

CONTROLS, BRAKES & MOTORS FOR HEAVY MOVEABLE STRUCTURES



MAGNETEK  UNCOMMON POWER



MAGNETEK CONTROLS, BRAKES & MOTORS FOR HEAVY MOVEABLE STRUCTURES



Magnetek, the premier provider of innovative power control solutions to the overhead material handling industry, now brings that expertise to the control of Heavy Moveable Structures. Our state-of-the-art controls, brakes and motors, plus our 125+ combined years of application engineering experience—including extensive experience in lift applications—make Magnetek the ideal complete control system solution for your heavy moveable structure.

Magnetek's product range includes:

- Mondel[®] Braking Systems
- IMPULSE[®] AC Digital Drives
- OmniPulse[™] DSD DC Digital Drives
- AC Flux Vector Motors
- DC Motors
- Complete Control Panels

Magnetek's expertise includes:

- Pre-tested, bundled complete control systems
- Systems available with plug and play components to facilitate quick and easy installation
- Custom solutions designed to meet your exact specifications

Magnetek is your one-stop-source. We're dedicated to providing the Heavy Moveable Structure industry with turnkey solutions, innovative system design, state-of-the-art manufacturing, and technical engineering and application support that's second to none.

MONDEL[®] BRAKING SYSTEMS

Mondel Brakes are the ideal braking solution for your heavy moveable structure. They're designed with high performance, ease of use, reliability and safety in mind.

300M AISE-NEMA MILL DUTY SHOE BRAKES

- 5"-30" diameter
- 10-11,000 lb. Ft. Torque
- Fabricated steel construction
- AC, DC or Hydraulic

Options include:

- Adjustable external torque spring with calibrated indicator
- Select manufacturer drop-in replacements (consult factory)

400D HEAVY DUTY DISC BRAKE

- 12"-50" diameter
- 50-30,000 lb. Ft. Torque
- Type ADT Brake conforms to AISE ratings and dimensions
- AC or DC
- Adjustable external torque spring with calibrated indicator

Accessories include:

- Discs—Standard/Ventilated
- Discs/Hubs (Rigid)
- Discs/Couplings (Flexible)

300M AND 400D MONDEL BRAKES

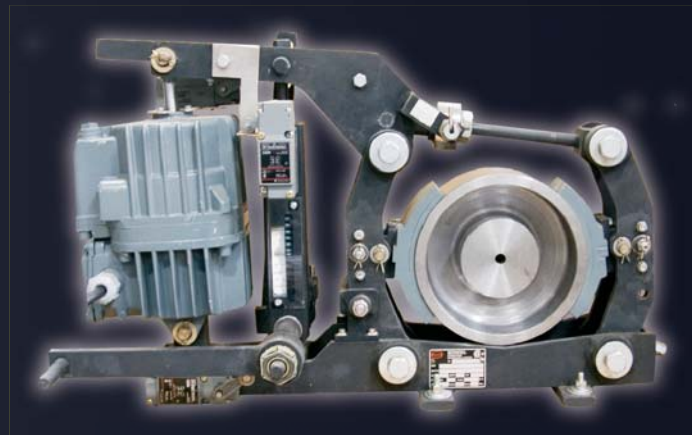
Features include:

- Available in 230/460 VAC; 575 VAC, and 230 VDC (special voltages available)
- Brake wheels and/or discs that may be mounted on motors as a complete package
- Standard stainless steel enclosures that stand up to the harshest environment; available in 1, 2 or 3 slot configuration
- Fast response
- Spring applied, electrically released operation
- One-year warranty

Options include:

- Nitride[®] Corrosion Protection
- Externally adjustable, stepless time delays—both directions; set and release independent of each other
- Latching manual hand release
- Limit switches indicating brake release, brake set and hand release
- Balanced torque to minimize shaft stresses (2 brakes on common disc)
- Four actuator operating fluids available covering a temperature range from -76° F to 176° F

TYPICAL MONDEL 300M MBTE BRAKE USED FOR HEAVY MOVEABLE STRUCTURE APPLICATIONS



400D HEAVY DUTY DISC BRAKE



Magnetek also offers general purpose shoe brakes with many of the same features and options—consult factory.

AC DIGITAL DRIVES

IMPULSE® AC DIGITAL DRIVES

IMPULSE Drives, from Magnetek's Electromotive Systems line, offer the latest in advanced technology. They provide unmatched performance, versatility, reliability and safety for controlling your heavy moveable structure. We offer closed loop flux vector units, in addition to open loop vector controls, that will meet the demands of your HMS application.

Features include:

- Programmable Digital Control
- Keypad with Digital Display
- Xpress Programming™—program initial setup in seconds
- Safe Operating Windows™—reduces the possibility of programming an unsafe parameter
- Loadshare*—allows use of two or more motors on the same drive shaft
- Load Float™*—allows structure to be held aloft at zero speed without setting the electric brake
- Built-in RS485 communication
 - Optional Serial Communication—provides reliable digital linkage among various system peripherals including Modbus+, Profibus and Ethernet

- Brake Test*—allows testing of available brake torque
- Encoder Loss Detection*—signals loss detection at all times
- Snapped Shaft Detection*—detects a broken coupling or shaft
- Multi-Level Password Protection—limits unauthorized modification of drive parameters
- Complete wireless communication package available
- Made in the USA
- Two-year warranty

*Features only on Flux Vector Controls

INVERTER CONTROL OF WOUND ROTOR MOTORS

IMPULSE Drives are compatible with existing wound rotor motors. Get all these great features just by making a few simple modifications to your wound rotor motor:

- Short out slip ring on rotor
- Install load reactor between drive output and modified wound motor rotor

MAGNETEK DRIVE DATA			
IMPULSE SERIES 3 AC CONTROLS			□
	G+ ADJUSTABLE FREQUENCY/ OPEN LOOP VECTOR DRIVES	VG+ FLUX VECTOR DRIVES	
Ratings ⁺	200-240 VAC, 7 to 346 AMP (1 to 125 HP)	200-240 VAC, 7 to 346 AMP (1 to 125 HP)	23
	380-460 VAC, 2.1 to 590 AMP (1 to 500 HP)	380-460 VAC, 2.1 to 590 AMP (1 to 500 HP)	
Overload Capacity	150% of rated load for 1 minute		
Braking Torque	150% or more with dynamic braking (optional)		
Speed Range	40:1 in V/F; 100:1 in Open Loop Vector	1000:1	
Operating Temperature	14° to 113° F (-10° to 45° C) for open chassis		
Programmable Terminals	8 Inputs, 6 Programmable—Standard (4 additional inputs available) 2 Programmable Analog Outputs 3-Digital Outputs—Standard (8 additional outputs available)		
Certification	UL, cUL (CE available upon request)		

+575V available. Consult Factory.

DC REGENERATIVE DRIVES

OMNIPULSE™ DSD DC DIGITAL REGENERATIVE DRIVES

Easy to install and program, our OmniPulse DSD DC Digital Drives provide reliable, energy-efficient control of DC shunt wound motors, while significantly reducing operating and maintenance costs. Our state-of-the-art performance, safety and troubleshooting features include:

- Programmable Digital Control
- Brake torque proving at start
- Safe Operating Windows™—reduces the possibility of programming unsafe parameters
- Load Float™—allows a load to be held aloft at zero speed
- 2 line x 16 character LCD display in control cabinet is standard
- Microprocessor-based built-in diagnostics
- Saves last 16 faults, automatic reset, or external fault reset
- Built-in motor overload protection
- Built for harsh operating environments
- Made in USA
- Two-year warranty

OMNIPULSE DSD DC CONTROLS

DIGITAL REGENERATIVE DRIVES

30/460 VAC, 3-phase +/- 10%, 48 to 62 Hz (15-800 HP)
(DC output voltage proportional to AC input)

200% of rated load for 1 minute

Consult Factory

1000:1 speed range with encoder (lift)

-10° C (14° F) to 55° C (130° F)

11 Digital Inputs
2 Programmable Analog Inputs
3 Relay Outputs; 4 Digital Outputs
2 Programmable Analog Outputs

CSA Listed

IMPULSE® G+/VG+ SERIES 3 DRIVES



KEYPAD/DIGITAL DISPLAY MAKES IT EASY TO PROGRAM, TROUBLESHOOT AND READ DIAGNOSTICS



IMPULSE•LINK, A WINDOWS-BASED INTERACTIVE DRIVE SOFTWARE PACKAGE, ALLOWS YOU TO UPLOAD, DOWNLOAD AND MONITOR PARAMETERS TO MAXIMIZE THE EFFICIENCY OF YOUR AC DRIVE



RUN, ALARM AND FAULT HISTORIES ARE EASILY ACCESSED ON YOUR PC WITH OUR USER-FRIENDLY DATALOGGER DRIVE RECORDING DEVICE



OMNIPULSE™ DSD DIGITAL DC DRIVE



UNDISPUTABLE ATTENTION TO DETAIL

UNBEATABLE SERVICE, TESTING AND SUPPORT

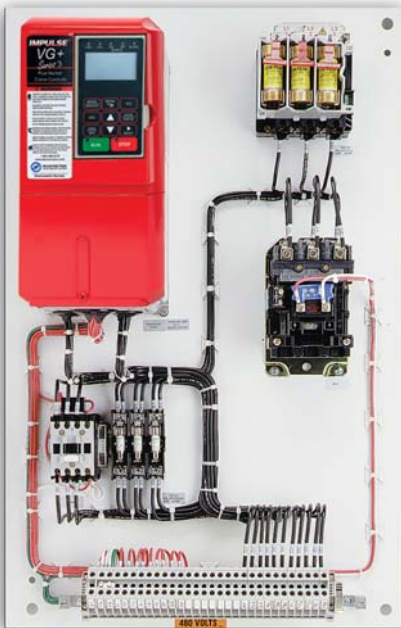
We back our products with:

- On-call service 24/7, 365 days a year
- On-site technical support
- Emergency control replacement
- Field start-up service available
- Complete application and engineering support
- Factory-certified dynamic performance testing available with every job
- Highly trained team of service and test technicians
- On-site and in-house training programs



COMPLETE CONTROL PANELS AVAILABLE

Custom engineered panels, built in Magnetek's UL508 certified panel facility, feature all the components needed to provide complete motor control of your heavy moveable structure, designed to meet your specific application needs.



IMPULSE® AC Control Panel

AC & DC MOTORS

AC MOTORS

Magnetek's AC Inverter Duty Motors are the ideal choice when precision motion control and higher horsepower are required, and premium construction and performance are a must.

Features:

- Up to 1,000 HP
- 1.0 Service Factor on PWM drives
- 1,000:1 speed range when coupled with our IMPULSE VG+ Series 3 Control
- Available—
 - Totally Enclosed Non-Ventilated (TENV) 60 Min. duty
 - Totally Enclosed Blower Cooled (TEBC) continuous duty
 - Totally Enclosed Non-Ventilated (TENV) continuous duty
- NEMA design A, optimized for operation with IGBT inverters
- Standard Class H insulation with patented winding system for use with IGBT variable frequency drives
- Class F thermostats (klixons) in all three phases
- Cast iron frame and brackets for strength and corrosion resistance
- 230, 380, 460, 575 and 690 volt, 3 phase, 60 Hz
- Available options include encoders, space heaters, severe duty treatment, doubleshaft/tapershaft, brakes, and Inpro Seals
- Made in USA
- Two-year warranty

DC MOTORS

Our DC Motors meet NEMA MG-1 Standards and are available from 10-300 HP.

Features:

- Re-greasable ball bearings
- Moisture resistant insulation
- Special extended shaft to match mechanicals
- Drain plugs
- N/C thermostat
- Frame finished with corrosion-resistant paint or coating
- Certified motor test reports to be provided when required



AC Flux Vector Motor

MAGNETEK UNEXPECTED SOLUTIONS

MAIN PHONE: 262-783-3500

TOLL FREE PHONE: 800-288-8178

MAIN FAX: 262-783-3510

TOLL FREE FAX: 800-298-3503

CANADA PHONE: 905-828-1526

CANADA TOLL FREE PHONE: 800-792-7253

CANADA FAX: 905-828-5707

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