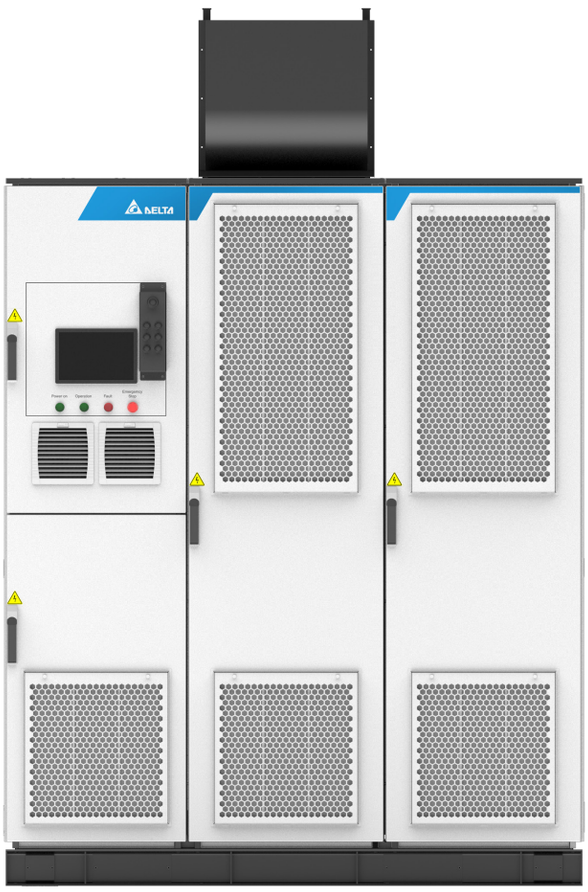
All-In-One MVU / MVF Series
Medium Voltage Drives



Delta Electronics Quick Facts

- Founded in 1971
- Delta is an energy-saving solutions provider with core competencies in power electronics
- Delta is #1 global power supply manufacturer and #1 thermal management solution provider
- Delta features advanced products & world-class manufacturing facilities
- Recipient of several global awards and recognition for its business achievements, innovative technologies and dedication to corporate social responsibilities
- Worldwide 60 R&D facilities in Taiwan, China, Europe, India, Japan, Singapore, Thailand, and the U.S, 153 sales offices, 38 manufacturing facilities and regional application engineering

Delta All-In-One MVU/MVF Medium Voltage Drive Highlights

- Very compact All-in-one drive.
- Front side access for all ratings.
- Power cell ratings from 36A to 215A
- Meets IEE519 requirement (THDI< 5%)
- High-efficiency
- Compact and reliable
- Energy-saving solution
- Advanced motor vector control algorithms
- Shipped fully assembled
- Ready for installation
- Easy operation and maintenance
- Fast dynamic response to load fluctuations and high torque at low speeds
- Multilevel output voltage

Application Segments

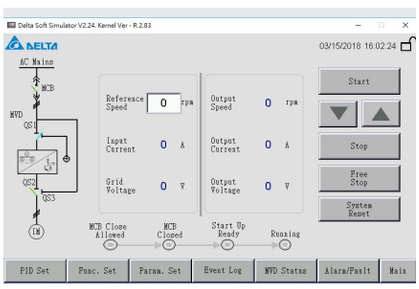
- Power generation
- Petrochemical
- Rubber
- Metals
- Cement
- Sugar
- Oil & gas
- Mining
- Public facilities

www.deltaww.com/mvd/en

Drive Specifications	MVU / MVF series
Input Frequency	50 Hz / 60 Hz (-2% ~ +2%)
Input voltage tolerance	-10%~10% normal operation; -30%~-10% de-rating operation
Control Power	AC 380 V 3Φ or AC 220 V 1Φ□5kVA
Input Current THD	<5% (at rated speed & load), compliant with IEEE-519
Power Factor	>0.96 (at rated speed & load)
Drive Efficiency	>98.5% (at rated frequency & load, excluding transformer)
Input Voltage Range	2.3 kV ~ 13.8 kV
Output Voltage Range	2.3kV ~ 11 kV (UL model up to 6.9 kV)
Output Frequency Range	0.5 ~ 120 Hz
Output Frequency Resolution	0.01 Hz
Overload Capacity	Standard 110% for 1 min, every 10 min, other overload ratings available on request
Speed Control Method	V/F control / Vector control / Sensor less vector control
Speed Control Range	1% ~ 100% with encoder); 5% ~ 100% (sensor less)
Speed Control Resolution (steady state)	±0.1% (depends on the encoder resolution); ±0.5% (sensor less)
Modulation Method	SVPWM
Analog I/O	2 channels / 4 channels (0~10 V or 4~20 mA); expandable through additional IO module (optional)
Digital I/O	10 channels / 8 channels, dry contact type; expandable through additional IO module (optional)
HMI for Local Operation	7” multi-language touch panel, 10’’ available (option)
Communication Interface (Optional)	Modbus RTU, Modbus TCP, PROFIBUS DP (DPV0), DeviceNet™, ProfiNet IO, EtherNet/IP™, EtherCAT®, CANopen®, PowerLink, ControNet™
Type of Motor	Induction motor (squirrel cage, slip-ring motor); Synchronous motor (with brush and exciter system)
Operating Temperature	0°C ~ +40°C normal operation; +40°C ~ +50°C de-rating operation
Relative Humidity	5% ~ 95%, no-condensing
Altitude	<1000 m normal operation; 1000 m ~ 2000 m de-rating operation
Cooling Method	Forced air cooling by top cooling fans
System Bypass	Manual bypass, auto bypass, synchronous transfer bypass
Enclosure Structure	SPCC steel enclosure, self-standing, access from front only, RAL 7035 color
Enclosure IP Class	IP31, IP42 available
Pollution Degree	Degree 3
Compliance Standards	IEC, IEEE, GB, CE and UL

Compact and high efficiency modules

Advanced testing station



HMI Screen

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