

# Electromotive Systems

# **IMPULSE<sup>P3</sup>** *Series 2*

*Adjustable Frequency Crane Controls*



**MAGNETEK**



**MATERIAL HANDLING**

**Electromotive Systems**

**Telemotive**

**Mondel Engineering**

YOUR ONE-STOP SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

# IMPULSE<sup>®</sup>•P<sup>3</sup> Series 2

## Adjustable Frequency Crane Control

The Electromotive Systems IMPULSE<sup>®</sup>•P<sup>3</sup> Series 2 from Magnetek is the most reliable and cost-effective low HP adjustable frequency crane control ever offered. We've made it easy to program for basic applications, yet capable of working in high performance environments with the selection of a single software parameter. The IMPULSE•P<sup>3</sup> Series 2 has been designed with an expanded HP range and smaller dimensional footprint than its predecessor. All this, plus greater reliability and lower cost make the IMPULSE•P<sup>3</sup> Series 2 Adjustable Frequency Crane Control the product of choice for your overhead material handling needs.

### Factory Default Software Settings

The IMPULSE•P<sup>3</sup> Series 2 is factory preset and activated for standard application programming. This allows the operator to easily program the drive via a keypad display in minutes for most applications.

### Advanced Programming Capability

With the selection of a single programming parameter, the basic IMPULSE•P<sup>3</sup> Series 2 can be programmed for many of the control features of the IMPULSE G+ Series 2 Crane Control, but at a much lower cost!

### Compact Design

Our most compact low HP drive to date, the IMPULSE•P<sup>3</sup> Series 2's size permits the use of smaller control enclosures, which reduces the overall cost of an installation. It also expands application opportunities on smaller cranes, hoists, trolleys and monorail carriers.

### Expanded HP Range

Available in fractional as well as 7-1/2 and 10 HP ratings. This allows the user to select the most cost-effective product for low HP applications through Class D service.

### Reliability with Lower Cost

Designed with reliability and cost in mind! The hardware and software were designed and tested specifically for the operating conditions seen in overhead material handling applications. The IMPULSE•P<sup>3</sup> Series 2 has proven to be extremely reliable, and is backed by our two-year warranty.

### Optional Flat Heat Sink Design

Available in an optional flat heat sink design. This reduces the depth of the drive by as much as 45%. Consult factory on the suitability of the flat heat sink design for your application.

## TCONTROLS Complete Panels Available

IMPULSE•P<sup>3</sup> Series 2 can also be purchased as part of a complete, pre-engineered TCONTROL Motor Control System.

### Standard Features Include:

- 120 Volt control voltage interface card
- Brake contactor
- Branch fusing
- Built-in electronic motor thermal overload protection
- Dynamic braking resistor(s)
- All wiring to a single terminal strip
- Clearly marked wires (at both ends)
- Basic wiring diagram
- NEMA 12 enclosure



**For maximum control flexibility, match the IMPULSE•P<sup>3</sup> Series 2 with SBP<sup>®</sup>/ SBP2<sup>®</sup>**



### Standard IMPULSE•P³ Series 2 Features

#### Capabilities

**CMAA Class A-D Service**

**40:1 Speed Range**

**Three Speed Control Methods**

- Up to 5 distinct speeds
- Infinitely Variable Control
- Analog Speed Reference

#### Ratings\*

- 380-460 VAC, ½ to 10HP
- 200-230 VAC, ¼ to 10HP

#### Exclusive Crane & Hoist Software

#### Safety

**Safe Operating Windows™** - reduces possibility of programming unsafe parameters

**Motor Thermal Overload Protection** - reduces possibility of motor damage

**Quick Stop™** - reduces possibility of crane collision

#### Performance

**X-Press Programming™** - allows programming initial setup within seconds

**Swift-Lift™** - allows overspeeding with light loads or empty hook

**Reverse Plug Simulation™** - allows operator to smoothly and quickly stop and change directions without setting brake

\*For wiring diagrams, drive ratings and dimensions, see P3TECH-03A (Technical Data Sheet)

### IMPULSE•P³ Series 2 Advanced Control Features

The IMPULSE•P³ Series 2 offers you all our standard features, plus it can be reconfigured, with the adjustment of a single parameter, to take advantage of the following advanced programming features:

#### Capabilities

**100:1 Speed Range**

- Up to 16 Discrete Speed References
- Expanded Programmable Input/Output Capabilities

#### Safety

End of Travel Limit Selection—slow and stop when travel limits are reached

#### Performance

- Open-Loop Vector Control
- Micro-Positioning™ Control
- Serial Communications—ModBus, RS-485

## Keypad/Digital Display



#### Allows for:

- Programming both standard and advanced drive parameters
- Simplified set up and troubleshooting
- Monitoring the functions of the drive
- Reading alpha-numeric fault diagnostic indications

## Unsurpassed Product Support

As always, you can count on Electromotive Systems and IMPULSE® drives to help you achieve the maximum performance and reliability of your overhead material handling system:

- Two-year warranty
- Electromotive Service Technicians on-call 24/7
- On-site and in-house product training programs
- Fully tested prior to shipment
- UL and cUL Listed; CE Approved
- UL recognized Electronic Thermal Overload

**Pendant Pushbutton Stations or Magnetek's line of Radio Remote Crane Controls.**

# MAGNETEK MATERIAL HANDLING

Electromotive Systems

Telemotive

Mondel Engineering

YOUR ONE-STOP SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

## Engineered Systems & Solutions

Project Evaluation  
Application Solutions  
Engineering Design  
PLC/PC Program  
Development  
System Manufacturing  
Project Management  
Installation Assistance  
Field Startup and Test  
Customer Training  
Maintenance Support

## IMPULSE® AC Adjustable Frequency Drives

230, 460 and 575 Volt Power Platforms  
.25-1,500 Hp  
Exclusive Application Software  
Specific Crane & Hoist Software

## OmniPulse™ Digital Drives

DSD - AC in/DC out  
15-800 Hp  
DDC - DC in/DC out  
5-500 Hp

## MAC™•2000 Motor Acceleration Control

Single & 2 Speed — up to 15.2 Amps  
Contactor Panels

## Variable Speed Motor Control Panels

Standard Pre-Engineered Systems  
Custom Engineered Systems

## Motors & Accessories

Standard Inverter Duty AC Induction Motors  
Flux Vector Designed Motors

## Power Delivery Systems

ELECTROBAR® — 90, 110, 250, 350 Amps  
ELECTROBAR® FS — 90, 125, 250, 400 Amps  
ELECTROBAR® ELITE — 60, 100, 130, 200 Amps  
ELECTROBAR® HX — 400, 700, 1000, 1500 Amps  
FABA® Conductor Bar Systems — 100 Amps

## ELECTROMOTIVE™ Festooning Systems

Standard Duty  
Heavy Duty  
Mill Duty

## SBP® & SBP2® Pendant Push Button Stations

Standard 2 through 12 Button Stations  
Custom Configured Stations

## Radio Remote Control Systems

### Pre-Engineered Radio Control Systems

MLTX™  
SLTX™  
JLTX™  
telePilot™  
telePendant™  
Pendant Style

### Engineered Radio Control Systems

MLTX™  
SLTX™  
JLTX™  
Locomotive Control Systems

## Collision Avoidance Systems

Laser Guard®  
Reflex®

## Brakes

### 200S Industrial Shoe Brakes

4-19 In. Diameter  
6-2,650 Lb. Ft. Torque  
AC, DC, Hydraulic Actuators  
AC Explosion Proof Actuators

### AISE-NEMA 300M Mill Duty Shoe Brakes

5-30 In. Diameter  
10-11,000 Lb. Ft. Torque  
AC, DC, Hydraulic Actuators  
AC Explosion Proof Actuators

### 400D Heavy Duty Disc Brakes

8-50 In. Diameter  
50-30,000 Lb. Ft. Torque  
AC, DC, Hydraulic Actuators  
AC Explosion Proof Actuators

### Bracketronic™ Control System

Bracketronic Controller  
Standard Pre-engineered Panel  
Mill Duty Foot Pedal (optional)

### Brake Kit

Remote Air/Hydraulic Bridge Brake  
Conversion Kit



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