

SERIES: VGS-200G | DESCRIPTION: INTERNAL AC-DC POWER SUPPLY

FEATURES

- 140 W with natural convection, 200 W with forced air cooling
- -20°C to 70°C operating temperature, with derating
- universal 100 ~ 240 Vac input voltage
- power factor correction
- over voltage, short circuit, over current, over temperature protection
- certified to EN/UL 62368
- CE/FCC radiated and conducted Class B



MODEL	output voltage	output current max	output power ¹ max	ripple and noise ² typ	efficiency ³ typ
	(Vdc)	(A)	(W)	(mVp-p)	(%)
VGS-200G-12	12	16.0	192	120	93
VGS-200G-15	15	13.0	195	150	93
VGS-200G-24	24	8.3	199	240	93
VGS-200G-36	36	5.5	198	360	93
VGS-200G-48	48	4.2	201	480	93

Notes: 1. Maximum output power of 200 W with 12 CFM forced air cooling, and 140 W with natural convection cooling at 50°C. See derating curve for more information.
 2. Ripple & noise are measured at 20 MHz BW with 47 µF aluminum electrolytic capacitor and 0.1 µF ceramic capacitor on the output.
 3. Measured at 230 Vac.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage	ac input	90	100~240	264	Vac
frequency		47	50~60	63	Hz
current		1.0		2.5	A
inrush current	at 230 Vac, cold start			100	A
leakage current	at 264 Vac/60 Hz			5	mA
no load power consumption	at 230 Vac			0.21	W
power factor		0.9			

OUTPUT

parameter	conditions/description	min	typ	max	units
load regulation			±5		%

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	latch off			150	%
over current protection				150	%
short circuit protection	auto-recovery				
over temperature protection	output shut-down				

SAFETY & COMPLIANCE

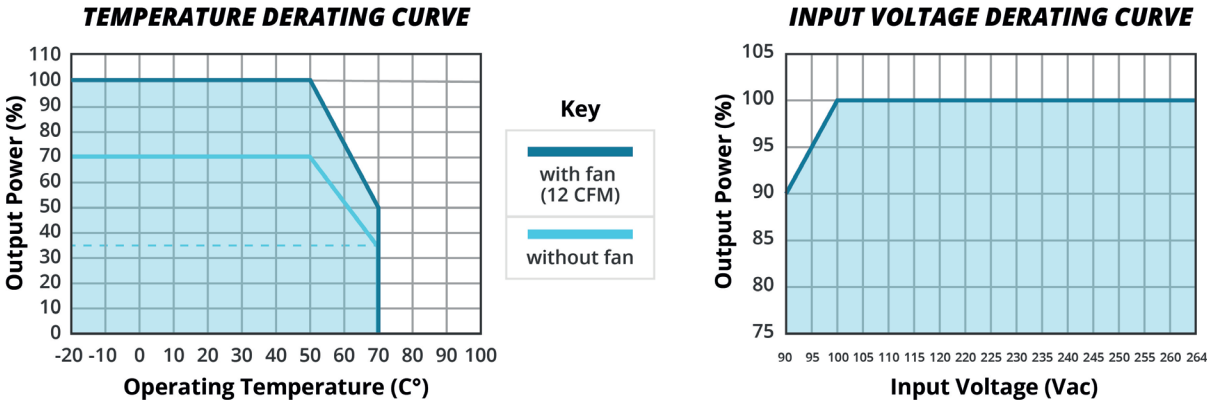
parameter	conditions/description	min	typ	max	units
isolation voltage ⁴	input to output for 1 minute, 10 mA max input to ground for 1 minute, 10 mA max	4,000 1,770			Vac Vac
safety class	class I				
safety approvals	certified to 62368: EN, UL				
EMI/EMC	CE / FCC Class B, conduction & radiation				
MTBF	as per Telcordia SR-322 at 25°C	300,000			hours
RoHS	yes				

Notes: 4. FG is isolated from secondary return.

ENVIRONMENTAL

parameter	conditions/description	min	typ	max	units
operating temperature		-20		70	°C
storage temperature		-20		80	°C
operating humidity	non-condensing	20		80	%
storage humidity	non-condensing	10		90	%

DERATING CURVE



MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	103.4 x 62.0 x 42.9				mm
weight			306		g

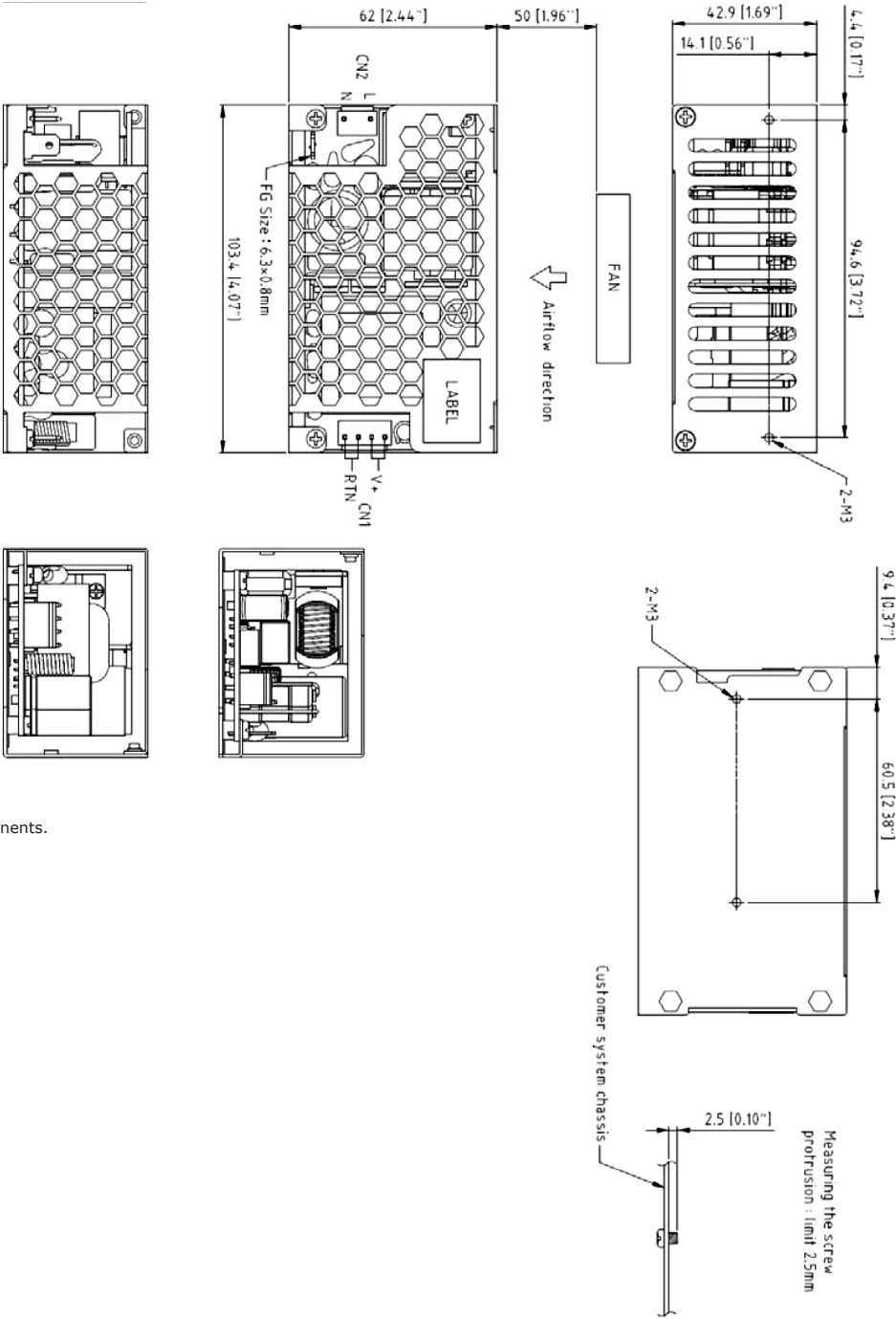
MECHANICAL DRAWING

units: mm [inch]
general tolerance: -1.0 / +3.0 mm

Input Connector CN2 (HOEDER: A3960WV-03P)	
PIN	Function
1	AC(N)
2	AC(L)

Output connector CN1 (HOWDER: A3960WV-04P)	
PIN	Function
1	+Vout
2	+Vout
3	RTN
4	RTN

Frame Ground (6.3 x 0.8 mm)	
PIN	Function
Tab	FG



Note: 5. Ensure adequate clearance for components.

REVISION HISTORY

rev.	description	date
1.0	initial release	10/28/2024
1.01	tolerance updated, assembly note added	06/17/2025

The revision history provided is for informational purposes only and is believed to be accurate.



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