

# MAGNEPULSE™ DMC

## DIGITAL DC INDUSTRIAL LIFTING MAGNET CONTROL

Magnetek, the leader in crane and hoist motor control, offers the MagnePulse™ Digital Magnet Control for the operation of DC industrial lifting magnets. Built on Magnetek's proven OmniPulse DDC platform, this microprocessor based, solid-state, DC-to-DC control combines advanced safety and performance features to improve productivity and reliability in your facility.

### ADVANCED PERFORMANCE

- Digital control of the magnet's demagnetizing current means the magnet cleans the load faster and more consistently, increasing throughput
- Exclusive OmniBeam™ feature allows the operator to enable any combination of up to four unique magnets to precisely match individual load requirements
- Stepped current allows you to program the drive to lift/clean a single slab or a stack of slabs, reducing cycles and improving throughput
- Power loss ride-through continues to energize the magnet to keep the control running and current flowing through the magnet when main power is lost

### IMPROVED SAFETY & PROTECTION

- MagnePulse DMC automatically removes magnet power during a fault event, preventing damage to the drive and magnet
- Open/short circuit detection automatically disables current to the magnet if a cable is cut, avoiding control and magnet damage while improving plant safety
- Over-temperature protection utilizes the magnet's resistance to determine its temperature, preventing magnet damage and increasing life expectancy
- Digitally control the rate of current change to prevent voltage spikes and minimize drop time
- Password protection stops unauthorized users from changing the control characteristics



### INCREASED PRODUCTION AND EFFICIENCY

- Reduced lifting current maintains a full load while saving energy, lengthening magnet life, and increasing average lift capacity
- Efficient use of energy reduces magnet heating up to 50%, reducing or eliminating the need for magnet change-outs
- Flexible control options include single-input, dual-input, stepped-input, analog or serial current references as well as a programmable input to maximize magnet and crane performance
- Twenty-five drive, magnet and control status monitors check magnet current, voltage, resistance, temperature, DC bus voltage, and control variables to simplify process optimization

### ENHANCED PROGRAMMABILITY & DIAGNOSTICS

- Comprehensive software provides superior flexibility and allows for quick parameter changes — software upgrades can be flashed from a PC
- Fully compatible with IMPULSE®•Link 4.1 Basic and IMPULSE•Link 4.1 Wireless Diagnostic System (WDS) allowing you to upload, download and monitor parameters using a hardwired or wireless link to your PC



**ELECTROMOTIVE SYSTEMS**

YOUR ONE-STOP SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

With our combination of extensive application experience and leading-edge products, Magnetek provides the ultimate solution for overhead motion control.

## FLEXIBLE OPTIONS

MagnePulse DMC can be easily retrofitted into your current framework, using existing operator controls and connections. Magnetek can also provide a pre-engineered panel with all the components needed to provide complete AC or DC powered magnet control. Panel accessory options include E-stop, fan kits, and circuit breakers. MagnePulse DMC may also be added to a custom panel, designed and built to your exact specifications.

## SPECIFICATIONS

### Continuous Current Rating

- Current Range: 5 - 2000 Adc
- Pre-Engineered Panels: 67, 133, 200 and 400 Adc

### Input Voltage

- 200 – 320 Vdc
- 230/460/575 Vac

### Inputs

- 8 Discrete 230 Vdc or 120 Vac
- 8 Discrete 24 Vdc
- 2 Analog 0-10 Vdc

### Outputs

- 4 Discrete 24 Vdc
- 2 Discrete 230 Vdc or Form C Relay
- 1 Analog 0-10 Vdc

### Communication

- RS-232/RS-485 Mod-BUS RTU

### Temperature

- 10°C to 40°C (enclosed) at 60% duty cycle
- 10°C to 55°C with optional fan kits at 60% duty cycle

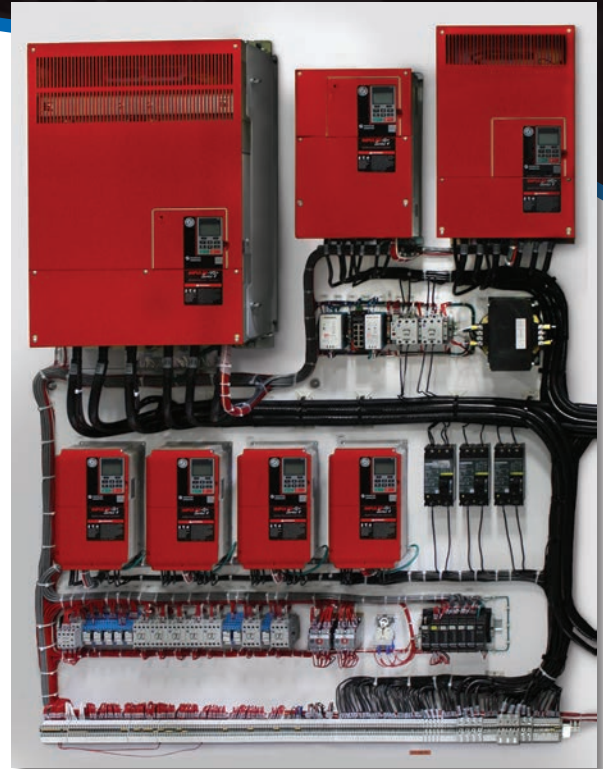
### Altitude

- 1000 m maximum without derating

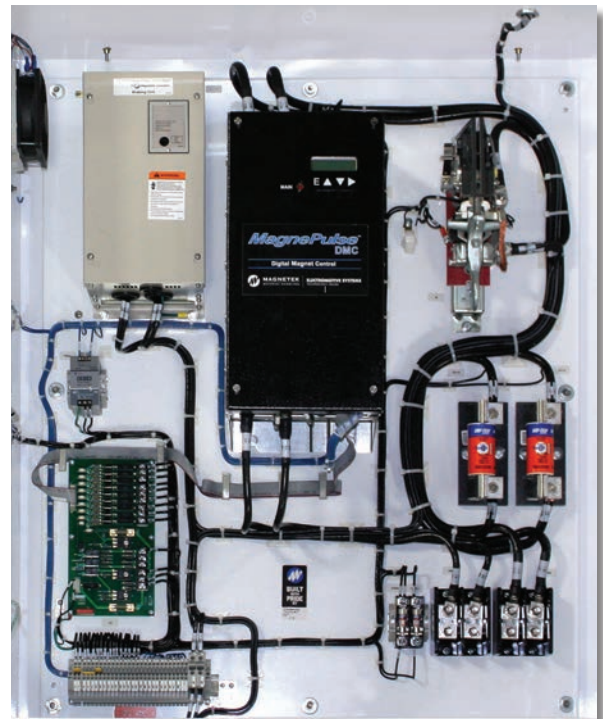
### Humidity

- 95% non-condensing

**For more information, contact Magnetek Material Handling or your local Magnetek Sales Representative.**



Engineered AC Panel



Engineered DC Panel



**ELECTROMOTIVE SYSTEMS**

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MH212\_MagnePulse DMC Brochure  
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