



### 6" x 6" BYPASS PUMP PACKAGE

**PUMP TYPE: CORNELL** 

**ENGINE:** DOOSAN

# **SPECIFICATION SHEET**

GENERAL BYPASS PUMP PACKAGE INFORMATION						
TPC Model	Pump	Engine	Max. Solids	Fuel Tank	Suc. x Dis.	
TPK064750	Cornell	Doosan	3"	100 gals	6" x 6"	

Engine rating: Rated for 2200 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 PUMP PACKAGE DESCRIPTION

Tradewinds Power Corp (TPC) bypass 6" x 6" pump packages are designed for continuous operation in rugged environments requiring uninterrupted de-watering for extended periods. As standard a automatic priming centrifugal pump and diesel engine are close coupled together on a DOT trailer. The package designed to be easily transported to site making it the preferred pump for renters, municipalities, industrial users, and construction.

#### Key TPK064750 Pump Package Features are:

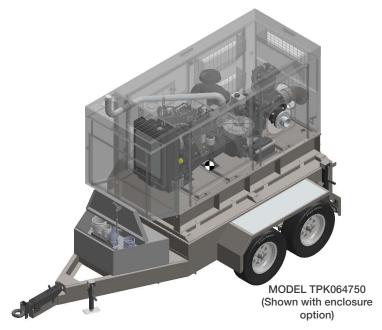
- CORNELL model 6612TVA Redi-Primel<sup>®</sup> bypass pump
- · Doosan diesel engine
- · EPA and CARB certified for mobile applications
- · DOT trailer for road and rough terrain mobility
- · Heavy duty lifting bale
- · 12v starter, charger and battery
- · Auto start controller
- · Open configuration with option for enclosure
- · Spray bed liner that lasts longer than paint
- · Torque spring axles for smoother equipment ride
- · Hose box assembly with 250 PSI hoses
- · All stainless steel hardware

#### Pump Features:

- 6" discharge x 6" suction with 125# cast iron flanges
- · Cast iron casing
- 2-vane enclosed stainless steel impeller that handles 3" diameter solids
- Replaceable wear rings & Run Dry Seals
- Cornell's patented Cycloseal  $^{\circledR}$  design with run-Dry oil lubrication system
- Vacuum pump 50 SCFM maximum. Positive seating vacuum priming valve prevent water carry-over to the vacuum, pump or atmosphere
- · Ball valve made out of brass to prevent corrosion
- · Alarms for Low Oil Level for run dry seals

#### Optional Equipment Available for TPK064750 Pump Package:

- Sound attenuated full enclosure fabricated from marine grade aluminum, and powder paint for durability
- Package can be easily upgraded to a pressure, level or flow transducer auto-start configuration



#### Optional Equipment. Continued:

- · Options for Flow Meters and Level Transducers
- · Hoses with Stainless Steel couplings

#### **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, transflective, white back light LCD



MPC20 ENGINE CONTROLLER

#### WARRANTY:

- Engine & Pump covered under the OEM manufacturer's warranty - consult Tradewinds Power Corp for details
- Complete package supplied with one-year limited warranty

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



## **TPK064750 Performance Curve**

		CORNELL 6	x 6 Pum	p Mode	1 66121	Perfor	mance	Curve			
250	2200 rpm								Data shown is a performance at		
225	\ \ \ \ \	,,	1	/				(	Total suction lift Vertical] Suction	on lift plus all f	
500 Feet		50 60	65 – 70	·/					osses in the su	n is pump hyd	
1		1	70	75	*****				efficiency. For N oump curve	PSHR, refer to	standard
H e a 150	1782 rpm	1	4-//			79	81				
Total Dynamic Head 122 121		1-1-	1/	-/	``-/-			8:	 		
ÜÁO 100		f	A		<u> </u>				/3	76	70 ——
Total 12	1200rpm	4-7-7-7-7									100 hp 75
50		1-1-1	1	/-//		·/··			50 h	75 hp 60 hp	
25								30	40 hp	μ	
0 40							15 hp	25 hp 20 hp			_
NPSHr - ft	Min flow line repr	resents the absolute ump can operate.	lowest								
1	_										
0		500 750	500 12	250 15	00 17	50 20	00 22	50 25	500 27		00 US gpm
	Des	sign Point 500 gpm, / 1750 gpm, 80 ft			— Effic	ciency			<ul><li>Horse</li></ul>		50

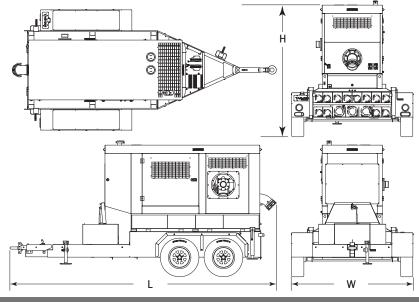
## **TPK064750 Performance Table**

**Diesel Model:** DOOSAN D34 **Pump Model:** Cornell 6612TVA

### Pump Details

Encl. Solids Handling	Adjustable	Package Dimensions		
Design Point min/max	1750gpm 160ft/1000 gpm 125'	Inches and Pounds		
Static Head	tatic Head 0 ft		96.08	
Size	6612TVA	Length	194.30	
Diameter (inches)	12"	Width	88.36	
Speed	1782	Dry Weight	6027.5 lbs	

## **TPK064750 Dimensions**



#### **Pump Specifications** Manufacturer Cornell Model # 6612TVA 6" discharge x 6" suction Туре Priming Self-prime Casing material Cast iron Impeller Enclosed 2-vane Impeller material Stainless steel Ball valve material Brass 3" Solid size managed Wear rings Replaceable Ball bearing life Heavy duty 50,000 hours

Shaft sleeve material

Compression ratio

Stainless steel

Vacuum Pump	50 SCFM maximum		
Engine Specifications			
Manufacturer	Doosan		
Model	D34		
Emissions	Tier 4 - Final & Stage IIIB		
Crankshaft speed	1,800 rpm		
Engine Type & Combustion	Diesel Direct Injection		
Fuel Injection System	High Pressure Common Rail		
Fuel Presssure	1800 bar		
Aspiration	Turbo-Charged & Intercooled		
Diesel fuel grade	EN590 : 2009 Diesel		
Cylinder Arrangement	In-line 4		
Displacement in <sup>3</sup> (liters)	208 (2.392)		
Bore and stroke ins (mm)	3.85 X 4.45 (98 X 113)		
Peak power hp (kW) @ 2400 rpm	130.0 (97.0)		
Cooling	Water Cooled		
Engine Control	Electronic Engine Management		

#### Standard Pump Package Arrangement Coupling Close coupled cam and groove Arrangement DOT trailer mounted Fuel tank 100 gallon mounted in base Starter and charging alternator 12V MPC20 Controller Exhaust Mounted silencer Hose coupling Aluminum 250 psi Lifting bale Site handling management

17.0:1

Options Offered for Pump Package				
Sound attenuated enclosure	Aluminum powder coated			
Hose box	Mounted on bed			
Hose coupling option	Stainless steel			
Auto switch operation options	Pressure/level/flow transducer			
Flow meters	To track water pumped			
Level Transducers	To measure height of water			

TRADEWINDS POWER CORP • 5820 NW 84th Avenue • Miami • Florida 33166

Call: 800.223.3289 or email: info@tradewindspower.com