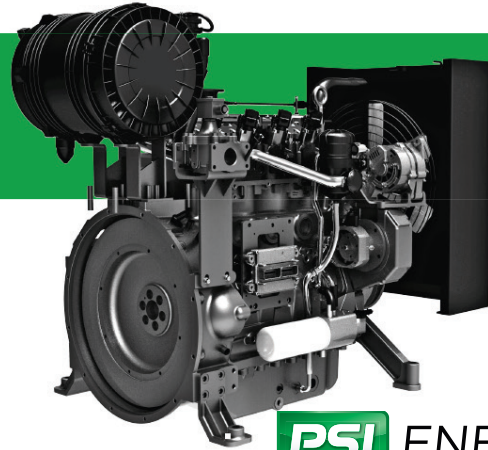


4.5LNA NATURAL GAS/PROPANE ENGINE



PSI ENERGY

The PSI 4.5-liter engine is U.S. EPA-certified for multiple fuels. This fuel-flexible power unit is a fully integrated drop-in solution that delivers uncompromised power performance and maximum fuel efficiency.

Superior engine performance is driven by an ECU that integrates and coordinates all critical functions including: Governor, Variable Ignition Timing, Air Fuel Ratio Control, Knock Suppression and Engine Protection.

The PSI Energy product lineup has displacements from 0.97L to 65L. These engines are an extension of the PSI product line, which is based upon blocks from 650cc to 8.8L. All PSI engines feature the same fuel systems and controls, simplifying your application development and support.

GENERAL DATA

- Cast Iron Engine Block
- One-piece forged crankshaft
- Separate cast iron cylinder heads and wet cylinder liners
- Forged Connecting Rod
- Radiator and hoses supplied
- Thermostatically-controlled system with belt driven water pump and Pusher/Puller fan
- Proven ECM, Fuel System and Engine Control
- Engine Protection
- CANBUS J1939 Standard Interface
- Telematics Compatibility
- SAE 1/SAE 3 flywheel housing and 11.5/10" flywheel

FEATURES

- Flat bottom high capacity oil pan (16 L)
- Cartridge oil filter
- High capacity gear driven lube oil pump
- Replaceable Dry Air Cleaner
- Air Cleaner Restriction Indicator
- 12V electric starter motors electrical system
- Optional low voltage battery charging alternator

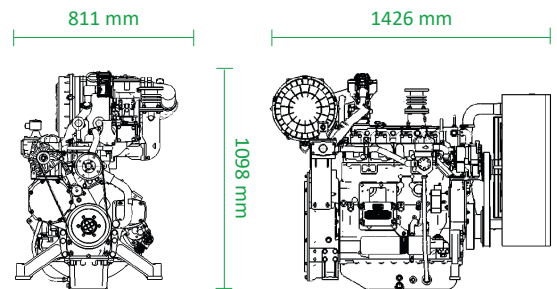
PSI 4.5LNA ENGINE DATA

Model Number	4.5LNA
Cylinders	4
Induction System	Naturally aspirated
Combustion System	Spark-ignited
Cooling System	Water-cooled
Displacement	4.5 L
Bore & Stroke	105 mm x 130 mm
Fuel Type	Natural Gas / Propane / Bi-Fuel
Direction of Rotation	Counter-clockwise viewed on flywheel
Dry Weight	500 kg

POWER RATINGS

GAS ENGINE	NG							RPM
	Gross Engine Output			Typical Generator output				
	ESP	PRP	COP	ESP	ESP	PRP	PRP	
	kWm	kWm	kWm	kWe	kVA	kWe	kVA	
4.5LNA	44	44	31	40	50	40	50	1500
	50	50	35	45	56	45	56	1800

GAS ENGINE	LPG							RPM
	Gross Engine Output			Typical Generator output				
	ESP	PRP	COP	ESP	ESP	PRP	PRP	
	kWm	kWm	kWm	kWe	kVA	kWe	kVA	
4.5LNA	47	47	33	43	53	43	53	1500
	49	49	34	44	55	44	55	1800



kWe values are based on standard assumptions for mechanical and electrical losses. Ratings and performance is subject to site conditions and PSI application and ratings guidelines.

