

Electromotive Systems

IMPULSE[®]·P³ *Series 2*

可調整頻率天車控制器 *Adjustable Frequency Crane Controls*



MAGNETEK  **MATERIAL HANDLING**
Electromotive Systems Telemotive Mondel Engineering

YOUR ONE-STOP SOURCE FOR MATERIAL HANDLING CONTROL SOLUTIONS

 **HWE WANG ENTERPRISES INC.**

IMPULSE[®]•P³ Series 2

Adjustable Frequency Crane Control

The Electromotive Systems IMPULSE[®]•P³ 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•P³ 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•P³ Series 2 Adjustable Frequency Crane Control the product of choice for your overhead material handling needs.

Factory Default Software Settings

The IMPULSE•P³ 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•P³ 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•P³ 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•P³ Series 2 has proven to be extremely reliable, and is backed by our two-year warranty.

Optional Flat Heat Sink Design

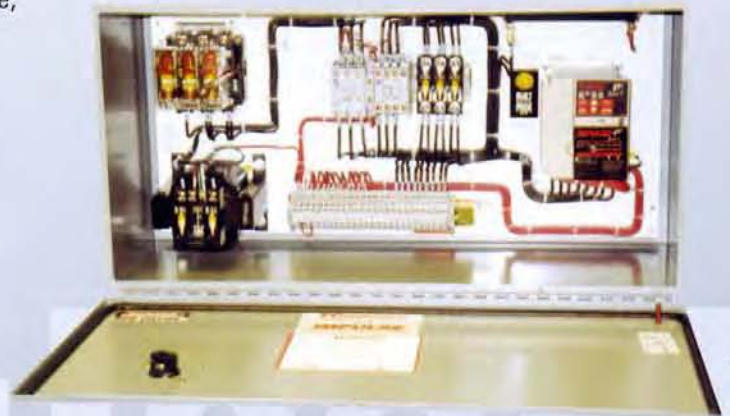
Available in an optional flat heat sink design. This reduces the depth of the drive by as much as 45%. Consult factory on the suitability of the flat heat sink design for your application.

TCONTROLS Complete Panels Available

IMPULSE•P³ 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



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For maximum control flexibility, match the IMPULSE•P³ Series 2 with SBP[®]/ SBP²

IMPULSE® P³ Series 2

可調整頻率天車控制器

本P³ S2是MAGNETEK最可信賴和有效的成本，低馬力天車變頻控制器，它能容易基於基本使用而鍵入所需程式，而且也能使用單一的軟體參數來作業高性能的環境，P³ S2設計使用大的馬力範圍和先前的較小的安裝尺寸，基於以上說明，較大的信賴度和較低的成本使P³ S2天車可調變頻器能符合貴公司天車材料處理所需。

工廠除錯軟體設定

P³ S2已在工廠預先設定，並完成了標準用途的程式設計，操作者能在幾分鐘內容易地藉著鍵盤和螢幕顯示而鍵入所需的條件而達到最好的使用狀況。

先進的程式容量

藉著單一程式參數的選用，基本的P³ S2能鍵入很多IMPULSE G+ S2控制的特性，而成本較低。

結實的設計

是目前最結實、低馬力變頻器，其尺寸能允許用在小的控制箱，可減少安裝成本，而且可擴大使用在小吊車、橫行小車和單軌吊車的操作上使用。

擴大的馬力範圍

分別的可以使用在7-1/2HP和10HP額定馬力，允許使用者選用在低馬力，CMAA D級吊車的有效成本的产品。

低成本可靠性佳

以低成本及最佳可靠性來設計，硬體和軟體特別設計用在天車材料處理的操作上使用。

選用的平板吸熱電阻塊設計

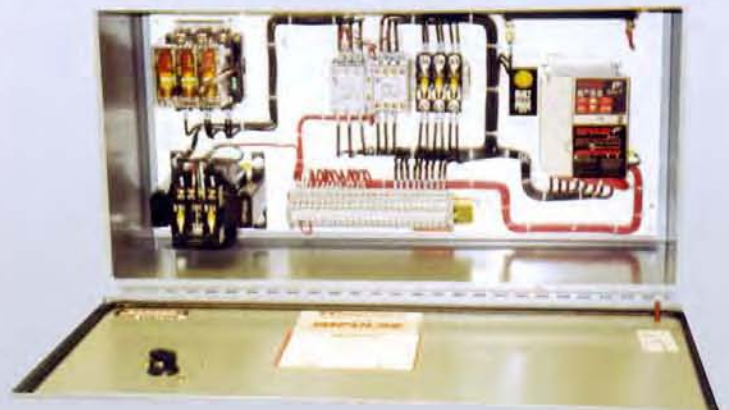
可減少變頻器厚度達45%，如需要和工廠洽詢。

TCONTROLS Complete Panels Available

可以提供完整的控制箱，也能購買完整預先設計好的TCONTROL馬達控制系統內裝有P³ S2之變頻器。

標準特性：

- ◎ 120V 控制電壓介面卡
- ◎ 所有接線為單一端子排
- ◎ 剎車電磁接觸器
- ◎ 很清楚的線號
- ◎ 分支保險絲
- ◎ 基本線路圖
- ◎ 裝有電子馬達熱電阻過載保護
- ◎ NEMA 12 外箱
- ◎ 動能剎車電阻





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, 1/2 to 10HP
- 200-230 VAC, 1/4 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

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



標準IMPULSE P³ S2特性

能力

CMAA A-D級天車使用

40:1速度範圍

3種速度控制方法

可達5種不同速度

無段可變速度控制

類比速度參考

額定*

380-460VAC 1/2 - 10HP

200-230VAC 1/4 - 10HP

專為天車使用的軟體

安全

安全操作視窗- 減少鍵入不安全參數的可能性

馬達熱電阻過載保護- 減少馬達損壞的可能性

快速停止- 減少天車碰撞的可能性

性能

X-Press Programming- 幾秒鐘內就可完成初期的設定

Swift-Lift- 允許在輕荷重或空負載時超速使用

Reverse Plug Simulation- 允許操作者平順、快速的停止和改變方向而不用剎車

*至於線路圖，變頻額定和尺寸請參閱P3TECH-03A (技術數據資料)

IMPULSE P³ S2先進的控制器特性

P³ S2提供給您所有標準特性，加上它能使使用單一參數的調整來再定位所需要數據有下列先進的特性：

能力

100:1速度範圍

可達到16個不同速度參考，並擴充了鍵入及輸出能力

安全

當到達天車的走行極限時，走行極限端選用-慢速及停止

性能

開放式向量控制

微調定位控制

系列連線-ModBus，RS-485

鍵盤及數字顯示



允許：

- ◎ 鍵入標準和先進驅動參數
- ◎ 簡單化設定和故障排除
- ◎ 監視變頻器功能
- ◎ 錯誤診斷指示，讀取數字和代號

無法超越的產品支持

使用IMPULSE變頻來幫助您完成天車材料處理最高的性能和最佳的信賴度：

- ◎ 2年保固
- ◎ 24小時服務
- ◎ 可在現場和公司作產品訓練
- ◎ 出貨前作過完全之測試
- ◎ UL和CUL表列，CE認證
- ◎ UL認可的電子熱電阻過載