

MAGNIFIER DC™



Class 6845 Digital DC Magnet Control

After more than 100 years designing crane control, we've got the experience to engineer a Digital DC Magnet Controller with advanced magnet protection and diagnostics for severe mill duty operations and environments. The modular designed Magnifier DC uses the latest IGBT technology and a state of the art PLC to provide full current and voltage control of the magnet in lift, drop, and clean modes. The NEMA 3R control package includes the DC line choke, Regenerative Power Module, and magnet discharge resistor as standard and is sized dimensionally to fit into spaces where contactor magnet controls are used.

Simply connect the DC power and the DC magnet to the Magnifier DC and you'll lift more material and move it faster. Improved efficiency, greater throughput, usable energy savings, and increased profits are now available.

The Brains Behind Cranes.

EC&M's MAGNIFIER DC

Ratings:

- INPUT: 150 to 300 VDC +10% to -15%
- OUTPUT: 10-500 Amps DC
- Operating Ambient: 0°C to 60°C
- Enclosure: NEMA 3R, Wall Mount

Product Features:

- IGBT technology to control voltage and magnet current flow
- Voltage cutback for cooler running magnets
- Stored magnet energy dissipated through integrated Regenerative Power Module and discharge resistor
- Integrated DC line choke reduces the impedance mismatch between the magnet controller and the connected DC supply bus
- Designed for severe mill duty service up to 60°C ambient
- Integrated protection for magnet cut cables and short circuits
- Magnet temperature monitoring and alarm
- Status & Diagnostic Indicators
- Suitable for full or partial voltage magnets
- Modular design incorporates common parts across controller range reducing costly inventory
- Standard Lift/Drop master switch or pushbuttons
- Can be programmed to store up to four different magnet parameter settings and operate any one of four magnet setups through an input selection
- Parameter adjustments and controller monitoring from any attached computer using Internet Explorer
- Designed to replace existing contactor type Magnet Control

Applications:

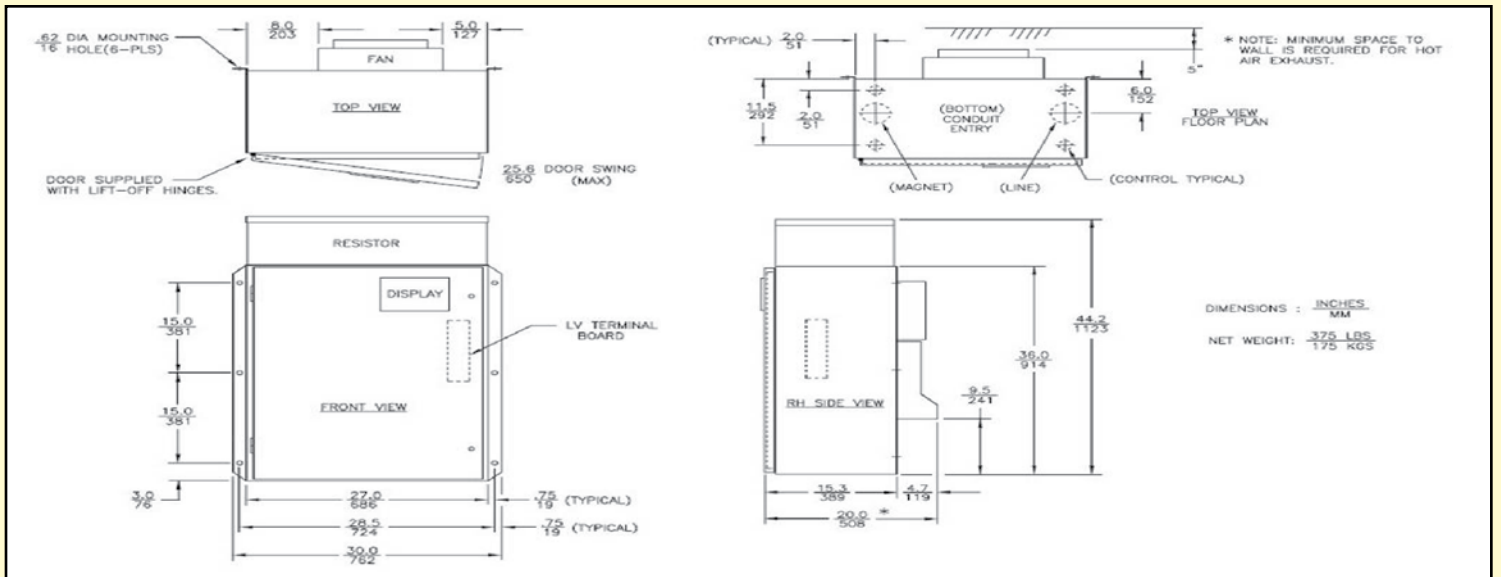
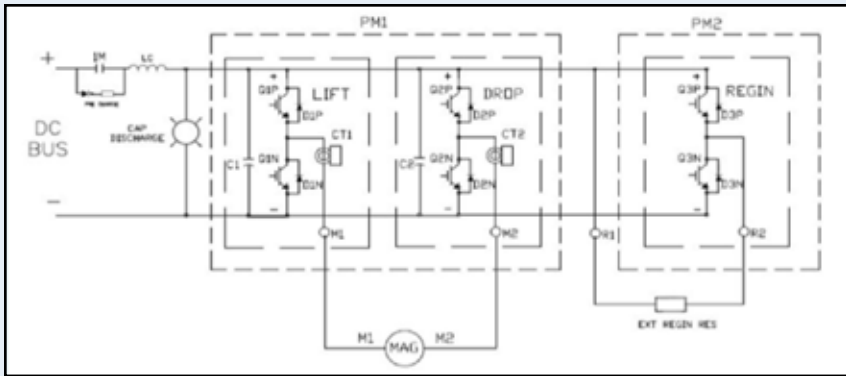
- Typical applications for the Magnifier DC Digital DC Magnet Controller include:
 - Scrap cranes
 - Slab handling cranes
 - Coil handling cranes
 - Plate handling cranes
 - Finished product cranes



The Electric Controller and
Manufacturing Company, LLC

800.240.1230 www.ecandm.net

Magnifier DC™ Power Circuit



Magnifier DC I/O Specifications

Description	Specification
Digital Inputs	6 Dedicated 4 Programmable
Digital Outputs	3 Dedicated 3 Programmable (discrete or On/Off time delay)
Analog Input / Outputs	2 Programmable Analog Inputs 2 Programmable Analog Outputs
Communications	Ethernet standard Option for other field bus networks Serial com standard display communication
I/O Insulation Test Voltage	500 Volts DC

Magnifier DC Power Rating Specifications

Description	Specification
Continuous Current Rating	10 amps to 500 amps
Supply Bus Voltage: +10% to -15%	150 to 300 Volts DC Standard
System Grounding	Full Floating, Grounded Positive or Negative
DV/DT Rise	1500 volts per microsecond maximum
Switching Frequency	1KHz



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