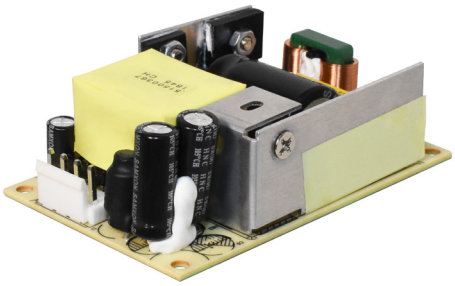
CUI INC
a bel group

SERIES: VOF-60C | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

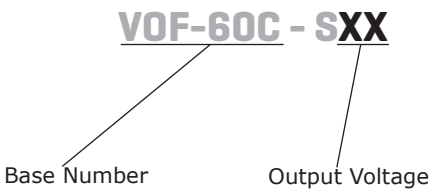
- universal input voltage range (85~264 VAC)
- 3 × 2 x 1.2 in (76.2 x 50.8 x 30 mm)
- class B EMI performance, meets CISPR32 / EN55032
- output short circuit, overcurrent & overvoltage protection
- safety certified: IEC/EN/UL 62368



MODEL	output voltage (Vdc)	output current min (mA)	output current max (mA)	output power max (W)	ripple and noise[1] max (mVp-p)	efficiency[2] typ (%)
VOF-60C-S5	5	0	10000	50	150	80
VOF-60C-S9	9	0	6600	60	150	83
VOF-60C-S12	12	0	5000	60	150	85
VOF-60C-S15	15	0	4000	60	150	85
VOF-60C-S24	24	0	2500	60	150	87
VOF-60C-S48	48	0	1250	60	150	87

Notes:
1. At full load, nominal input, 20 MHz bandwidth oscilloscope, with 1 µF ceramic and 10 µF electrolytic capacitors on the output.
2. At 230 Vac input.
3. All specifications are measured at Ta=25°C, humidity <75%, nominal input voltage, and rated output load unless otherwise specified.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		85 100		264 370	Vac Vdc
frequency		47		63	Hz
current	at 115 Vac at 230 Vac			1600 900	mA mA
inrush current	at 115 Vac at 230 Vac		35 50		A A
no load power consumption				0.5	W

OUTPUT

parameter	conditions/description	min	typ	max	units
capacitive load	5 Vdc output models 9 Vdc output models 12 Vdc output models 15 Vdc output models 24 Vdc output models 48 Vdc output models			40,000 12,000 8,000 7,000 1,500 1,000	µF
initial set point accuracy			±2		%
line regulation	at full load		±0.5		%
load regulation	from 5~100% load		±1		%
hold-up time	at 230 Vac, full load		35		ms
switching frequency			65		kHz
temperature coefficient			±0.02		%/°C

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	output voltage clamp, auto recovery 5 Vdc output models 9 Vdc output models 12 Vdc output models 15 Vdc output models 24 Vdc output models 48 Vdc output models			 9 16 20 24 35 60	Vdc
over current protection	hiccup, auto-recovery	120		300	%
short circuit protection	hiccup, continuous, auto-recovery				

SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output electric strength test for 1 minute, leakage current <5 mA	3,000			Vac
safety approvals	IEC/UL/EN 62368-1 certified				
safety class	Class II				
conducted emissions	CISPR32/EN55032, Class B				
radiated emissions	CISPR32/EN55032, Class B				
ESD	IEC/EN61000-4-2, Contact ±6KV, Perf. Criteria B				
radiated immunity	IEC/EN61000-4-3 10V/m perf. Criteria A				

SAFETY & COMPLIANCE (CONTINUED)

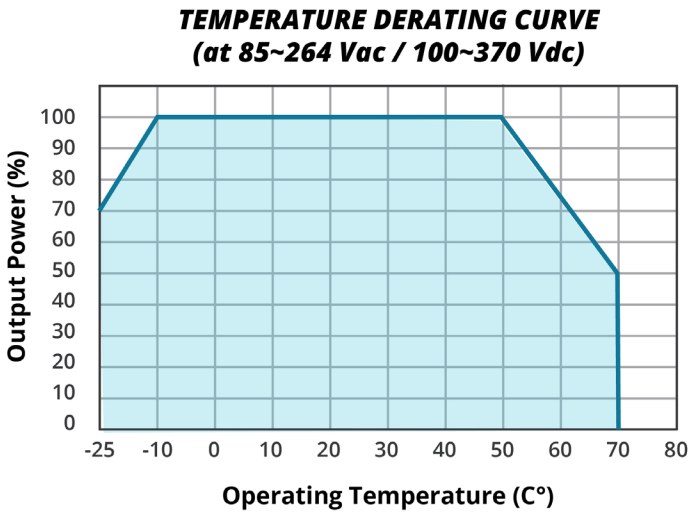
parameter	conditions/description	min	typ	max	units
EFT/burst	IEC/EN61000-4-4, ±2 kV, perf. Criteria B				
surge	IEC/EN61000-4-5, line to line ±1KV, perf. Criteria B				
conducted immunity	IEC/EN61000-4-6, 10 Vrms, Perf. Criteria A				
voltage dips & interruptions	IEC/EN61000-4-11 , 0%,70%, perf. Criteria B				
MTBF	as per MIL-HDBK-217F at 25°C	300,000			hours
RoHS	yes				

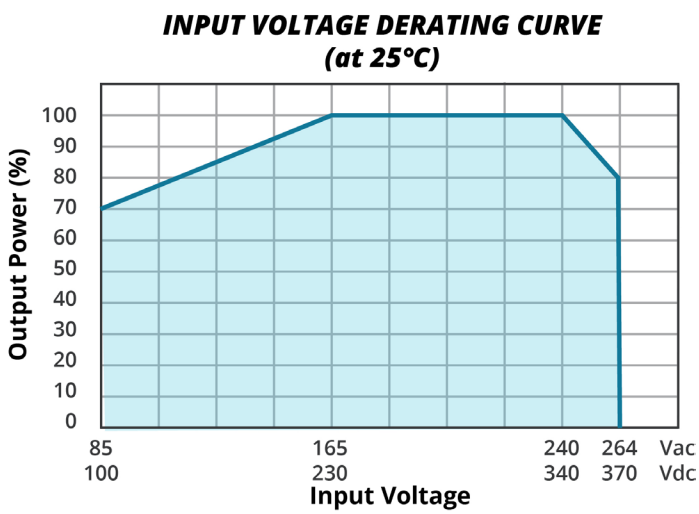
Notes: 4. The power supply is considered a component which will be installed into final equipment. The final equipment still must be tested to meet the necessary EMC directives.

ENVIRONMENTAL

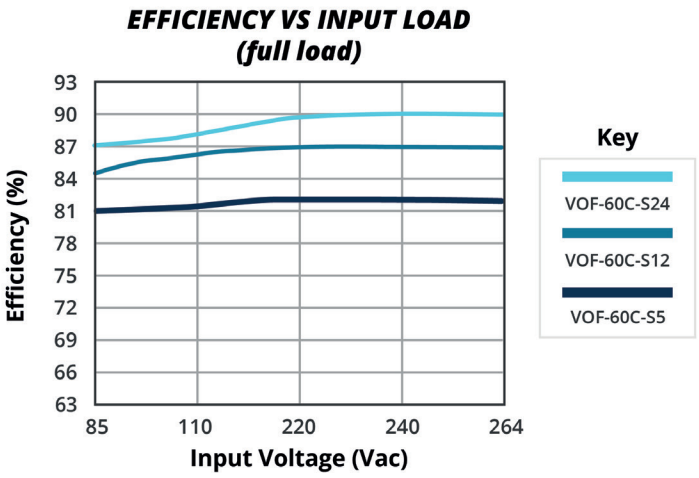
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curves	-25		70	°C
storage temperature		-25		85	°C
storage humidity	non-condensing			90	%

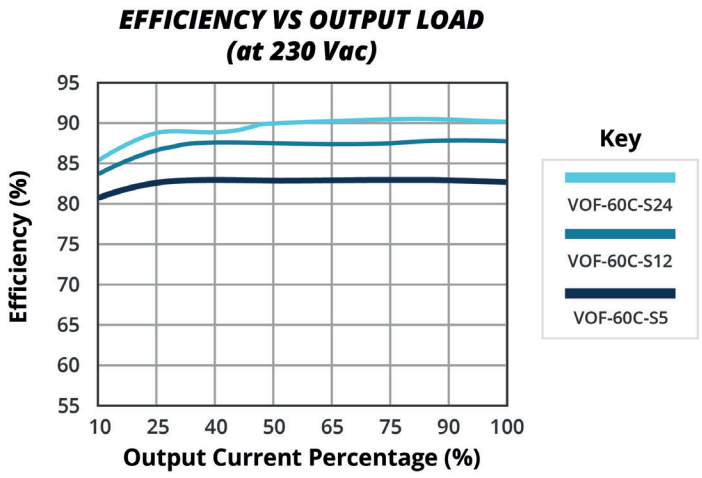
DERATING CURVES





EFFICIENCY CURVES



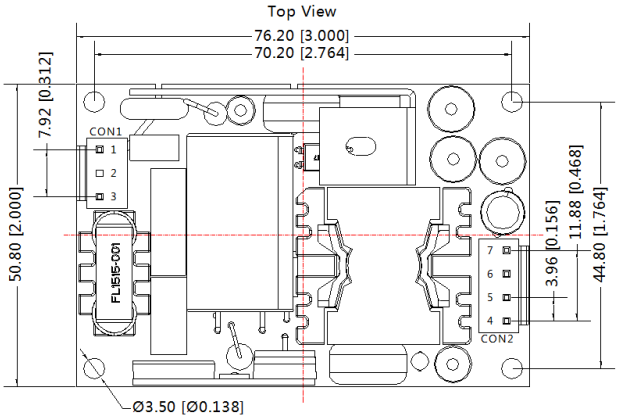


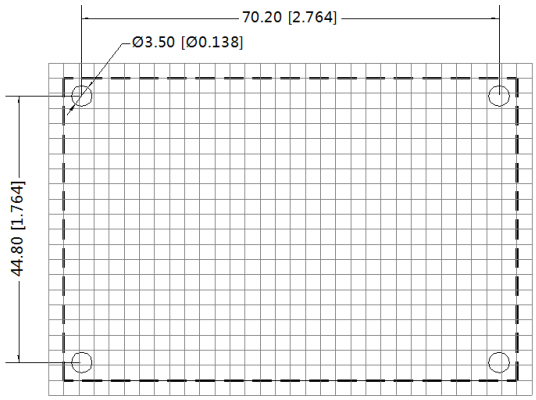
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	76.20 x 50.80 x 30.00				mm
weight			95		g

MECHANICAL DRAWING

units: mm[inch]
tolerance: ±0.50[±0.020]
In CON1 model: VH-3A, Recommended terminal: VH-3Y
Out CON2 model: VH-4A, recommended terminal: VH-4Y
Mounting hole screwing torque: Max 0.4 N·m





Note: Grid 2.54*2.54mm

PIN-Out			
PIN	Function	Connector	Terminal
1	AC(L)	VH-3A or B2P3-VH or the same Spec.	VH-3Y or VHR-3N or the same Spec.
2	NoPin		
3	AC(N)		
4	-Vo	VH-4A or B4P-VH or the same Spec.	VH-4Y or VHR-4N or the same Spec.
5	-Vo		
6	+Vo		
7	+Vo		

REVISION HISTORY

rev.	description	date
1.0	initial release	10/17/2019
1.01	derating and efficiency curves updated	05/13/2021

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

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CUI offers a two (2) year limited warranty. Complete warranty information is listed on our website.

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