

HDPK20

Perkins Series Gen Set
Stand-by Specification Sheet
Stand by Rating - 20KW
Continuous Rating – 19KW
60HZ



Standard Features

- 4 Cylinder Diesel Engine for maximum durability, reliability and efficiency.
- Brushless alternator provides uninterrupted power with almost zero maintenance.
- Deep Sea 7220 AMF Digital Controller provides user friendly control over generator and easy to read monitoring of engine, alternator and mains (utility) information.
- 200amp Automatic Transfer Switch (ATS) gives customer touch free load transfer from mains to generator when the power goes out.
- Sound and weather enclosure shelters your investment from the elements while keeping the sound to a minimum.
- 50 gallon fuel tank keeps your generator running throughout the outage.
- EPA Tier 4 Compliant keeps the atmosphere clean.
- Oil pan and water jacket heaters are standard.
- Delivered fully ready to perform with batteries, oil and coolant. All you have to is have your electrician hook it up.

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SPECIFICATIONS

Engine Specifications

- Perkins 404D-22G
- EPA Tier 4
- 124.3kW /32.6bhp @ 1800 RPM
- 12V Electric start
- Cast iron engine block
- 2.0 l/hr @ 50% load
- 2.7 l/hr @ 75% load

ENGINE DATA	
Number of cylinders	4
Bore and Stroke	84x100
Displacement	2.216 Liters
Aspiration	Naturally Aspirated
Cycle	4 Stroke
Combustion System	Indirect Injection
Compression Ratio	23.3:1
Rotation	Anti-Clockwise
Cooling System	Liquid Cooled
Total Lubrication Capacity	10.3 Liters
Total Coolant Capacity	7.0 Liters

Alternator Specifications

- Brushless Generating Head
- Single and Three phase options
- Multiple Voltages available
- 4 Pole Connection
- Automatic Voltage Regulator (AVR)

ALTERNATOR DATA	
Model Number	TFDW-20
Rated Power	20KW
Rated Voltage	120/240*
Rated Current	83.3 amps @ 240V 166 amps @ 120V
Rated Frequency	60HZ
Rated Speed	1800 Rpm
Power Factor	1 for single phase/ .8 lagging for three phase
Phase Connection	Single or Three Phase
Excitation Method	Brushless
Voltage Regulation	AVR
Poles	4(L1,L2,N,G)

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CONTROLLER



DSE 7220 DIGITAL CONTROLLER

AUTO MAINS FAILURE MODULE

The Deep Sea 7220 Auto Mains Failure control module is designed as an auto-start and auto-stop module for single gen set applications. The 7220 controller takes all the electronics out of the generator and crams it all into a user friendly module. This controller handles engine, generator and mains (utility) information as well as the operation of the Automatic Transfer Switch.

FEATURES

- Automatic Switching from Mains (utility) power to generator power upon power outage
- User friendly menus and readings
- Fully configurable via PC software
- Editable from front panel
- Multiple date and time maintenance scheduler
- 16 user configurable exercise timers
- Set it and forget it operation upon completion of setup

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Transfer Switch



Automatic Transfer Switch

The Automatic Transfer Switch is the most crucial part for having standby power generation. The ATS is responsible for switching your home from mains (utility) power to generator power when there is a power outage. The ATS is operated and monitored by the equally critical Deep Sea 7220 AMF module on your generator. The ATS is included with your generator in a wall mount, weather resistant steel cabinet.

INCLUDED

- 200Amp AUTOMATIC TRANSFER SWITCH
- Wall-mount weather resistant steel cabinet.
- Pre-wired for ease of installation.
- Wiring Diagram to give to your electrician.
- Measurement of box is 20"x 20"x 10"

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Sound and Weather Enclosure



SOUND AND WEATHERPROOF ENCLOSURE

The steel constructed weather and soundproof enclosure is meant to protect your investment from the elements and decrease noise of operation.

ENCLOSURE

- Houses the Deep Sea 7220 Controller as well as the Perkins 404D-22G diesel engine and the brushless alternator.
- Inside the enclosure is mounted a 30 gallon diesel fuel tank for longer operation.
- Exhaust piping through the roof of the enclosure for ease of extra tubing if generator is placed in a shed or barn.
- Opened grills for efficient airflow.
- Sound Dampening lining to lower noise
- 68dB rating at 7 meters.
- Utility panel for easy hookups.

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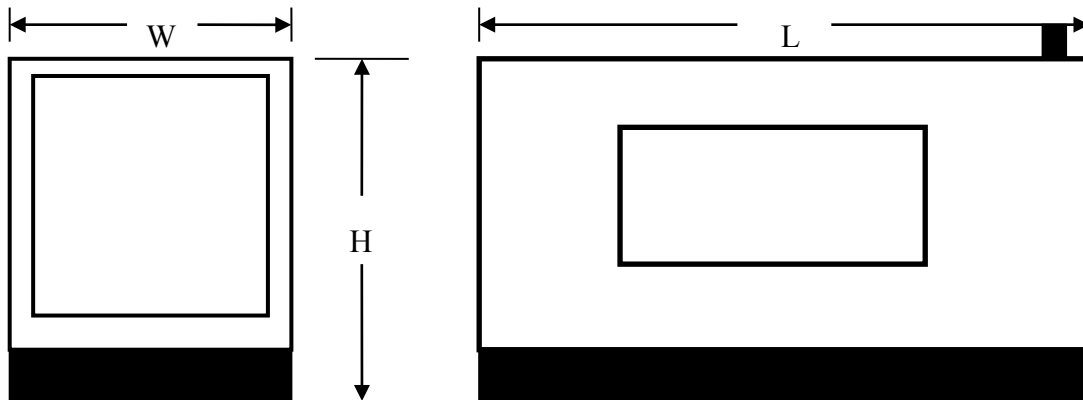
Utility Panel and Measurements



UTILITY PANEL AND HOOKUPS

The utility panel is where your wiring is sent from the generator to the Automatic Transfer Switch. The standard hookup is a 4 pole setup with 4 control wires to hook the Deep Sea Controller to your transfer switch.

- 3 40Amp 240V plugs
- 2 110V Plugs GFCI
- Main Breakers.



Dimensions(LxWxH)*	80	40	57
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* These dimensions are subject to change. Please consult your sales rep for proper sizing. Proper concrete slab size should be 3 feet large on each size for ease of maintenance.