

## PA57-1000 AC PERMANENT MAGNET (PM) MOTOR



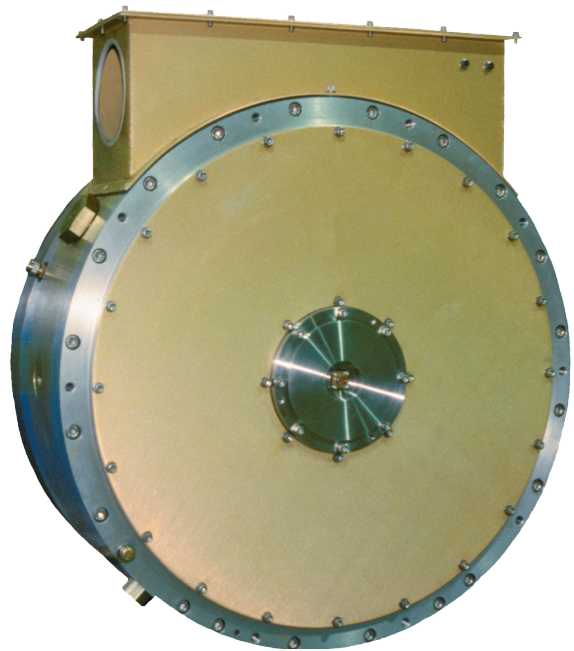
# THE PA57-1000 AC PM MOTOR PROVIDES EXTREME POWER-DENSITY AND EFFICIENT PERFORMANCE

### LEVERAGE THE BENEFITS OF PM TECHNOLOGY.

The Leonardo DRS PA series Permanent Magnet (PM) motors are designed to maximize the benefits of PM technology with direct water cooling. Inherently more efficient, this PM motor is one of the most power dense motors available in industry today. **At 750 pounds the PA57-1000 motor produces 1.3 horsepower per lb. at 4000 rpm.**

The completely enclosed water cooled is CE ATEX certified to operate in moist and dusty environments and in extreme temperatures (-40 to +60°C ). This motor has also been in service in applications including propulsion systems for buses and marine power and propulsion applications.

Leonardo DRS is a leader in the design and manufacture of advanced electrical machinery, focusing on machines for demanding jobs where efficient performance and precise control are required.



# PA57-1000 AC PERMANENT MAGNET (PM) MOTOR

## BENEFITS

- Extremely power-dense
- Energy efficient
- Generator applications
- Low rotor inertia

## FEATURES

- Liquid cooling
- Dual stator
- Certified IP Class I Div. II: Explosive Environments
- Choice of internal or external splined shaft

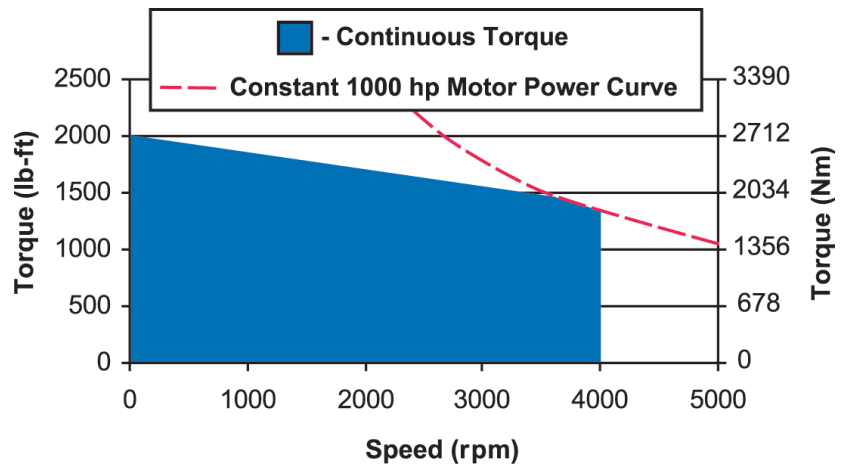
## OPTIONAL FEATURES

- CE ATEX, ABS Certification
- Special Shaft Extensions
- Rotor Temperature Sensor

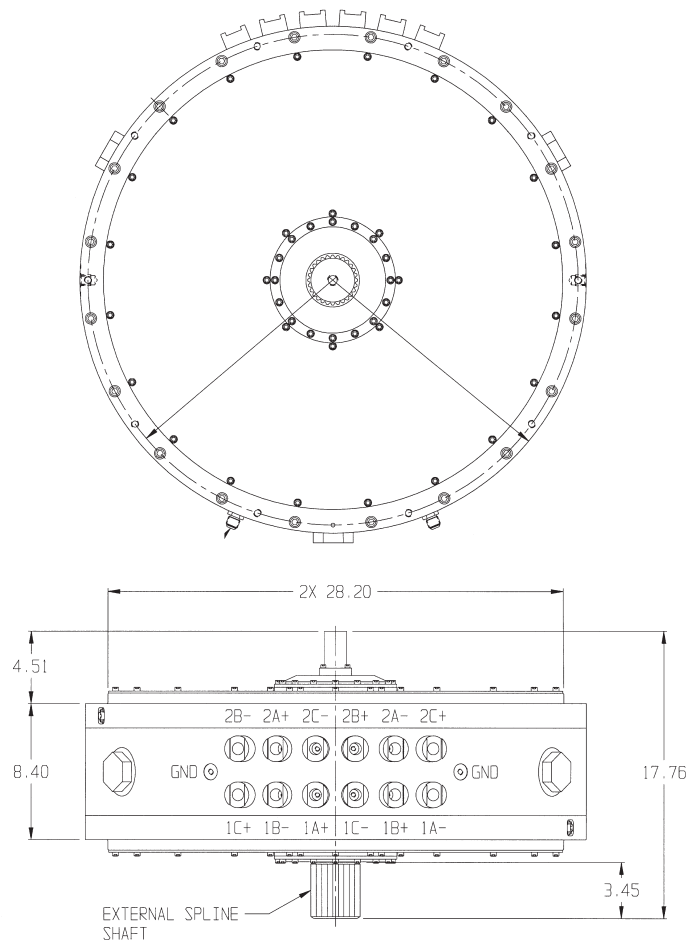
## MOTOR SPECIFICATIONS

PERFORMANCE	P57-1000
Rated power	1000 HP (746 kW)
Rated speed	4,000 rpm
Maximum torque	2,000 ft-lbs. (2,712 Nm)
Rated volts	700 V peak
Rated phase current	Arms
Rated frequency	Hz
Frequency constant	0.30 Hz/rpm
Max operating speed	rpm
Rotor moment of inertia	2.1 kg m <sup>2</sup>
Efficiency at rated speed	96%
PHYSICAL CHARACTERISTICS	
Weight	750 lbs. (340 kg)
Cooling (water/glycol)	120° F (50° C) max
Coolant flow rate	10 gpm (5 gpm per stator)

## MOTOR CHARACTERISTICS



## MOTOR DIMENSIONS



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