Users in the Petroleum and Chemical industries wanted a general purpose, easy to specify motor that had the base features required for safe, reliable operation in severe duty applications. The American Petroleum Institute responded by creating Specification number 547.

The Baldor • Reliance API 547 motor is designed to meet the spec and is also the first motor of any kind to receive the API Monogram. This commitment to delivering quality and value to our customers is one of the reasons that Baldor • Reliance motors remain the preferred choice of users in the Petrochemical Industry.

**About API Standard 547**

- This standard covers the requirements for form-wound induction motors for use in general purpose petroleum, chemical, and other industrial severe duty applications.

These motors:
- Are rated 250 Hp – 3000 Hp for 4, 6, and 8 pole speeds
- Are rated < 800 Hp for 2 pole totally enclosed motors
- Are rated < 1250 Hp for 2 pole WP-II motors
- Drive centrifugal loads
- Drive loads having inertia values within those listed in NEMA MG 1 Part 20

**Application Information**

- API 547 motors are ideally suited for many common pump, fan, and compressor applications.
- Data Sheets for 547 motors are available, but not required as the specification has default selections for all necessary motor features.
- Pre-Engineered model number selections are available for 2 pole and 4 pole motors.

**About the API Monogram**

As an API licensee Baldor • Reliance is committed to modern quality systems enabling us to deliver interchangeable products that are safe and meet industry standards and performance specifications. Receiving the API license proves that Baldor has documented systems that incorporate the structure, responsibilities, control processes, and resources needed to manage and maintain quality.
API 547 Motor Feature Summary

- 85 dBA
- API vibration limits - .10 in/sec or 1.5 mils
- 1.0 service factor
- Sleeve bearings
- API foot planarity (0.002 in/ft)
- Oil resistant silicon leads
- Pilot holes for dowel pins
- Sump heaters for sleeve bearing motor if < 18C ambient
- Class 1 Div 2, Group C & D T3A
- 60 Hz sine wave power
- Crowned 1/2 key for balancing
- (2) Insulated bearings and a grounding device
- Ambient “-25˚C to +40˚C”
- (2) Frame grounds
- APEX (UV resistant) paint system
- API routine test minimum
- Aluminum rotor – fab CU required over 1000 Hp
- Starting duty nameplate
- 80% RVS per NEMA load curve (> 500 Hp)
- XTS features for TEFC
- Constant level oilers – sleeve bearing
- Permanent end float indicator – sleeve bearing
- Vertical jack screws
- Spot face for hold down bolts
- 650% maximum locked rotor current
- 3.5 per unit surge withstand
- Stainless steel hardware
- Standard high efficient design
- 3300 feet altitude
- Horizontal – foot mounted
- Solid seal insulation (2 cycle VPI system capable of passing a water immersion test)
- IP55 bearing protection
- Oversized conduit box for stress cones
- Winding RTD’s ~ 100 ohm pt. 2 per phase
- Bearing RTD’s 100 ohm pt. 1 per bearing if sleeve bearing
- Replaceable space heaters – T3A
- Direct coupled
- Automatic drainage fittings
- Long term storage for at least 6 months

Additional Features for WPII Motors
- Stainless steel and filters
- Provisions for a differential air pressure switch/gauge

Additional Features for Model Number Motors
- CSA certified
- F1 to F2 convertible
- 2300/4000V
- Provisions for probes

API 547 Model Number Motor Selection Chart

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