

# 5813 TITAN® II Motors

## WPI and WP II Vertical Motors



**Horsepower:** 250 – 1750 HP

**Speed Range:** 400 – 1800 RPM

**Rated Voltages:** 460 through 6900 Volts, 3 Phase,  
50 or 60 Hz

**Insulation:** Class F  
VPI 2000, 5000 or Premium EVERSEAL®

**Enclosure:** WPI or WP II



### Product Overview and Features

The 5813 frame Vertical TITAN® II motor is custom built, based on customer specifications and requirements. It includes WPI and WP II (weather protected) enclosures, and is available in speed ranges from 400 to 1800 RPM. 5813 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 5813 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 5813 Frame 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 5813 frame 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.

### 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



5813 Frame TITAN® II

† All marks shown within this document are properties of their respective owners.

Nidec Motor Corporation, 2014; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation. Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

**Nidec**  
NIDEC MOTOR CORPORATION

8050 W. Florissant Avenue | St. Louis, MO 63136  
Phone: 888-637-7333 | Fax: 866-422-7758

# 5812 TITAN® II Motors

## TEFC Vertical Motors



**Horsepower:** 200 – 1250 HP

**Speed Range:** 400 – 1800 RPM

**Rated Voltages:** 460 through 6900 Volts, 3 Phase,  
50 or 60 Hz

**Insulation:** Class F  
VPI 2000, 5000 or Premium EVERSEAL®

**Enclosure:** Totally Enclosed Fan Cooled (TEFC)



### Product Overview and Features

The 5812 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 5812 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 5812 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 5812 frame 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 5812 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



5812 Frame TITAN® II

† All marks shown within this document are properties of their respective owners.

Nidec Motor Corporation, 2014; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation. Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

**Nidec**  
NIDEC MOTOR CORPORATION

8050 W. Florissant Avenue | St. Louis, MO 63136  
Phone: 888-637-7333 | Fax: 866-422-7758