

MEDIUM VOLTAGE MOTOR DRIVE

L3Harris' "hybrid" technology combines step-wave modulation and pulse-width modulation waveforms to provide a power dense high efficiency solutions modular 6MW Medium Voltage Motor Drive (MVMD).

Our MVMD motor drive modules operate as a motor drive or active rectifier for DC applications.

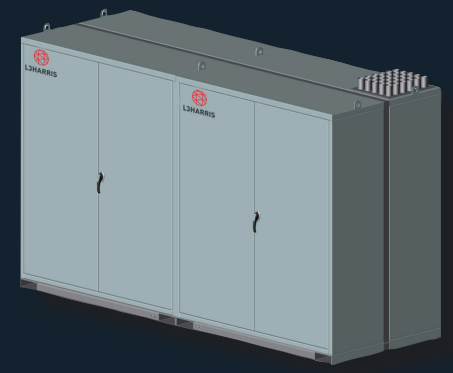
As many as six MVMD modules can operate in parallel to drive motors in increments of 6MW (6MW up to 36MW).

FEATURES

- > The MVMD is compatible with all types of multi-phase motors:
 - > Induction
 - > Synchronous
 - > High temperature superconductor
 - > Permanent magnet technologies
- > Delivers high efficiency >98%
- > Low line harmonics - High power quality waveforms with low total harmonic distortion <2%
- > MVMD supports full galvanic isolation with additional AC/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

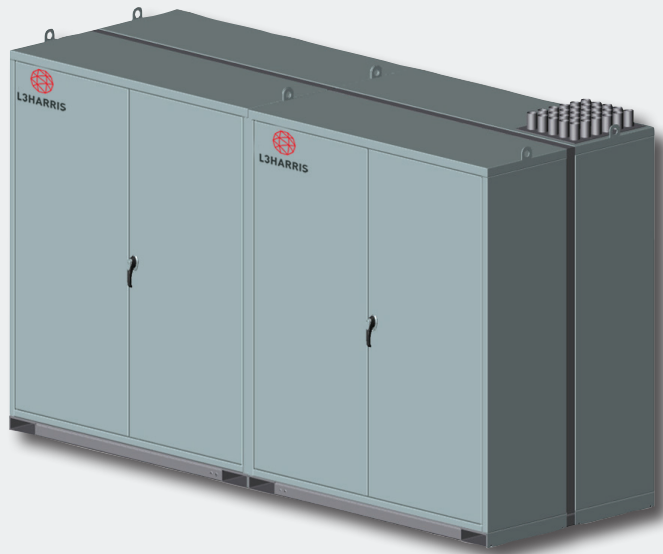
APPLICATIONS

- > DC power supply
- > Potential PCM-4 type source replacement for next generation integrated power systems
 - > 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
- > Future surface and combatants



BENEFITS

- > High-power quality – minimizes the output filter size and weight
- > Low output delta voltage/delta time – key benefit for motor winding
- > Uses low cost, low voltage IGBTs to generate medium voltage output
- > Eliminates the need for harmonic filters
- > 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



SPECIFICATIONS

- > Rated at 6.25MW, +/-0.9PF
- > Input voltage: 4200 VDC
- > Output voltage: 4160 VAC, variable frequency, 3-phase
- > Individual MVMD measures: 144" length X 51" width X 84" height (3658 mm length X 1295 mm width X 2134 mm height)
- > Individual MVMD weighs: 8,000 lbs

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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1025 W. NASA Boulevard
Melbourne, FL 32919
ProductSales@L3Harris.com