MODEL 483 HIGH VOLTAGE ELECTRICAL SWIVEL (HVES)

The Model 483 High Voltage Electrical Swivel (HVES) utilizes environmentally friendly gaseous insulation to accommodate operating voltages of up to 72.5 kV. This HVES has been designed specifically for 66 kV weathervaning offshore applications such as floating wind.

The enclosure and internals are standardized to provide cost and lead time savings. The HVES has a central through bore to allow electrical, hydraulic and/or fiber optic services to pass. The HVES is designed to be low maintenance and provide real-time health indicators that can be monitored remotely. Large access hatches are supplied standard such that inspection and maintenance can be performed in-situ as required.

Focal has been producing highly reliable MV power swivels for the FPSO market since 1990, with over 32 units in the field and a demonstrated uptime greater than 99.93%. This HVES design incorporates Focal's experience and proven, industry leading technology, further verified by prototype qualification tests at a certified laboratory.

PHYSICAL CHARACTERISTICS

- Design life: 30 years
- Ambient: -25°C to +45°C (-13°F to 113°F)
- External materials: AISI 316, 316L or similar
- Maximum continuous rotation speed: 1 rpm
- Ingress rating: IP66 typical

INDEPENDENT VERIFYING BODY

- Det Norske Veritas (DNV), others possible

CODES ADHERED TO

- EN 50068
- DNV-RP-C203
- DNV-OS-D201
- IEC 60071-1
- IEC 60529
- IEC 61892-2
- IEC 62271 Series
- NORSOK M-601 and M-630

SPECIFICATIONS

Electrical Characteristics:

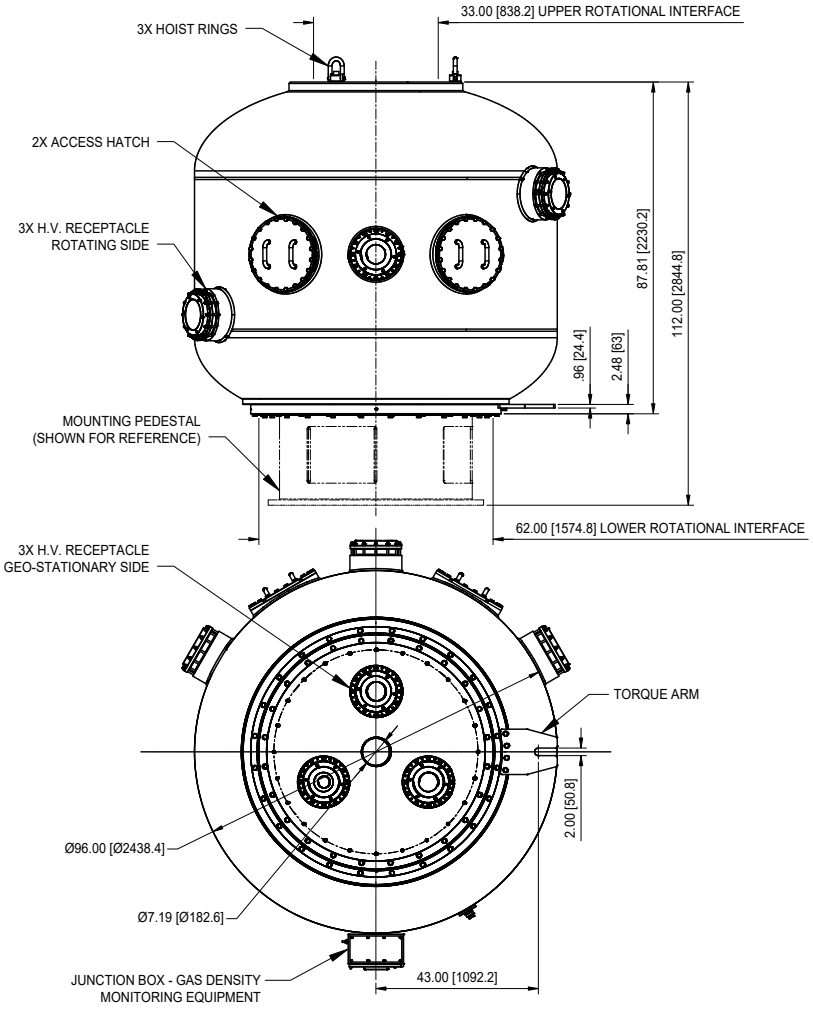
- Three-phase, three-wire
- Voltage: 72.5 kVAC
- Current: 800 A typical
- Power: 100 MVA
- BIL: 325 kV
- Dielectric: gaseous
- Connections: connectors IAW IEC 62271 series
- Power efficiency is 99.97%

Mechanical Characteristics*:

- Through bore of ø182.6 mm (7.19 in)
- Approximate weight: 5,280 kg (11,620 lb)
- Approximate torque: 27,000 Nm (20,000 lb-ft)

Supplementary Items:

- Condition monitoring via PLC system
- Visual monitoring of gas pressure / density
- Access hatches with viewing windows
- Self-sealing gas fittings provided
- Hoist rings for lifting supplied IAW ASME B30.26
- Easy, field implementable upgrade path to 145 kV with change to a higher di-electric strength, environmentally friendly gas
- Integral geo-stationary side connection area allows for daisy-chaining multiple installations



**Specifications do not include support pedestal and are subject to change.*

For product information, visit **www.moog.com/focal**

For more information or the office nearest you, contact us online, **rotarysolutions@moog.com**

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