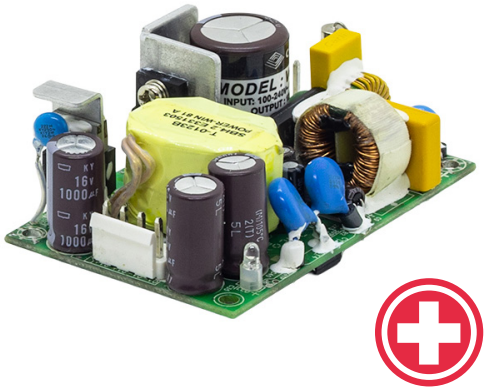
SERIES: VOFM-65G | **DESCRIPTION:** INTERNAL AC-DC POWER SUPPLY

FEATURES

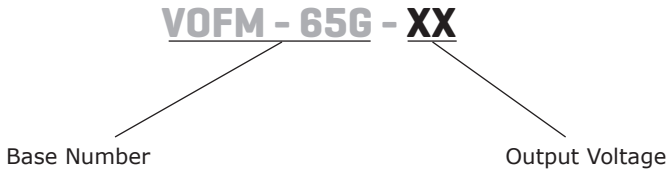
- universal input 90 ~ 264 Vac, 47 ~ 63 Hz
- high efficiency up to 87 %
- 40 ~ 65 W with natural convection
- compact size, high power density (3 x 2 x 1.18 inch)
- low no load power consumption (<0.21 W)
- certified to IEC/EN/UL 60601-1
- operating temperature -20 ~ 70°C (with derating)
- class I and class II application
- over voltage, over temperature, over current and short-circuit protection
- FCC Part 15 Class B
- medical protection (primary to secondary: 2 MOPP; primary to earth: 1 MOPP)
- power ON LED indicator



MODEL	output voltage typ (Vdc)	output current max (A)	output power max (W)	ripple and noise[1] typ (mVp-p)	efficiency level typ (%)
VOFM-65G-5	5	8.00	40	150	85
VOFM-65G-12	12	5.416	65	240	87
VOFM-65G-15	15	4.333	65	300	87
VOFM-65G-19	19	3.421	65	300	87
VOFM-65G-20	20	3.25	65	300	87
VOFM-65G-24	24	2.708	65	300	87
VOFM-65G-28	28	2.321	65	300	87
VOFM-65G-30	30	2.167	65	300	87
VOFM-65G-36	36	1.806	65	300	87
VOFM-65G-48	48	1.354	65	300	87
VOFM-65G-56	56	1.161	65	300	87

Notes: 1. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 100µF electrolytic capacitor and a 0.1µF ceramic capacitor in parallel at output connector.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		90	115~230	264	Vac
frequency		47	50~60	63	Hz
current	at 230 Vac			0.6	A
inrush current	at 230 Vac, cold start			130	A
touch current				0.1	mA
no load power consumption	at 230 Vac 5 Vdc output model all other output models			 0.1 0.21	 W W

OUTPUT

parameter	conditions/description	min	typ	max	units
load regulation	5 Vdc output model all other output models		±5 ±3		% %
hold-up time	at 115 Vac, 75 % load	10			ms
switching frequency	at full load		65		kHz

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over current protection	auto recovery	105		170	%
over voltage protection	latch off type, ac recycle				
over temperature protection	latch off type, ac recycle				
short circuit protection	auto recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output, 2 MOPP, for 4 seconds			4,000 5,656	Vac Vdc
	input to ground, 1 MOPP, for 4 seconds			1,500 2,121	Vac Vdc
	output to ground, for 4 seconds			1,500 2,121	Vac Vdc
safety approvals	certified to 60601-1: IEC, EN, UL				
safety class	class I and class II application				
EMI/EMC	IEC 60601-1-2:2014+A1:2020 EN (BS EN) 60601-1-2:2015+A1:2021 EN 55011(CISPR 11: 2015 + A1: 2016 + A2:2019 (Ed 6.2)) FCC 47 CFR Part 18				
MTBF	as per Telcordia SR-332 (Bellcore) at 25°C	430,000			hours
RoHS	yes				

ENVIRONMENTAL

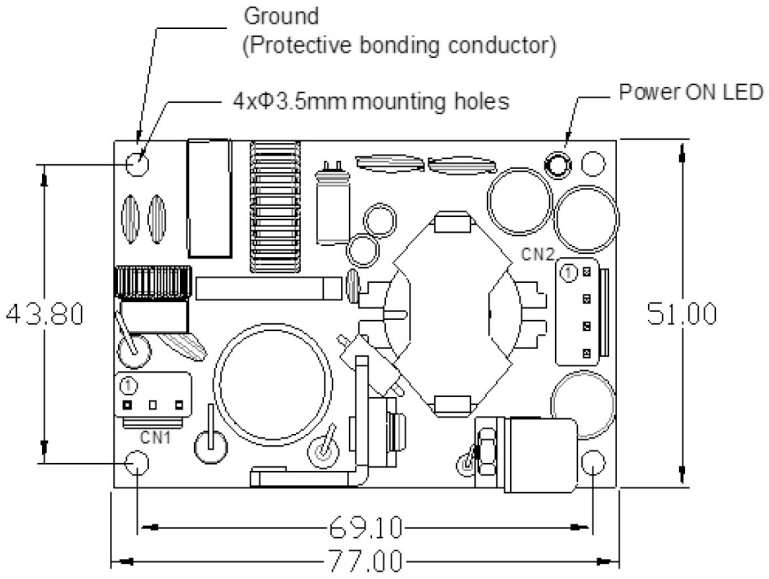
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-20		70	°C
storage temperature		-20		85	°C
operating humidity	non-condensing	10		95	%
storage humidity	non-condensing	0		95	%
operating altitude				3,000	m

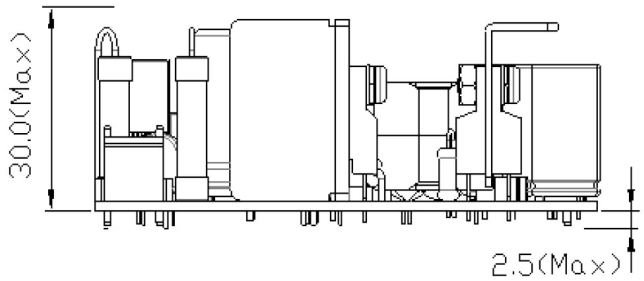
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	77.0 × 51.0 × 30.0 [3.000 x 2.000 x 1.180 inch]				mm
weight			120		g

MECHANICAL DRAWING

units: mm [inch]
tolerance: ±0.5mm



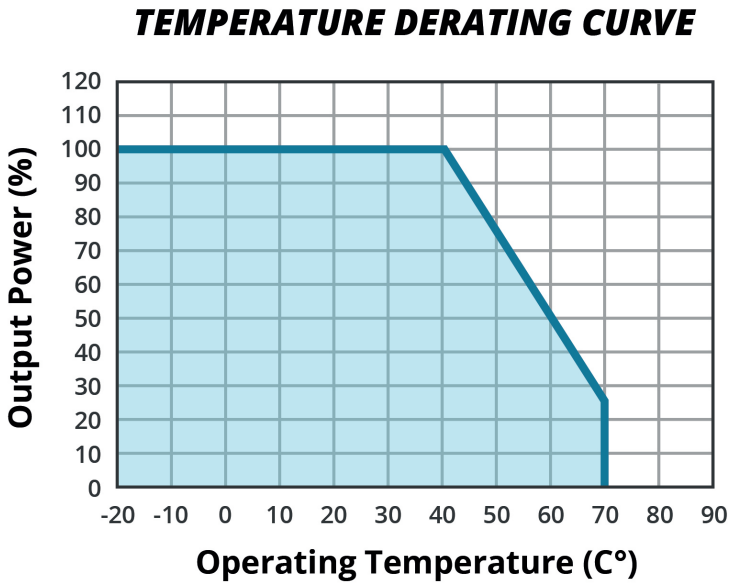


CN1: Input Connector JST B2P3-VH pitch: 7.92 mm or equivalent, mates with JST SVA-41T-P1.1 or equivalent	
PIN CONNECTIONS	
PIN	Function
1	AC(N)
2	AC(L)

CN2: Main Output Connector JST B4P-VH-B pitch: 3.96 mm or equivalent, mates with JST VHR-4N or equivalent	
PIN CONNECTIONS	
PIN	Function
1	-Vo
2	-Vo
3	+Vo
4	+Vo

Note:
1. For Class I applications, all four mounting hole positions must be securely connected to the protective earth ground during the final system assembly to ensure optimal safety and EMI performance.
2. For Class II applications, the four mounting hole positions must remain isolated from one another. Each mounting hole should be fixed to the chassis using insulated spacers.
3. To enhance EMI performance under Class II test conditions, the VOF-65G Series allows an additional clamp core to be applied with one turn on the AC input.

DERATING CURVE



Note: 1. Derates linearly 2.5% per °C from 41°C ~ 70°C.

REVISION HISTORY

rev.	description	date
1.0	initial release	06/26/2025

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

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