

SPECIFICATION SHEET

| Fuel | Rating | Intermittent | Continuous |
|--------|-----------------------------|---------------|---------------|
| Diesel | Power: hp (kW) 2000rpm | 234.6 (175.0) | 211.0 (157.5) |
| | Torque: ft-lb (N-m) 1400rpm | 760 (1028) | 684 (925) |
| | Power: hp (kW) 1800rpm | 223.9 (167.0) | 201.5 (150.3) |

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:

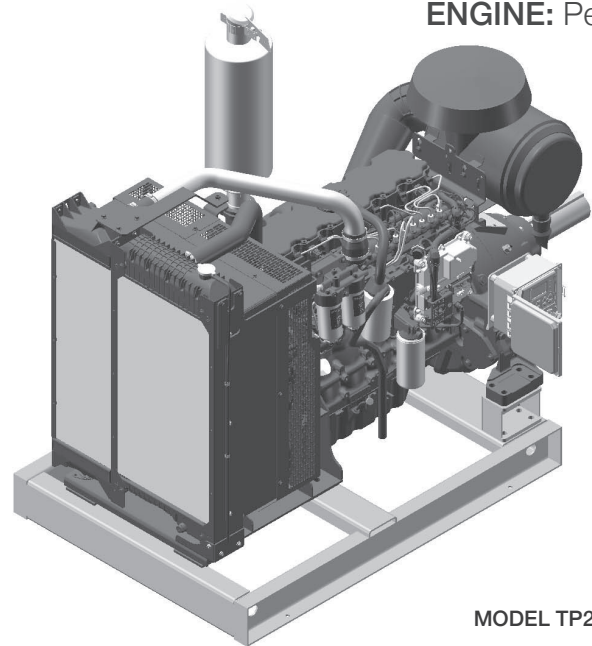
- Engine power units will accept one-step loading
- EPA and CARB certified for Agricultural use
- Designed to meet 2012 EPA Tier 4 Interim
- Complete package ready to use in all Ag applications
- Self contained with mounted exhaust and air-cleaner
- MPC Controller for engine start and stop
- Low oil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

Engine:

- Perkins 1106D.E70TA 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
- A robust electronically controlled common rail engine provides the opportunity to increase power and low speed torque
- 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
- Design consideration has also been incorporated to facilitate the next emissions change to EU Stage IIIB / EPA Tier 4

Drive System:

- Clutch directly mounted to flywheel housing
- Twin Disc clutch


MODEL TP202-I

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

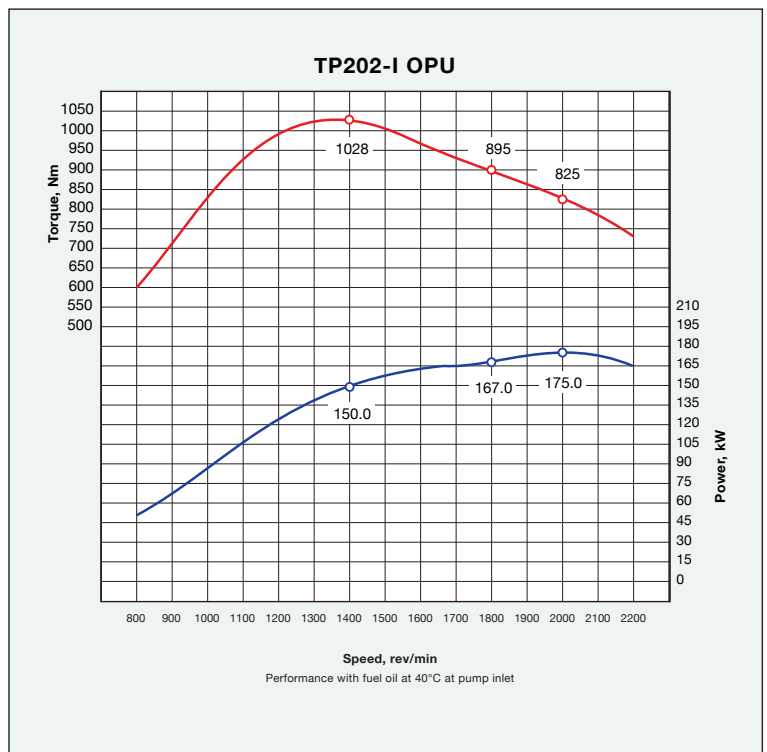
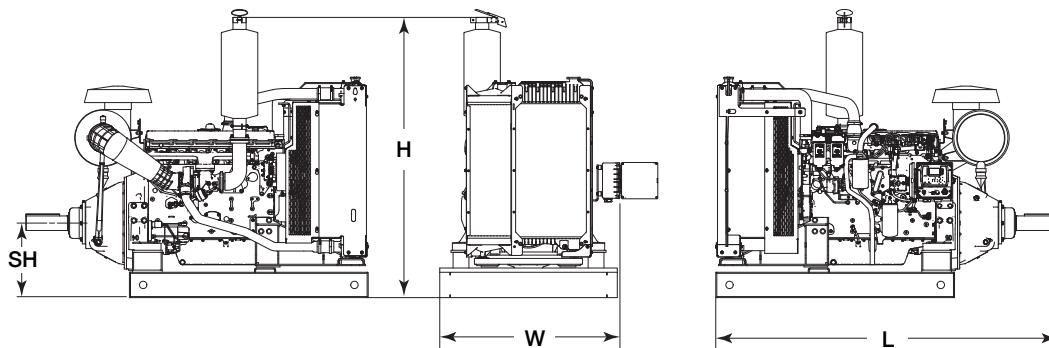
ENGINE: Perkins

| DRIVE ASSEMBLY: | |
|--------------------------|-------------------------------------|
| Configuration | Single engine 1800 rpm 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 |
| Model | 1106D.E70TA |
| Emissions | U.S. EPA Tier 3 |
| Crankshaft speed | 2,000 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 | 6 |
| Displacement in ³ (liters) | 428 (7.1) |
| Bore and stroke ins (mm) | 4.13 X 5.3 (105 X 135) |
| Peak power hp (kW) @ 2200rpm | 234.6 (175.0) |
| Cooling | Liquid |
| Governor | Electronic ECU |
| Compression ratio | 16.8:1 |
| 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) | 4.0 (15.2) |

| LUBRICATION SYSTEM: | |
|--|----------------------------|
| Oil pan capacity with filter - quarts (Liters) | 4.2 (16.0) |
| 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:
TP202-I OPU Clutch Drive**


| KEY DIMENSIONS AND WEIGHT | | |
|---------------------------|-----|-------------|
| Description | Key | Inches |
| Height | H | 66.3 |
| Length | L | 81.02 |
| Width | W | 42 |
| Shaft Height | SH | 17.62 |
| Dry Weight lbs (Kg) | | 2312 (1051) |

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