

# Vertical Turbine – 1 Pump – Compact Deck

## Medium Flow Pump Station – 1 Pump on a single deck

40 to 75 HP; Up to 140 psi (9.7 bar); Up to 800 gpm (50.5 lps, 182 m<sup>3</sup>/h)

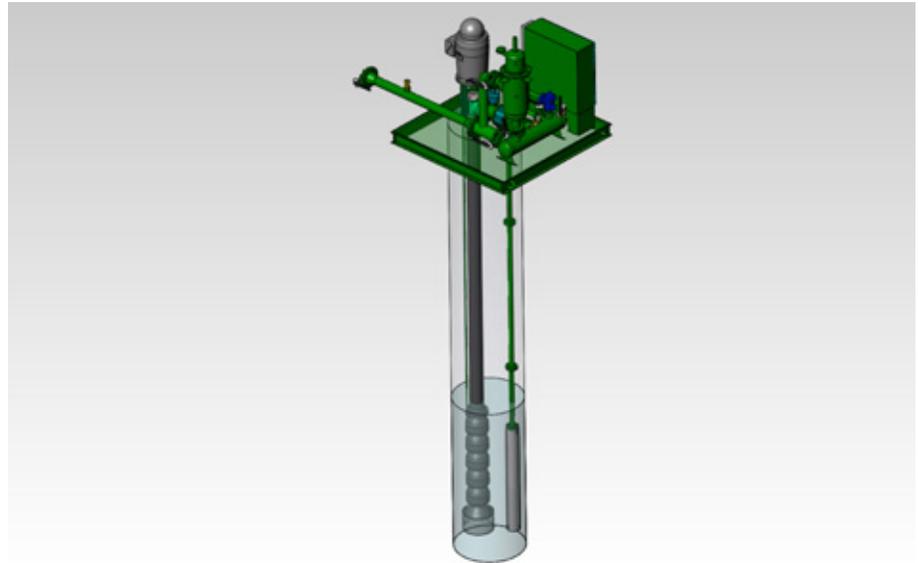
Rain Bird's single pump, vertical turbine pump station on a polyester powder-coated deck is designed to be installed over wet wells or vaults. Vertical turbines offer the highest hydraulic efficiency available, leading to the lowest cost of ownership over the life of the system. With a PM pump for pressure maintenance, this station is well-suited for large Turf and Golf Course irrigation applications with flows up to 800 gpm (50.5 lps, 182 m<sup>3</sup>/h).

### At-A-Glance Description

- **High Performance Control Package** – With either a cost-effective monochrome touchpanel display or high resolution color touchpanel display for improved user interfaced and remote monitoring via VNC (Virtual Network Computing)
- **Energy efficient** – Variable Frequency Drive (VFD) maintains constant pressure at varying flow demand.
- **Choice of filtration options** and accessories.

### Standard Features

- **Main Pump**
  - Marine Bronze Impellers
  - Stainless Steel Vertical Line Shaft
  - Porcelain Lined Bowls
  - 60K PSI Ductile Iron Head
- **Motors**
  - High Efficiency Motors, Weather Protected Type WP1, Class F insulation
  - Motor heaters
- **Mechanical Features**
  - Discharge Butterfly Isolation Valve
  - Silent Check Valve
  - Pressure Relief Valve
  - Air Relief Valve
  - Hose bib
- **Pressure / Flow**
  - Stainless Steel Pressure Transducer
  - Paddle Wheel Flow Meter
- **Enclosures / External Connections**
  - Polyester Powder-Coated Steel Deck and Piping
  - Integral Wet Well Service Hatch
  - NEMA 4 Electrical Enclosure
  - Heat Exchanger on Electrical Enclosure



- **Pump Control**
  - VFD
  - Illuminated, 3-position HOA switches
  - Resettable Circuit Breakers
- **Display**
  - 4-Line Monochrome Touchscreen
- **PLC (Programmable Logic Control)**
  - Ethernet-ready PLC Control Package

- **Lake Level Safety**
  - Low Level Shut Off (Float)

### Optional Features

- **Main Pump**
  - 316 SS or NiAl Bronze Impellers
  - 316 SS, NiAl Bronze, or Coal Tar Epoxy Coated Bowls

*(continued on back)*

### Vertical Turbine – 1 Pump – Small Deck

Motor Size	40 HP	50 HP	60 HP	75 HP
<b>Power Requirement</b> (other power configurations available upon request)	230/60/3 V/HZ/PH			
	480/60/3 V/HZ/PH			
	415/50/3 V/HZ/PH			
	380/50/3 V/HZ/PH			
	575/60/3 V/HZ/PH			
<b>Discharge Flow at 110 psi <sup>(1)</sup></b>	400 GPM 25.3 LPS, 91 m <sup>3</sup> /hr	500 GPM 31.6 LPS, 113 m <sup>3</sup> /h	600 GPM 37.8 LPS, 136 m <sup>3</sup> /h	80 GPM 50.5 LPS, 182 m <sup>3</sup> /h
<b>Discharge Pipe</b>	4"			
<b>PM Pump</b>	5 HP Submersible PM Pump - Optional			
<b>Deck Dimensions</b>	5' 9" x 6' 4" (1.75 meters x 1.93 meters)			
<b>Min Slab Dimension</b>	12' 9" x 12' 4" minimum (3.88 meters x 3.76 meters minimum)			
<b>Wet Well Diameter</b>	36" Diameter minimum (1.2 meters minimum)			
<b>Pump Set Length</b>	Up to 40 ft. (12.2 meters)			
<b>Clearance Height (from slab)</b>	5' 1" (156 cm)			

(1) Refer to pump performance curves, provided upon request from pumps@rainbird.com

## Optional Features (cont.)

- **Pressure Maintenance**
  - 5 HP PM pump – Submersible
- **Motors**
  - Premium Efficiency Motors
- **Mechanical Feature**
  - Well Service Valve
- **Pressure / Flow**
  - Magnetic Flow Meter
- **Display**
  - 8.4 inch, Color Touch Panel Display
  - Ethernet port for VNC Connectivity

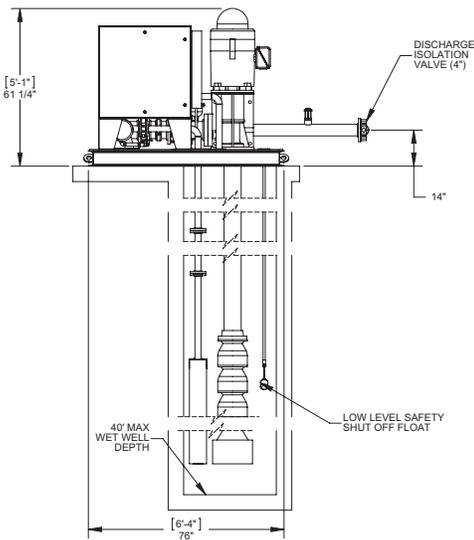
- **Panel Only**
  - Electrical Panel only (for retrofits)
- **Communications**
  - Ethernet Radio Modem Kit
  - Hardwire Ethernet Extender kit

## Accessories

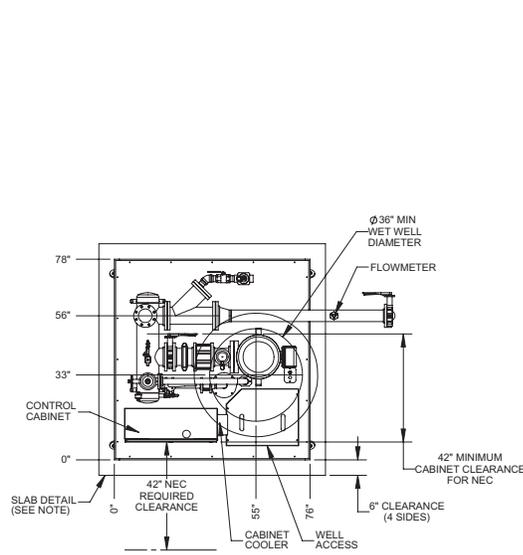
- **Filters**
  - Wye Strainer Filter (1/8" openings)
- **Intake Filters**
  - SS Steel Box Screen
  - SS Self Cleaning Intake Screen

- **Enclosures / External Connections**
  - Air Conditioning on Electrical Cabinet
  - 5 KW room heater
  - Power Zone (3, 5, or 10 kVA (110-220 VAC))
  - Custom Zee Pipe
- **Lake Level Control**
  - Lake Level Controls (Float or Analog)

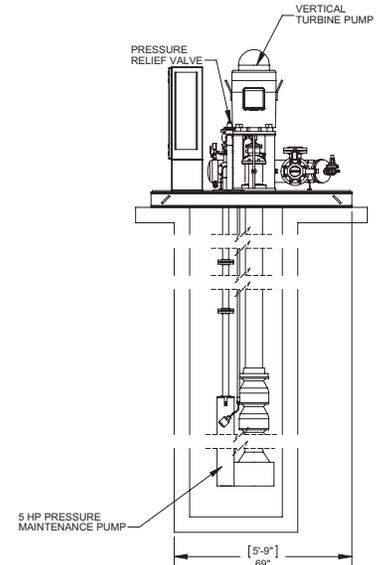
## Details



**Profile View**



**Plan View**



**Side View**

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