# **6813 TITAN® II Motors**WPI and WPII Vertical Motors



Horsepower: 500 – 4000 HP

**Speed Range:** 400 – 1800 RPM

Rated Voltages: 460 through 6900 Volts, 3 Phase,

50 or 60 Hz

Insulation: Class F, INSULIFE VPI 2000, 5000

or Premium EVERSEAL®

**Enclosure:** WPI or WPII





#### **Product Overview and Features**

The 6813 frame vertical TITAN® II motor is custom built, based on customer specifications and requirements. It includes WPI and WPII (weather protected) enclosures, and is available in speed ranges from 400 to 1800 RPM. 6813 frame verticals can be manufactured with either a hollow shaft or solid shaft in both low and medium voltage. Oil-lubricated bearings are standard on high and extra-high thrust capacity designs. The 6813 vertical TITAN II can be built with or without the BALLOMATIC® non-reverse ratchet and can be rated either standard or premium efficiency.

The U.S. MOTORS® brand 6813 vertical TITAN II motor is manufactured using a cast iron rather than a fabricated frame allowing the winding and frame assembly to be produced in parallel rather than in series. This feature reduces production time and means faster delivery to the customer. Additionally, the 6813 vertical TITAN II incorporates the latest, improved rotor fabrication process for extra reliability.

U.S. MOTORS brand vertical motors have been a standard in the pumping industry since 1922. These motors are recognized for their longevity, reliability and ease of use for virtually any centrifugal pump application in every major stage of water treatment and processing.

The 6813 vertical TITAN II incorporates a newly designed cooling circuit that moves more cooling air over the endturns of the stator increasing the efficiency of the cooling system. The new cooling circuit reduces the thermal stresses on the insulation and winding of the motor leading to more reliability, less services, and a longer life of the motor.

### **Product Options:**

- Solid Shaft or HOLLOSHAFT®
- Inverter duty with insulated bearings and shaft grounding provisions
- · Bearing and winding temperature detectors
- BALLOMATIC® non-reverse ratchet
- · Winding space heater
- · Thrust bearing cooling coils
- · Aluminum or copper bar rotor
- · Vibration switch options



6813 vertical TITAN® II

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# 6812 TITAN® II Motors TEFC Vertical Motors



Horsepower: 450 – 2000 HP

**Speed Range:** 400 – 1800 RPM

Rated Voltages: 460 through 6900 Volts, 3 Phase,

50 or 60 Hz

Insulation: Class F, INSULIFE VPI 2000, 5000

or Premium EVERSEAL®

Enclosure: Totally Enclosed Fan Cooled (TEFC)





#### **Product Overview and Features**

The 6812 frame vertical TITAN® II motor is custom built, based on customer specifications and requirements for applications such as, mining and oil and gas industries. It includes a TEFC enclosure, and is available in speed ranges from 400 to 1800 RPM. The 6812 frame verticals can be manufactured with either a hollow shaft or solid shaft in both low and medium voltage. Oil-lubricated bearings are standard on high and extra-high thrust capacity designs. Normal thrust motors feature grease lubricated bearings. The 6812 vertical TITAN II can be built with or without the BALLOMATIC® non-reverse ratchet and can be rated either standard or premium efficiency.

The U.S. MOTORS® brand 6812 vertical TITAN II motor is designed and built to high standards utilizing materials and manufacturing processes that ensure reliability and long life. The design incorporates our latest, improved rotor fabrication process for extra reliability. U.S. MOTORS® brand vertical motors can be manufactured to meet API 610 standards for applications such as booster, transfer, pipeline, chemical process and in refinery water treatment facilities. They can also be designed with many features that are required by API 547.

This new vertical TEFC frame from Nidec Motor Corporation satisfies the industry need for a high horsepower, totally enclosed electric motor that requires less service and less variation in design. The 6812 full cast iron frame does not require cleaning of cooling tubes or filters and, unlike fabricated steel frames, performs consistently.

### **Product Options:**

- Solid Shaft or HOLLOSHAFT®
- Inverter Duty with insulated bearings and shaft grounding provisions
- · Bearing and winding temperature detectors
- BALLOMATIC® non-reverse ratchet
- · Winding space heater
- · Thrust bearing cooling coils
- · Aluminum or copper bar rotor
- · Vibration switch options
- API 547 features





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