SERIES: VGD-75 | DESCRIPTION: AC-DC POWER SUPPLY

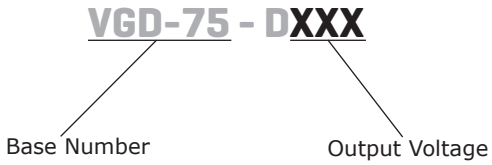
FEATURES

- universal input voltage range (90~264 Vac)
- provides dual outputs; independently isolated
- short circuit, over current and over voltage protections
- safety certified: IEC/EN/UL 62368
- designed to meet: IEC/EN/UL 60335
- class B EMI performance, meets CISPR32 / EN 55032

MODEL	output voltage (Vdc)	output current min (A)	output current max (A)	output power[1] max (W)	ripple and noise[2] max (mVp-p)	efficiency typ (%)
VGD-75-D512	5 12	0.7 0.3	7 3	71	80 120	82
VGD-75-D524	5 24	0.5 0.2	5 2	73	80 150	84

Notes: 1. Maximum total combined power.
2. Ripple & noise are measured at 20 MHz BW with 47 µF aluminum electrolytic capacitor and 0.1 µF ceramic capacitor on the output.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90 120		264 373	Vac Vdc
frequency		47		63	Hz
input current	115 Vac 230 Vac			1.7 0.9	A A
inrush current	115 Vac, full load, cold start 230 Vac, full load, cold start		30 45		A A

OUTPUT

parameter	conditions/description	min	typ	max	units
line regulation	Vo1, full load Vo2, full load		±0.5 ±1.5	±1.0	% %
load regulation	Vo1, 10 ~ 100% (balanced load) Vo2, 10 ~ 100% (balanced load)		±0.5 ±5.0		% %
temperature coefficient			±0.03		%/°C
hold-up time	115 Vac, full load 230 Vac, full load	5 30			ms ms
adjustability	adjustable with built-in trim pot[1]	4.75		5.5	V
output voltage accuracy	Vo1, full load range Vo2, full load range		±2.0 ±8.0		% %

Note: 1. Adjustment of 5 V output only.

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	hiccup mode	5.75		6.75	V
overload protection	hiccup mode, automatically recovers	110			%
short circuit protection	hiccup, continuous, self-recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output input to ground output to ground output Vo1 - output Vo2		3,000 2,000 500 500		Vac Vac Vac Vdc
isolation resistance	input to output at 500 Vdc @ 25°C	100			MΩ
safety approvals	IEC/EN/UL62368 designed to meet EN60335				
safety class	Class I				
conducted emissions	CISPR32/ EN55032 Class B				
radiated emissions	CISPR32/ EN55032 Class B				
ESD	IEC/EN61000-4-2, Contact ±6KV / Air ±8KV, perf. Criteria A				
radiated immunity	IEC/EN61000-4-3, 10V/m, perf. Criteria A				
EFT/burst	IEC/EN61000-4-4, ±2KV, perf. Criteria A				
surge	IEC/EN 61000-4-5, Line to Line ±2KV / Line to Ground±4KV, perf. Criteria A				
conducted immunity	IEC/EN61000-4-6, 10 Vrms, perf. Criteria A				

SAFETY & COMPLIANCE (CONTINUED)

parameter	conditions/description	min	typ	max	units
power-frequency magnetic fields immunity	EN 61000-4-8				
voltage dips & interruptions	IEC/EN61000-4-11, 0%,70%, perf. Criteria B				
MTBF	MIL-HDBK-217F at 25°C	300,000			hrs
RoHS	yes				

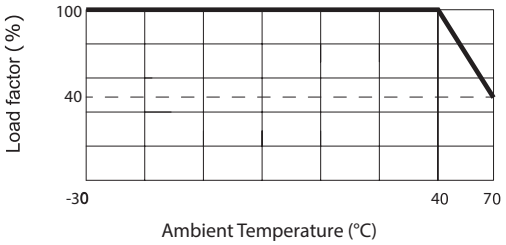
ENVIRONMENTAL

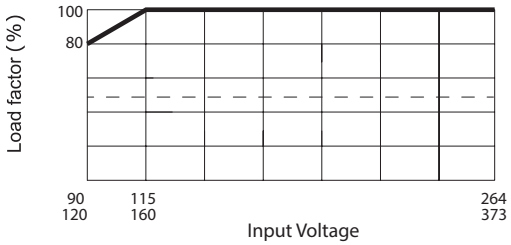
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-30		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing			95	%
storage humidity	non-condensing			95	%

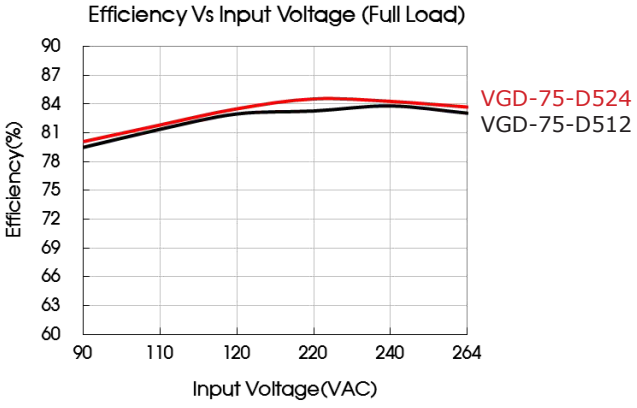
MECHANICAL

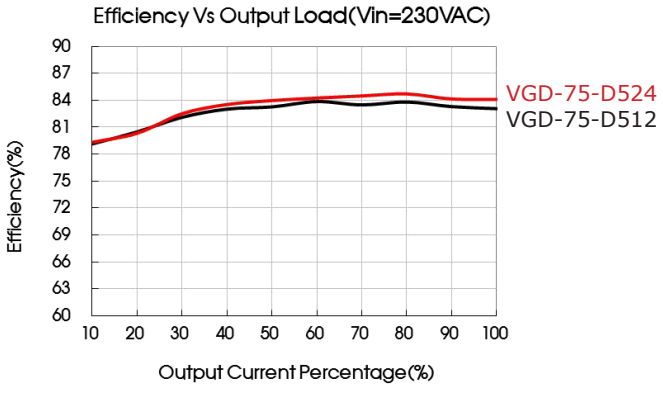
parameter	conditions/description	min	typ	max	units
dimensions	129 x 97 x 30 (5.1 x 3.8 x 1.2 inch)				mm
cooling method	free air convection (see derating curve below)				
weight			310		g

DERATING CURVES





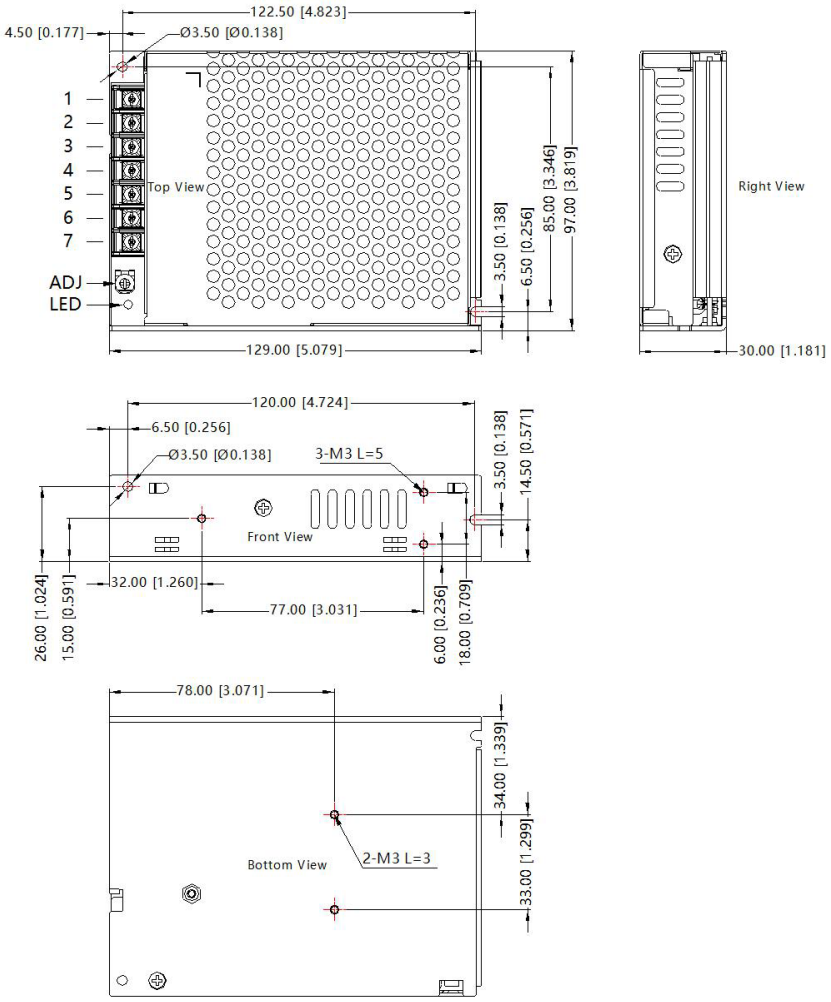




MECHANICAL DRAWING

units: mm [inches]
wire range: 22 - 14 AWG
tightening torque: M3, 0.5 N.m
tolerance: ±1.0 mm unless otherwise specified

PIN CONNECTIONS	
Pin	Function
1	AC(L)
2	AC(N)
3	⏚
4	-Vo2
5	+Vo2
6	-Vo1
7	+Vo1



REVISION HISTORY

rev.	description	date
1.0	initial release	11/08/2019

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

CUI INC®

Headquarters
20050 SW 112th Ave.
Tualatin, OR 97062
800.275.4899

Fax 503.612.2383
cui.com
techsupport@cui.com