



## IMPULSE®•VG+ Series 3 Specifications

Specification	Value and Information for All Models
Certification	UL, cUL (CE available upon request)
Crane Duty Classification	Rated for CMAA Crane Class Duty A – F only (or equivalent)
Rated input power supply volts & freq	3-phase 200-240, 380-480 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, 200/208/220/230/240V;380/400/415/440/460/480V (proportional to input voltage).
Rated frequency (Hz)	0 to 150 Hz (consult factory for applications over 150 Hz)
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
<b>Remote frequency reference sources</b>	0-10VDC (200hm); 4-20mA (250Ohm); ±10VDC; serial (RS-485)
<b>Accel/Decel times</b>	0.1 to 25.5 sec—4 sets; 8 parameters are <b>independently</b> adjustable
Braking torque 1	150% or more with dynamic braking (optional)



Motor overload protection	Electronic thermal overload relay; field programmable
Overcurrent protection level (OC)	200% of rated current
Circuit protection	Ground fault and blown-fuse protection
Overvoltage protection level	410/820VDC
Undervoltage protection level	190/380VDC
Heatsink over temperature	Thermostat trips at 105 ° C
Torque limit selection	Separate functions for FORWARD, REVERSE, REGEN; all selectable from 0-300%
Stall prevention	Separate functions for accel, at-speed, and constant horsepower region
Other protection features	Speed deviation, overspeed, mechanical brake failure, lost output phase, failed-oscillator, PG disconnect, mechanical overload, roll-back detection, and internal braking transistor failure.
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 140° F (-10° to 60° C)* 14° to 149° F (-10° to 65° C)**
Storage temperature	-4° to 158° F (-20° to 70° C)
Humidity	95% relative; noncondensing
Vibration	1 G less than 20 Hz; 0.2 G for 20-50 Hz
Elevation	3300 ft. (1000m) or less

\* 2 kHz carrier frequency

\*\* Maximum rated temperature of 65° C at the drive chassis with factory approved air handling system