

SPECIFICATION SHEET

Fuel	Rating	Intermittent	Continuous
Diesel	Power: hp (kW)	147.6 (110.1)	132.8 (99.1)
	Torque: ft-lb (N-m) 1400rpm	487.0 (660)	438.0 (594.0)
	Power: hp (kW) 1800rpm	134.0 (100.0)	120.6 (90.0)

Rating Definitions: Intermittent is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%). The Industrial Continuous engine power rating is for applications that operate with constant load and speed, except for short periods during startup or shutdown. Power output is within + or - 5% at standard SAE J 1995 and ISO3046. (See power curves over)

STANDARD FEATURES:

Tradewinds Power Corp open engine power units are designed, packaged, and tested to meet the power requirements of a wide range of equipment used in agricultural applications. All our systems and components are prototyped, assembled and tested within a purpose built packaging, manufacturing, and test facility.

Key System Features are:

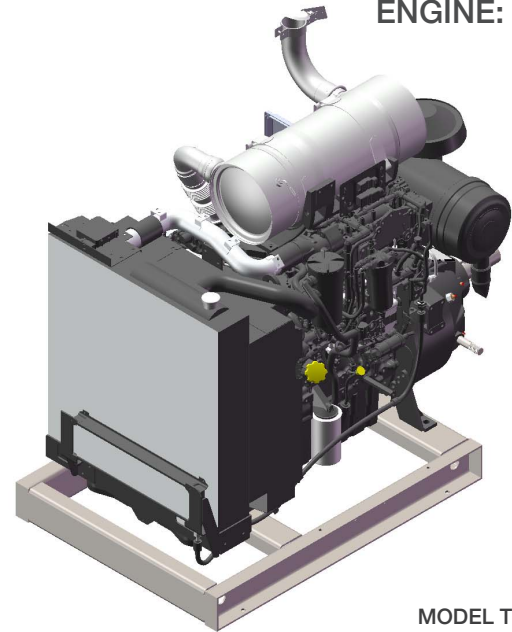
- Engine power units will accept one-step loading
- EPA and CARB certified for Agricultural use
- Designed to meet 2012 EPA Tier 4 Interim
- Complete package ready to use in all Ag applications
- Self contained with mounted exhaust and air-cleaner
- MPC Controller for engine start and stop
- Low oil pressure and high engine temperature fault detection and shut-down protection

Engine:

- Perkins 1204F.E44TA industrial diesel engine
- Heavy duty rated for continuous prime power operation
- Cooling system capable of operation at 120°F ambient
- Fuel system is common rail fuel pump and injectors
- Mechanical rotary fuel pump. The timing and fuel injection pressures are optimized to maximize performance and fuel economy at a given rated speed
- The ECM (Electronic Control Module) controls the injection timing through all speeds and loads. The ECM includes sensors for engine speed, oil pressure, and coolant temperature
- Turbo charged for greater engine output
- The engines are designed and built for dependability and durability, which results in minimum maintenance requirements
- Low cost maintenance is achieved through hydraulic tappets, multi-vee belts and 500 hour oil change intervals
- Aftertreatment technology for Teir 4 compliance includes DPF (Diesel Particulate Filter) and DOC (Diesel Oxidation Catalyst)

Drive System:

- Clutch directly mounted to flywheel housing
- Twin Disc clutch



MODEL TP147-I4

Engine Power Unit Arrangement:

- Engine OPU assembly mounted on steel frame
- Mounted exhaust, radiator, and air cleaner
- All rotating surfaces protected with guards
- Oil and water drain lines.

AUTOMATIC ENGINE CONTROLLER:

- Automatic engine controller with digital display of all functions
- Quick and easy to install
- Advanced, rugged, reliable microprocessor-based design
- Full engine monitoring and shut down protection
- Full autostart, manual start, and off controls
- 3.8" monochrome, transfective, white backlight LCD



MPC-20
ENGINE CONTROLLER
(Available on remote stand)

WARRANTY:

- Engine covered under the original equipment manufacturer's warranty - consult Tradewinds Power Corp for details
- Complete package supplied with one-year unlimited warranty

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

SINGLE ENGINE CLUTCH DRIVE OPU
FUEL: Diesel

ENGINE: Perkins

DRIVE ASSEMBLY:

Configuration	Single engine clutch drive
Clutch manufacture	Twin Disc
Operation	Manual
Pulley drive arrangement	N.A.
Drive shaft speed rpm	1800
Bearings	N.A.

ENGINE SPECIFICATION:

Manufacturer	Perkins
Perkins Model (TPC Build#)	1204F-E44TA (MT51853)
Emissions	2012 EPA Tier 4 Interim
Crankshaft speed	2,200 rpm
Engine Type	In-line, 4-cycle
Combustion system	Compression
Aspiration	Turbocharged aftercooled
Engine type	Diesel Injection
Diesel fuel grade	ASTM D975 D2
Number of cylinders	4
Displacement in ³ (liters)	268.5 (4.4)
Bore and stroke ins (mm)	4.13 X 5.0 (105 X 127)
Peak power hp (kW) @ 2200rpm	147.6 (110.1)
Cooling	Liquid
Governor	Electronic ECU
Compression ratio	16.5:1
Air cleaner type	Canister air cleaner
Exhaust Silencer dBA	TBA
Max. exh temp at full load degrees °F (°C)	TBA
Max. back pressure - ins H ₂ O (kPA)	TBA
Fuel filter	Full flow with water separator

COOLING SYSTEM FOR OPERATING AT 120°F AMBIENT:

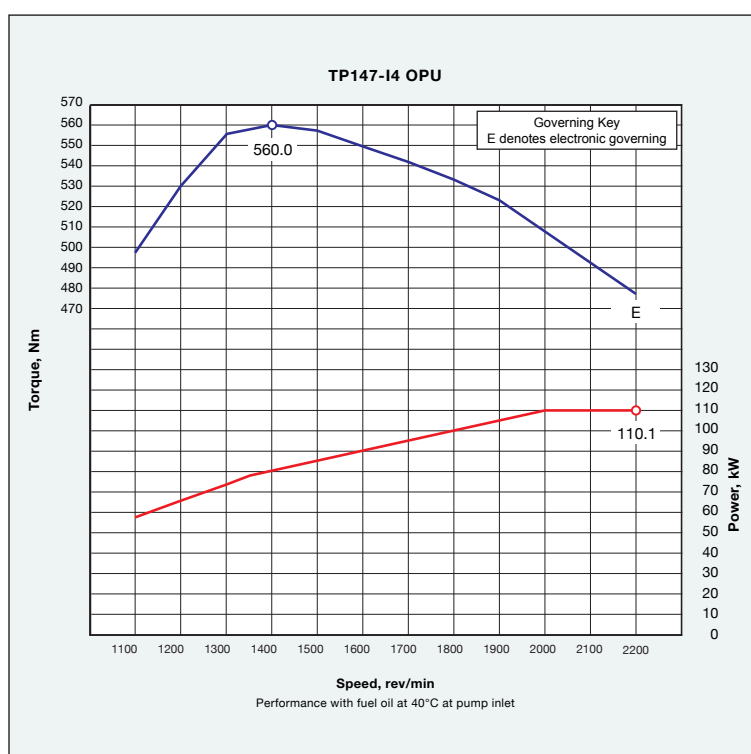
Eng. Cooling air flow - ft ³ /sec (m ³ /sec)	TBA
Radiator Capacity gallons (Liters)	2.85 (10.8)

LUBRICATION SYSTEM:

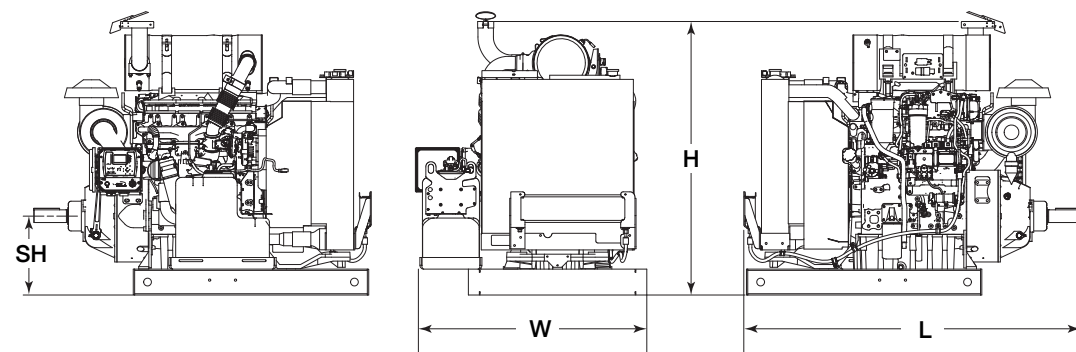
Oil pan capacity with filter - quarts (Liters)	3.57 (13.5)
Recommended lubricating oil grade	15W 40
Oil consumption at full load	< 0.1% of fuel consumption
Oil pressure - psi (kPA)	46 (320)

ENGINE ELECTRICAL SYSTEM:

Starting motor voltage	12 volt
Wet cell battery	Lead Acid
Cold cranking amps - minimum	720 amps

POWER & TORQUE CURVES

ARRANGEMENT DRAWING MODEL:

TP147-I4 OPU Clutch Drive


KEY DIMENSIONS AND WEIGHT

Description	Key	Inches
Height	H	50.25
Length	L	65.25
Width	W	43.38
Shaft Height	SH	15.25
Dry Weight lbs (Kg)		1360 (618)

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