

INGEDRIVE

MV 700

Frequency converters
air-cooled, medium-voltage

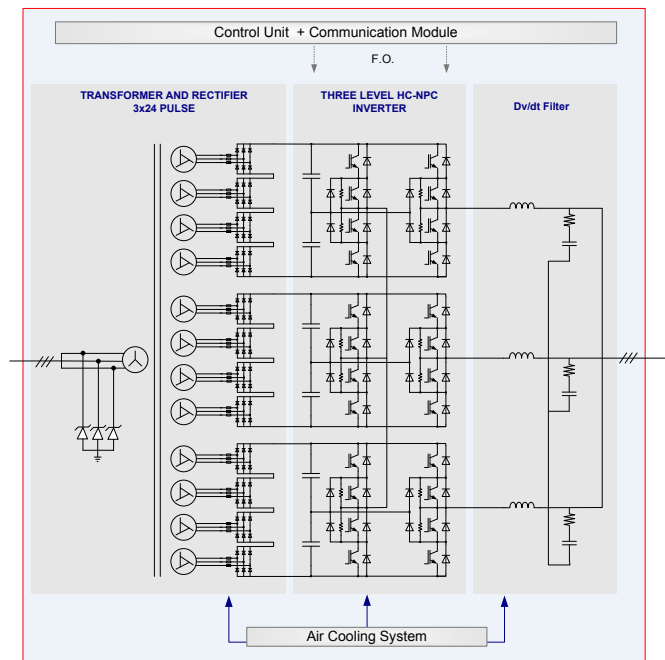


The **MV700** series of the INGEDRIVE™ converter range is composed of medium-voltage, IGBT-based frequency converters. They are designed to control induction, synchronous or permanent magnet motors especially focused on industrial and mining applications.

Its compact design featuring an integrated transformer, as well as its forced air cooling, allows a simple and quick startup of the INGEDRIVE™ MV700 converter.

The whole Ingedrive converter range offers a powerful configuration tool enabling you to view and parameterise drives both locally using the touch screen and remotely via an Ethernet connection.

with HV-IGBTs Power Semiconductors



Applications :
Metals, water treatment, cement,
oil&gas, power generation, chemical and
marine

www.ingeteam.com
ingedrive.info@ingeteam.com

Ingeteam

	MV700
<p>General data</p> <ul style="list-style-type: none"> Inverter Type Rectifier Type Output Power Range Main Supply Voltage ⁽¹⁾ Supply Voltage Tolerance Supply Frequency Input Power Factor Output Voltage Output Frequency Efficiency at Rated Load Motor Types 	<p>Five Level Voltage Source Inverter with HV-IGBT Power Semiconductors Diode Front End (DFE) 24P 1MVA - 8MVA 0 -11 kV AC Typically $\pm 10\%$ 50 / 60Hz ($\pm 5\%$) 0.96 0 to 6 kV/6,6 kV 0 to 70Hz (higher on request) Typically > 0.96 (transformer included) Induction, Synchronous or Permanent Magnet Motor</p>
<p>Control properties</p> <ul style="list-style-type: none"> Control types Static Speed Acc. (closed loop) ^{(3) (4)} Static Torque Acc. (closed loop) ^{(3) (4)} Static Torque Acc. (open loop) ^{(3) (4)} Torque Response Time Shaft Torque Ripple ^{(3) (4)} Drive Protection Functions Motor Protection Functions 	<p>Vector Control (VC), Voltage Frequency Control (VF) ⁽²⁾ < 0.01% in field weakening / < 0.01% in constant flux < 1% in field weakening / < 1% in constant flux < 2% in field weakening / < 2% in constant flux (for synchronous motors) < 5% in field weakening / < 3% in constant flux (for induction motors) < 10ms $\pm 1\%$ Overcurrent, overvoltage and undervoltage monitoring; earth fault; short-circuit detection and protection; semiconductor failure monitoring; cooling supervision; phase loss Overload ⁽⁵⁾, overspeed</p>
<p>Environmental cond.</p> <ul style="list-style-type: none"> Converter Cooling Noise Ambient Temp. for Operation Am. Temp. for Storage/Transport Installation Altitude Relative Air Humidity Protection level Paint finish Compliance with Standards 	<p>Air cooled Typically < 85 dB (A) at a distance of 1m from the cubicle +5°C to +40°C (maximum 50°C with derating) 15 to +75 °C < 1000m above sea level (100% load capacity) > 1000m above sea level (with current derating) 5% to 95% (condensation not permitted) IP21 (others on request) RAL 7035 (others on request) IEC 61800-4, IEC 60146-1-1</p>
<p>Options</p> <ul style="list-style-type: none"> Main Options 	<p>Different communication modules, sinusoidal filter, input/output isolation switch, motor grounding switch, redundant fan, bypass system, IP42</p>

(1) Integrated transformer
 (2) Only for induction motors and quadratic torque loads. No speed sensor needed
 (3) Refers to maximum values of equipment
 (4) Only for correct design and installation of the motor
 (5) Depends on electrical characteristics