio                                        | 10.1:1                                                                                  |                                        |                                     |
| Air cleaner type                                         | Dry, replaceable cartridge                                                              |                                        |                                     |
| ALTERNATOR SPECIFICATION                                 |                                                                                         |                                        |                                     |
| Manufacturer                                             | STAMFORD                                                                                |                                        |                                     |
| Model 120/240V Single phase                              | UCI274F                                                                                 |                                        |                                     |
| Model 120/208V Three phase                               | UCI274F                                                                                 |                                        |                                     |
| Model 277/480V Three phase                               | UCI274E                                                                                 |                                        |                                     |
| Model 347/600V Three phase                               | UCI274E                                                                                 |                                        |                                     |
| Alternator Type                                          | Four pole, rotating field                                                               |                                        |                                     |
| Excitation System                                        | Brushless. PMG-excited                                                                  |                                        |                                     |
| Power factor                                             | 1.0/0.8                                                                                 |                                        |                                     |
| Number of leads                                          | 4-Lead Dedicated (Single Phase)<br>12 leads, reconnectable<br>12- lead dedicated (600V) |                                        |                                     |
| 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                       |                                        |                                     |
| Line harmonics                                           | 5% maximum                                                                              |                                        |                                     |

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## STANDARD FEATURES

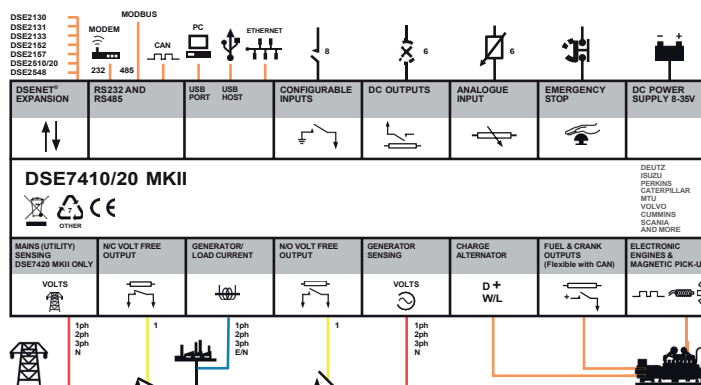
| ENCLOSURE                                                      | ENGINE SYSTEM                 | ELECTRICAL SYSTEM                                              |
|----------------------------------------------------------------|-------------------------------|----------------------------------------------------------------|
| Rust-Proof Fastener with rubber gashers to protect finish      | Oil Drain Extension w/Valve   | Battery                                                        |
| High Performance Sound-Absorbing Material                      | Air Cleaner                   | Battery Cables                                                 |
| Gasketed Doors                                                 | Fan Guard                     | Battery Tray                                                   |
| Air Discharge Hoods for Radiators (Upwards/ Downward Pointing) | Factory Filled Oil            | GENERATOR SET                                                  |
| Lift Off Door Hinges                                           | ALTERNATOR SYSTEM             | Internal Genset Vibration Isolation                            |
| Stainless Steel Lockable Handles                               | 12 Leads                      | Separation of Circuits – High / Low Voltage                    |
| Textured Polyester Powder Coat + Primer                        | Class H Insulation Material   | Wrapped Exhaust Piping                                         |
| COOLING SYSTEM                                                 | Vented Rotor 2/3 Pitch        | Standard Factory Testing                                       |
| Factory-Installed Radiator                                     | Full Load Capacity Alternator | 2 Year/ 2000 hours Limited Warranty                            |
| Radiator Drain Extension w/ Valve                              | Protective Thermal Switch     | Silencer Mounted in the Discharged Hood (Enclosed Models Only) |
| 50/50 Ethylene Glycol Antifreeze                               | Skewed Stator                 |                                                                |

## CONTROL SYSTEM



### DSE7410 MKII

- “Protections disabled” feature
- kW protection
- Reverse power (kW) protection
- LED and LCD alarm indication
- Power monitoring (kWh, kVA<sub>r</sub>, kVA<sub>h</sub>, kVA<sub>r</sub>h)
- 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
- License-free PC software
- Multiple date and time scheduler
- DSENet® expansion compatible
- Charge alternator failure alarm
- 4-Line back-lit LCD text display
- Front panel editing with PIN protection
- Customisable 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)



Codes and Standards Compliances used where applicable

## CONFIGURABLE OPTIONS

| ENCLOSURE                                          | ELECTRICAL SYSTEM                                          | CONTROL SYSTEM                                                  |
|----------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------|
| Open Skid                                          | Battery Warmer                                             | Spare Inputs (4x) / Output (4x)                                 |
| Level 1 Sound Attenuation                          | Battery Charger                                            | DSE2130 - DSENet Input Expansion Module                         |
| Level 2 Sound Attenuation                          | 10 Positions Load Center (100Amps)                         | DSE2157 - DSENet Output Expansion Module                        |
| Level 1 Sound Attenuation (Aluminum Enclosure)     | Remote ESTOP w/ N3R break glass                            | DSE855 - DSENet USB to Ethernet ModBus TCP/IP Comm. Module      |
| Level 2 Sound Attenuation (Aluminum Enclosure)     | 120V GFCI receptacle                                       | DSE892 - DSENet USB to Ethernet ModBus TCP/IP-SNMP Comm. Module |
| Snow Hood (Only w/ Level 2)                        | 10A Relay Common Alarm                                     | CIRCUIT BREAKER OPTIONS                                         |
| ENGINE SYSTEM                                      | 10A Run Relay                                              | LSI Electronic trip 80% and 100% rated                          |
| Oil Heater                                         | Control Panel Heater                                       | LSIG Electronic trip 80% and 100% rated                         |
| 120V-1ph Water Jacket Heater (w/ Isolation Valves) | 8, 16, & 24 Leds Remote Annunciator on Surface Mounted Box | Second Main Line Circuit Breaker                                |
| ALTERNATOR SYSTEM                                  | AC/ DC Enclosure Lighting Kit w/Timer                      | Shunt Trip                                                      |
| Anti-Condensation Heater                           | Enclosure Heater                                           | Auxiliary Contacts for MLCB                                     |
| Rheostat                                           | GENERATOR SET                                              | Auxiliary Contacts for Secondary Breaker                        |
| PMG w/ MX341 AVR or MX321 AVR                      | Extended Test                                              | Mechanical Lugs                                                 |
|                                                    | Extended Warranty                                          |                                                                 |
|                                                    | Custom Testing                                             |                                                                 |

## ENGINEERED OPTIONS

| ENCLOSURE                                | CIRCUIT BREAKER OPTIONS          | ALTERNATOR SYSTEM                             |
|------------------------------------------|----------------------------------|-----------------------------------------------|
| Air Outlet Gravity Dampers               | 3rd Breaker System               | Bearing RTD's on Alternator                   |
| Air Inlet Motorized Dampers (Only w/ L2) | Shunt Trip on 3rd Breaker        | Main Stator RTD's on Alternator (2 per Phase) |
| GENERATOR SET                            | Auxiliary Contact on 3rd Breaker | Tropical Coating                              |
| Seismic Mounts                           | ELECTRICAL SYSTEM                | Alternator Up-Sizing                          |
|                                          | 240V Twist Lock Receptacle       |                                               |

## OPERATING DATA

| FUEL SYSTEM<br>(Measured at engine inlet at operating load)                                                         |                                      |                |       |           |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------|-------|-----------|
| Fuel type                                                                                                           | Natural Gas, LP Vapor withdrawal, LP |                |       |           |
| NG and LPV Fuel supply line - inlet                                                                                 | 1-1/4" NPTF (NG/LPV)                 |                |       |           |
| LP Fuel supply line - inlet                                                                                         | 3/8" (LP)                            |                |       |           |
| Natural gas and LPV fuel supply pressure                                                                            | 7" to 11"column H2O                  |                |       |           |
| LP fuel supply pressure                                                                                             | LP - 312 PSI (Max)*                  |                |       |           |
| FUEL CONSUMPTION - NATURAL GAS<br>(Measured at genset fuel inlet, downstream of any dry fuel or filter accessories) |                                      | m3/h           | ft3/h | BTU/h     |
| 100% load                                                                                                           |                                      | 55             | 1,940 | 1,940,000 |
| 75% load                                                                                                            |                                      | 42             | 1,455 | 1,455,000 |
| 50% load                                                                                                            |                                      | 27.5           | 970   | 970,000   |
| 25% load                                                                                                            |                                      | 13.8           | 485   | 485,000   |
| FUEL CONSUMPTION - LPG<br>(Measured at genset fuel inlet, downstream of any dry fuel or filter accessories)         |                                      | m3/h           | ft3/h | BTU/h     |
| 100% load                                                                                                           |                                      | 20             | 705   | 1,773,543 |
| 75% load                                                                                                            |                                      | 15             | 529   | 1,330,157 |
| 50% load                                                                                                            |                                      | 11             | 395   | 993,184   |
| 25% load                                                                                                            |                                      | 6              | 212   | 532,063   |
| COOLING SYSTEM                                                                                                      |                                      |                |       |           |
| Engine cooling air flow                                                                                             | cfm (m³/min)                         | 13,000 (369)   |       |           |
| Alternator cooling flow                                                                                             | cfm (m³/min)                         | 1,308 (37)     |       |           |
| Combustion air flow                                                                                                 | cfm (m³/min)                         | 364.6 (10.4)   |       |           |
| Total cooling air flow (engine+alternator+combustion)                                                               | cfm (m³/min)                         | 14,673 (416.4) |       |           |
| Total cooling capacity                                                                                              | US gallons (liters)                  | 3.63 (13.7)    |       |           |
| Max, Ambient Operating Temperature                                                                                  | ° F (° C)                            | 120(50)        |       |           |
| EXHAUST                                                                                                             |                                      |                |       |           |
| Maximum allowable back pressure                                                                                     | inH2O(kPa)                           | 3(10.2)        |       |           |
| Exhaust Volumetric Flow Rated @ Rated Power 1350° F                                                                 | cfm (m³/min)                         | 1177.5 (34.34) |       |           |

## Starting Capabilities (sKVA)

|          | 240V |     |     |     |     | 480V |     |     |     |     | 208/240V |     |     |     |     | 600V |     |     |     |     |
|----------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|----------|-----|-----|-----|-----|------|-----|-----|-----|-----|
|          | 10%  | 15% | 20% | 25% | 30% | 10%  | 15% | 20% | 25% | 30% | 10%      | 15% | 20% | 25% | 30% | 10%  | 15% | 20% | 25% | 30% |
| Standard | 85   | 135 | 190 | 250 | 325 | 115  | 180 | 260 | 345 | 440 | 105      | 165 | 230 | 310 | 400 | 120  | 185 | 260 | 350 | 450 |
| Upsized  | 100  | 165 | 230 | 305 | 390 | 135  | 215 | 305 | 405 | 520 | 170      | 260 | 380 | 500 | 640 | 125  | 200 | 285 | 380 | 485 |

## Circuit Breaker

|                | 120/240V                | 277/480V                 | 120/208V                 | 120/240V                 | 347/600V                 |
|----------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Make and model | ABB XT5NU360B-BFF000XXX | ABB XT5NU350BB-BFF000XXX | ABB XT5NU340AB-BFF000XXX | ABB XT3NU3200A-BFF000XXX | ABB XT4NU3200A-BFF000XXX |
| Amps           | 600 A                   | 500 A                    | 400 A                    | 200A                     | 200 A                    |

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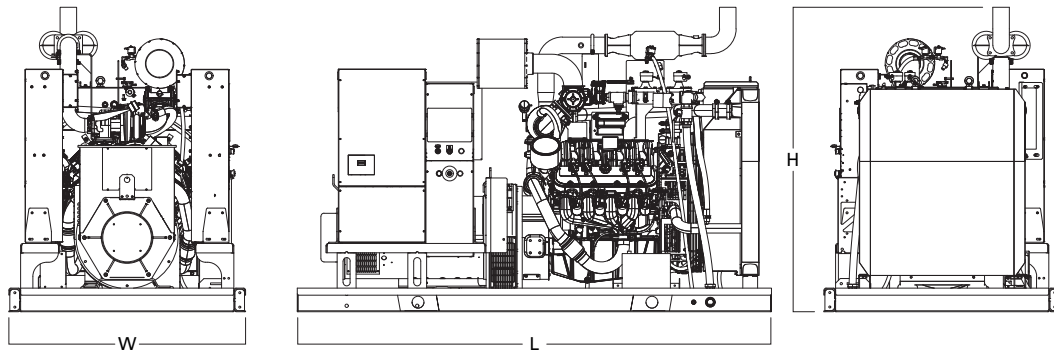
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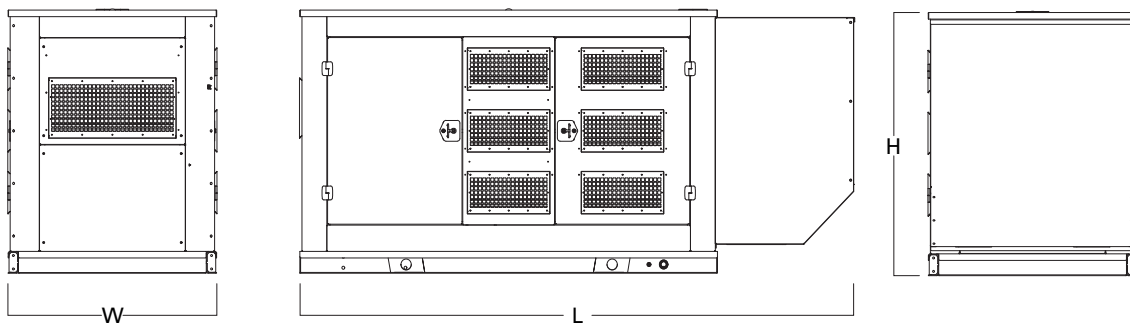
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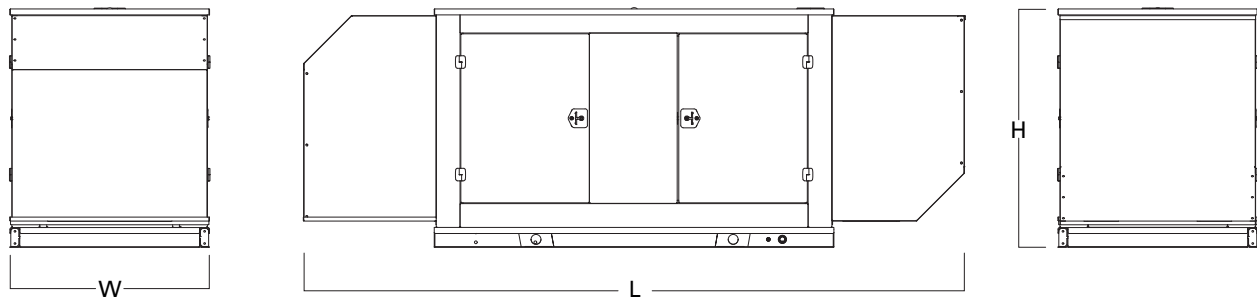
## DIMENSIONS, WEIGHTS & SOUND LEVELS



| CONFIGURATION | L = Length | W = Width | H = Height | Weight lbs | dBA |
|---------------|------------|-----------|------------|------------|-----|
| OPEN SET      | 100.7"     | 50.3"     | 64.7"      | 3430       | TBD |



| CONFIGURATION     | L = Length | W = Width | H = Height | Weight lbs | dBA |
|-------------------|------------|-----------|------------|------------|-----|
| LEVEL 1 ENCLOSURE | 133.8"     | 50.3"     | 60.1"      | 4350       | 78  |



| CONFIGURATION     | L = Length | W = Width | H = Height | Weight lbs | dBA |
|-------------------|------------|-----------|------------|------------|-----|
| LEVEL 2 ENCLOSURE | 166.8"     | 50.3"     | 60.1"      | 4490       | 76  |

\* All measurements are approximate and for estimation purposes only. 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

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REV-11



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