

IMPULSE® G+/VG+ Series 2

575 Volt Adjustable Frequency Crane Controls



Electromotive Systems 575V IMPULSE•G+ and VG+ Series 2 crane controls from Magnetek have a proven track record for providing unmatched performance and reliability to the overhead material handling industry.

Featuring our exclusive crane and hoist software, these third generation controls offer many features designed for ease of use and enhanced safety. Magnetek's vast overhead material handling application experience and after-market product support make IMPULSE Crane Controls the proven market leader.

Capabilities

	G+ Series 2 Adjustable Frequency/Open Loop Vector Controls	VG+ Series 2 Flux Vector Controls
Ratings	500-600 VAC, 3.5 to 200 AMP (2 to 200 HP)	500-600 VAC, 3.5 to 200 AMP (2 to 200 HP)
Class of Service	CMAA Class A-F Service AISE TR6 Class 1 to 4 ASME HST-4M H1 to H5	CMAA Class A-F Service AISE TR6 Class 1 to 4 ASME HST-4M H1 to H5
Speed Range	40:1 in V/F 100:1 in Open Loop Vector	1000:1
Speed Control Methods	Up to 6 Distinct Speeds 2-Step Infinitely Variable 3-Step Infinitely Variable Analog Signal (0-10 VDC, 4-20 mA ±10 VDC)	Up to 6 Distinct Speeds 2-Step Infinitely Variable 3-Step Infinitely Variable Analog Signal (0-10 VDC, 4-20 mA ±10 VDC)
Programmable Terminals	8 inputs, 6 programmable (4 additional inputs available as option) 2 programmable analog outputs 1-digital output-standard (4 additional outputs available as option)	8 inputs, 6 programmable (4 additional inputs available as option) 2 programmable analog outputs 3-digital outputs-standard (2 additional outputs available as option)
Applications	Traverse Motions Worm Gear and Mechanical Load Brake Hoists	Traverse Motions Non-Mechanical Load Brake Hoists
All Series 2 Crane Controls Include:		
<ul style="list-style-type: none"> • Exclusive Crane & Hoist Software • Two Year Warranty • 24-Hour On-Call Technical Support 		

Product Features & Options

575 Volt IMPULSE•G+/VG+ Series 2

Safety

Slack Cable Detection*	Identifies a slack cable condition and provides a selectable response (stop, slow down, alarm)
Roll Back Detection* Torque Proving at Start* Brake Check at Stop*	Drive monitors brake functionality at start and stop
Safe Operating Windows™	Reduces the possibility of programming unsafe parameters
Load Check™	Reduces the possibility of lifting an overload
Quick Stop™	Reduces the possibility of crane collision
Multi-Level Password Protection	Limits unauthorized modification of drive parameters
Phase Loss Detection	In case of phase loss, brake will set immediately, retaining load
Interface Boards	120 V optically isolated-standard (Other voltages available as option)
UL/CUL Rated	Tested and certified by Underwriters Laboratory
Ground/Fault Short Circuit Protection	

Options & Accessories

- Custom Software
- Datalogger
- IMPULSE•Link Interactive Drive Software/Hardware

Unsurpassed Product Support

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

- Two-year warranty
- Magnetek Service Technicians on call 24/7
- On-site and in-house product training programs
- On-site technical support (when necessary)
- Emergency crane control replacement

Performance

Load Float™ *	Allows a load to be held aloft at zero speed without setting the electric brake
Weight Calculation*	Enables load weight to be calculated with an accuracy of $\pm 5\%$ of full load (0-10VD C Output)
X-Press Programming™	Allows programming initial setup within seconds
Swift-Lift™/ Ultra-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
Stall Prevention	Extends acceleration time and prevents the motor torque limits from being exceeded
Micro-Positioning™	Allows operator to make precise, slow moves
Torque Limit at Accel/Deceleration	Allows for load dependent acceleration or deceleration
Multi-Function Input Terminals	For end of travel/slow down limits, stops or other options
Flash ROM	Stores last four fault occurrences, even after power-down, for diagnostic purposes
Elapsed Time Counter	Indicates actual time of operation (power on or run time)
Hoist Synchronization	Synchronize up to 8 motors in master-slave configuration.

Reliability

Built-In Auto Tune	Maximizes performance and life of motor
Built-In Serial Communication	Provides reliable digital linkage among various crane system peripherals, including Modbus, Modbus+, Profibus and Devicenet.
Operation/ Fault Display	Simplifies setup and troubleshooting

*Features only on VG+ Series 2 Crane Controls



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