Product Description

Power Paragon’s new “hybrid” technology combines Step Wave Modulation (SWM) and Pulse Width Modulation (PWM) waveforms to provide high efficiency solutions in a single compact common modular 6MW Medium Voltage Motor Drive (MVMD).

MVMD motor drive modules operate as a motor drive or active rectifier.

The parallel drive system accommodates up to six MVMD modules to drive motors in increments of 6MW (6MW up to 36MW).

FEATURES
- The MVD6 is compatible with all types of multi-phase motors:
  - Induction
  - Synchronous
  - High Temperature Superconductor (HTS)
  - Permanent Magnet technologies
- Delivers high efficiency > 98%
- Low line harmonics
  - High power quality waveforms with low THD <2%
- MVD6 supports full galvanic isolation with additional DC/DC converters
- Compact module for small system footprint and envelope
- MVMD modules configured in parallel or synchronized, are capable of driving 3-, 6- or 9-phase motors

APPLICATIONS
- DC power supply
- Potential PCM-4 type source replacement for Next Generation Integrated Power Systems (NGIPS)
  - Eliminates need for 60Hz transformer
  - Weight savings in comparison to existing Integrated Power Systems
- Single common module suitable for many applications – drives and distribution
- Perfect for retrofit with existing motors
MEDIUM VOLTAGE MOTOR DRIVE (MVD6)

BENEFITS

• High-power quality – minimizes the output filter size and weight
• Low output DV/DT – key benefit for motor winding
• Uses low cost, low voltage IGBTs to generate medium voltage output
• Eliminates the need for harmonic filters
• MVD6 module fully supports bi-directional power flow and operates as an active rectifier to provide high DC power
• High torque drive capability with low ripple at low speeds
• Power dense with fresh water liquid-cooling, eliminates need for de-ionized water
• Single common module part number for two functions deduces

SPECIFICATIONS

• Rated at 6.25MW, +/-0.9PF
• Input voltage: 4200 VDC
• Output voltage: 4160 VAC, variable frequency, 3-phase
• Individual MVMD measures: 144”L X 51” W X 84” H
• Individual MVMD weighs: 8,000 lbs

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