



### SINGLE ENGINE PULLEY DRIVE ECU

FUEL: NG & LPG

ENGINE: GM

## SPECIFICATION SHEET

Fuel	Rating	Power hp (kW)	Torque ft-lbs (N-m)
Natural Gas	Intermittent	45 (33.6)	224 (303)
	Continuous	39 (29.1)	201 (272)
LPG	Intermittent	60 (44.8)	304 (411)
	Continuous	52 (38.8)	274 (371)

**Rating Definitions: Rated for 2700 rpm engine speed.** (Corrected per SAE J1349)  
Intermittent - Applicable for a varying intermittent loads with no overload capability.  
Continuous - Continuous prime rating is applicable for supplying power to a varying load for an unlimited amount of running time, with 10% overload capacity available for 1 out of every 12 hours.

### STANDARD FEATURES:

Tradewinds Power Corp 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:

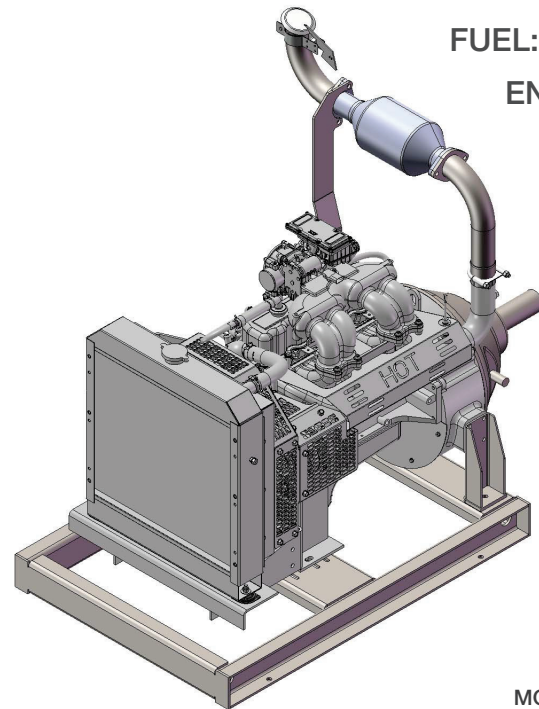
- Engine power units will accept one-step loading
- EPA and CARB certified for Agricultural use
- Four (4) point lifting eyes
- Assembled on integral sub-base with fork lift pockets
- Self contained with mounted exhaust and air-cleaner
- TPC Controller for engine start and stop
- Low oil pressure and high engine temperature fault detection and shut-down protection

### Engine:

- PSI GM3.0L
- Heavy duty rated for continuous prime power operation
- Cooling system capable of operation at 120°F ambient
- Hydraulic lash adjusters with roller finger cam followers
- Even firing order with internal balance shaft to be vibration free
- Broadband knock sensor, calibrated for individual cylinder use
- Coil on plug ignition system for reliable and effective spark delivery
- 12 volt electric start and charging system
- Electronic engine management system with built-in engine protection against detonation, high coolant temperature, low oil pressure, over-speed shutdown, and starter lockout

### Drive System:

- Manual clutch assembled to engine flywheel housing
- Clutch shaft running @ 1800 rpm



MODEL TG51

### Engine Power Unit Arrangement:

- Assembled on steel base frame
- Designed to be moveable via standard door way
- Oil and water drain lines

### AUTOMATIC ENGINE CONTROLLER:

- CAN-based display with rich, full-color graphics
- Full engine control and safety shut-down monitoring
- Bonded glare-free LCD screen, viewable in direct sunlight
- Easy -to-use configuration software
- Full autostart, manual start, and off controls
- Rugged design for extreme environments



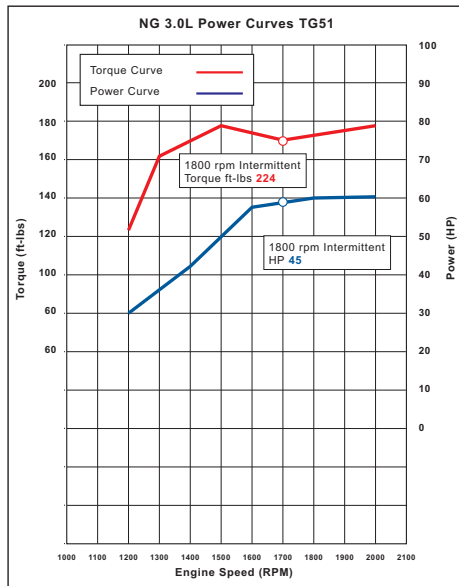
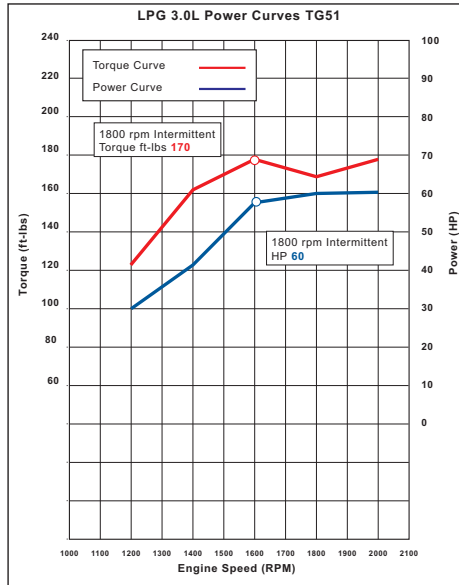
MPC-20  
ENGINE CONTROLLER  
(Available on remote stand)

### WARRANTY:

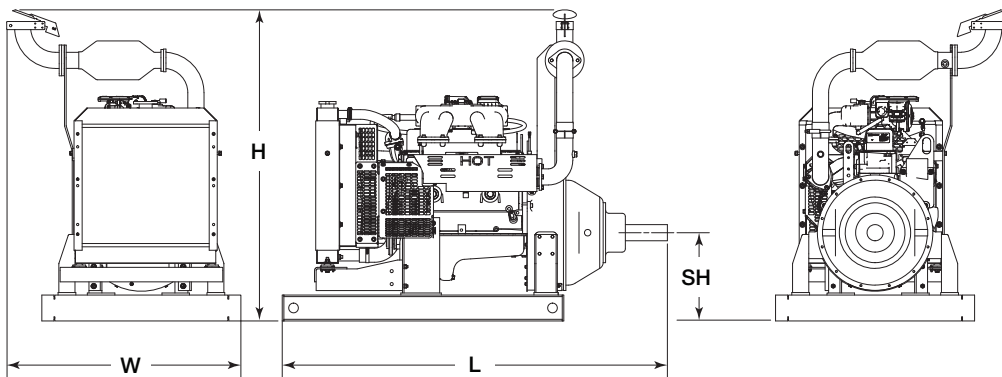
- Engine covered under the original equipment manufacturer's warranty - consult Tradewinds Power Corp for details
- Complete package supplied with one-year unlimited warranty

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

## POWER & TORQUE CURVES



## ARRANGEMENT DRAWING MODEL: TG51 1800 rpm Shaft



DRIVE ASSEMBLY:	
Configuration	Single engine 1800 rpm clutch drive
Drive Connection	Twin Disc
Operation	Manual
Pulley Drive Arrangement	N.A.
Engine to Drive Shaft Speed rpm	1800
Bearings	N.A.
ENGINE SPECIFICATION:	
Manufacturer	GM
Model	PSI 3.0L NA
Emissions	EPA and CARB certified
Max. (Cont.) HP Power 1800 rpm	LPG 60 (52) NG 45 (39)
Type	Industrial, four-stroke
Combustion system	Electronic Spark Ignition
Aspiration	Naturally Aspirated
Engine type	Natural Gas and LPG spark ignition
Fuel NG (LPG)	NG 1050 BTU/FT3 (LPG HD-5)
Min. NPT Supply Pipe Size NG (LPG) inches	1.25 (0.75)
Cylinder arrangement	In-line 4
Displacement in³ (liters)	183 (3.0)
Bore and Stroke ins (mm)	4.0 (101.5) 3.6 (91.4)
Cooling	Liquid
Governor	Electronic
Starting motor & alternator	12 volt
Compression ratio	10.5:1
Air cleaner type	Medium duty dry type
Exhaust Silencer dBA	TBA
Max. Exh temp at full load degrees F (C)	1350 (732)
Max. Exh. Back pressure - ins H2O (kPa)	3 (10.2)
Fuel Filter	Full flow with water separator
COOLING SYSTEM FOR OPERATING AT 120°F AMBIENT:	
Heat Rejection - btu/min (kcal/sec)	1436 (6.04)
Radiator Capacity gallons (Liters)	4 (3.8)
ENGINE ELECTRICAL SYSTEM:	
Starting motor voltage	12 volt
Wet Cell Battery	Lead Acid
Cold Cranking Amps - minimum	720 amps
LUBRICATION SYSTEM:	
Oil pan capacity with filter - quarts	4.0 (3.78)
Recommended lubricating oil grade	SAE 5W-30
Oil consumption at full load	< 0.1% of fuel consumption
Oil pressure - psi (kPa)	250 (121)

KEY DIMENSIONS AND WEIGHT		
Description	Key	Inches
Height	H	46.24
Length	L	59.5
Width	W	30.75
Shaft Height	SH	13.63
Dry Weight lbs (Kg)		390 (177)

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