



Electromotive

IMPULSE® VG+ Series 2

IMPULSE® Control Products
IMPULSE® VG+ Series 2 Specifications

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Specification

Value and Information for All Models

Certification	UL, CUL (CE available upon request)
Rated input power supply volts & freq	3-phase 200/400, 208/415, 220/440, or 230/460 or 500/600 VAC; 50 or 60 Hz
Allowable input voltage fluctuation	+10% or -15% of nominal
Allowable input frequency fluctuation	±5% of nominal
Control method	Fully digital; sine-wave, pulse-width-modulated
Maximum output voltage (VAC)	Max output voltage 3-phase, 200/208/220/230V;380/400/415/440/460;500/575/600V (proportional to input voltage.)
Rated frequency (Hz)	Up to 150 Hz maximum
Output frequency accuracy	.01%-with digital reference command, -10° to 40° C; .1%-with analog reference command; 10 bits/10V; 25° C, ±10° C
Frequency reference resolution	Digital: .01 Hz; Analog: .03 Hz (at 60 Hz)
Output frequency resolution	.01 Hz
Overload capacity	150% of rated load for 1 min
Remote frequency reference sources	0-10VDC (20kW); 4-20mA (250W); ±10VDC; serial (optional)
Accel/Decel times	0.1 to 25.5 sec-2 sets; 4 parameters are independently adjustable
Braking torque	Approximately 120% if motor and inverter are sized 1:1; 150% or more with dynamic braking (optional)
Motor overload protection	Electronic thermal overload relay; field-programmable
Overcurrent protection level (OC1)	200% of rated current

Circuit protection	Ground fault and blown-fuse protection
Overvoltage protection level	400/800/1000VDC
Undervoltage protection level 1	90/380/546VDC
Heatsink over temperature	Thermostat trips at 90° C
Torque limit selection	Separate functions for FORWARD, REVERSE, REGEN; all selectable from 0-300%
Other protection features	Output phase loss, input phase loss, failed-oscillator detection, and mechanical overload detection
DC bus voltage indication	Charge LED is on until DC bus voltage drops below 50VDC
Location	Indoors; requires protection from moisture, corrosive gases and liquids
Ambient operating temperature	+14° to 104° F (-10° to 40° C) for NEMA 1; 14° to 122° F (-10° to 50° C) for open chassis
Storage temperature	-4° to 140° F (-20° to 60° C)
Humidity	90% relative; noncondensing
Vibration	1 G less than 20 Hz; 0.2 G for 20-50 Hz
Elevation	3300 ft. (1000m) or less