

Vari-Green™ Drive – 100

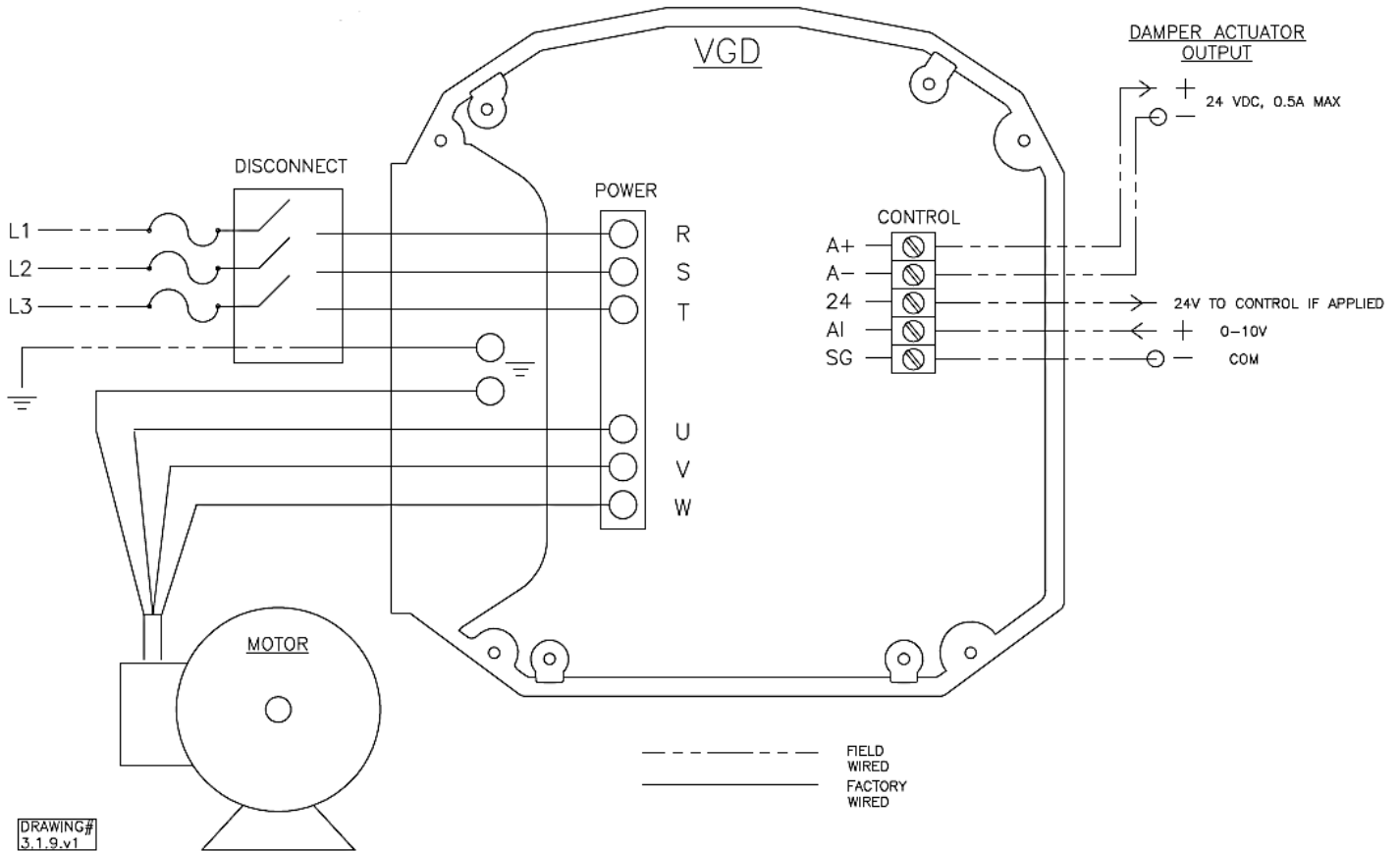
200-240 VAC, 380-480 VAC, 3 ϕ
 Factory Mounted, Pre-Programmed,
 Variable Speed Control
 R³ Filtering Technology

The Vari-Green Drive™ 100 is factory mounted, wired and programmed to match the fan and motor characteristics. The Vari-Green Drive™ can be configured with an on-board potentiometer dial; a 0-10VDC or 4-20mA signal for speed reference. 24VDC power is available for powering Vari-Green Controls as well as a motorized backdraft damper.

NOTE: The Vari-Green Drive™ requires Class J or Class K, 20A max fuses on the input for short circuit protection. If a fused disconnect is not ordered with the fan, fuses must be supplied by others.



Vari-Green™ Drive - 100 Physical Overview & Wiring Diagram



Specifications		Part # 385817	Part # 385818
Output Ratings	Voltage	0 - 240VAC	0 - 480 VAC
	Max motor FLA	8.0A	6.0A
	Frequency*	15 - 240 Hz	15 - 240 Hz
	Phase	3 ϕ	3 ϕ
Input Ratings	Voltage	200 - 240VAC (+15%/-10%)	380 - 480VAC (+15%/-10%)
	Frequency	50/60Hz (\pm 5%)	50/60Hz (\pm 5%)
	Phase	3 ϕ	3 ϕ
	Efficiency	\geq 96%, full load	\geq 96%, full load
	Power Factor	\geq 0.9	\geq 0.85
	% THD	32.0 Meeting IEEE 519	32.0 Meeting IEEE 519
Operation	Analog Input	0 - 10V, 0 - 24V, 4 - 20mA (selectable via DIP switch)	0 - 10V, 0 - 24V, 4 - 20mA (selectable via DIP switch)
	Damper Actuator Output	24VDC, 0.5A Max	24VDC, 0.5A Max
	Control Voltage Output	24VDC, 50mA Max	24VDC, 50mA Max
	Indication	3 LEDs: Power, Run, Fault	3 LEDs: Power, Run, Fault
Environment	Cooling Method	Free Convection	Free Convection
	Max Ambient Temp	40°C (104°F)	40°C (104°F)
	Storage Temperature	-30 to 65°C (-22°F - 149°F)	-30 to 65°C (-22°F - 149°F)
	Relative Humidity	Up to 95% RH (Non-condensing)	Up to 95% RH (Non-condensing)
Certifications	Agency Approvals	UL Listed E223975	UL Listed E223975
	Enclosure Rating	Typer 4/IP66	Typer 4/IP66
	EMC	EMC Directive 2014/35/EU	EMC Directive 2014/35/EU
	CE	Low Voltage Directive 2014/35/EU and EMC Direct 2014/35/EU	Low Voltage Directive 2014/35/EU and EMC Direct 2014/35/EU

*Actual frequency range will vary

Wiring Sizes and Terminal Lugs							
VFD rating	Terminals	Screw Size Metric	Screw Torque			Conductor Size	
			kgf. cm	lbf.in	Nm	AWG/kcmil	mm ²
200 - 240VAC 380 - 480VAC	All Control Terminals	M2.6	4.55	3.98	0.4	14 - 26	0.2 - 2.5

Control Wiring	
Terminal Label	Purpose
A+	+24VDC Power, 0.5A Max. On when VGD is commanding motor to run. Useful for powering appropriate damper actuator.
A-	-24VDC Power. Ground for A+ terminal.
24	+24VDC power, 50mA Max. Used to power Vari-Green Controls. On when VGD is powered.
AI	Analog input signal (configurable via ANALOG dip switches).
SG	Signal ground for analog input.