

HD9xs Series – Two-quadrant Cell-cascaded Medium-voltage AC Drive

Basic features: Highly reliable cell-cascaded vector control AC drives which are based on the two-quadrant and synchronous/asynchronous motor control platform and can be built in bypass mode

Voltage range: 3–13.8 kV

Power range: 200 kVA to 30 MVA

Topology: Power cell cascaded

Applications:

Energy-saving applications in power, chemical, petrochemical, water treatment, metallurgy, municipal and other fields

Large capacity (above 10 MW) variable frequency and soft start applications

- AC drive in use reaching maximum power of 10 MW (electric water supply pump, main sintering fan)
- Maximum application altitude 4700 m, in Naqu area, Tibet
- Pioneer in applying medium-voltage 700 Hz high-speed PMSM control in China



HD9xs-R Series – Four-quadrant Cell-cascaded Medium-voltage AC Drive

Basic features: Highly reliable high-performance cell-cascaded vector control AC drives which are based on the four-quadrant and synchronous/asynchronous motor control platform and can be built in bypass mode

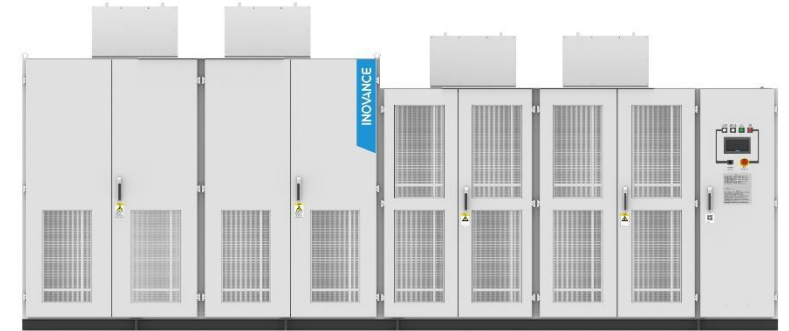
Voltage range: 3–13.8 kV

Power range: 200–7000 KVA

Topology: Power cell cascaded, AFE rectification

Applications: mines, cranes, test stations and other occasions requiring bidirectional energy flow between the load and the grid

- AC drive in use reaching maximum power of 14 MW (two AC drives connected in parallel)
- Batch applications of descending belt conveyors, mine hoists and high-power test benches
- Application of permanent magnetic synchronous direct drive with multi-drive belt



HD7xs Series – High-end Dedicated Medium-voltage AC Drive

Basic features: High-performance cell-cascaded medium-voltage AC drive targeted at segment markets such as central air conditioning, mixer, and shore power (industry-tailored or customized AC drive)

Voltage range: 3–13.8 kV

Power range: 200–15000 KVA

Topology: Power cell cascaded

Applications:

Customers and industries with special requirements

- Market share of central air conditioning ranking No.1 in China
- Market share of internal mixer drive ranking No.1 in China
- First supplier of integrated solutions for onshore power supply in China



HD3x Series – Three/Five-Level Medium-Voltage AC Drive

Basic feature: Medium-voltage AC drive based on two/four-quadrant and synchronous/asynchronous motor control water cooled platform, applying the three-level/five-level neutral point clamping topology, multi-drive common DC busbar design, and highly dynamic performance vector control algorithm

Voltage range: 2.3–3.3 kV

Power range: Three units can be paralleled for rectification and five units can be paralleled for inverter

2.5–7.5 MVA (IGBT models)

10–45 MVA (IGCT models)

Performance indicator: Torque response of 5 ms; Speed stability accuracy of 0.01% (FVC); Torque accuracy $\pm 2\%$ (synchronous motor)

Topology: Three-level/Five-level neutral point clamping topology (multi-pulse rectifier or AFE)

Application scenarios: Medium-voltage rolling mills for metallurgy

Medium-voltage high-power mine hoists

Medium-voltage high-performance test benches

