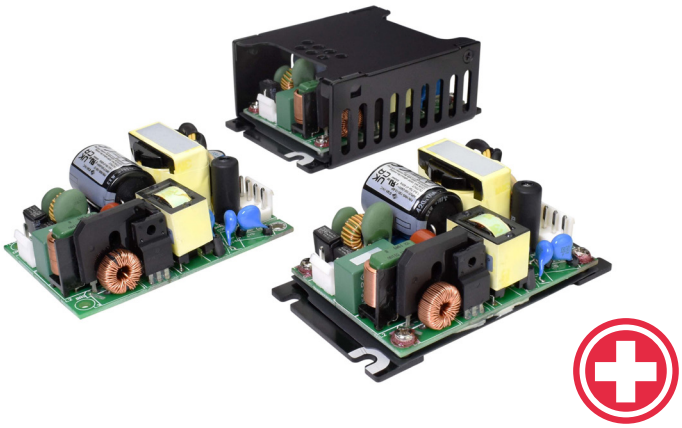
CUI INC
a bel group

SERIES: VMS-130 | DESCRIPTION: AC-DC POWER SUPPLY

FEATURES

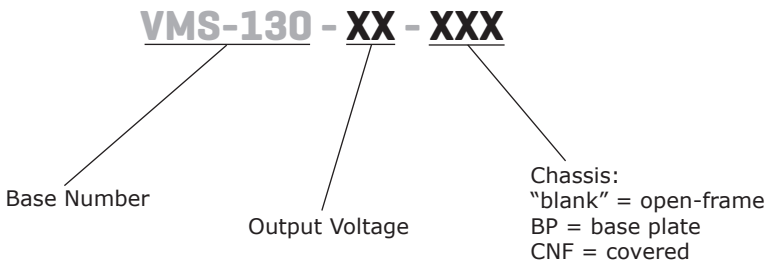
- 80 ~ 264 Vac input voltage range
- 2" x 3" open frame chassis
- 100 W power output with natural convection
- 130 W power output with forced air cooling
- active PFC
- IEC 60601-1 approved
- IEC Class I & Class II safety approved



MODEL	output voltage (Vdc)	output current[1] max (A)	output power[2] max (W)	ripple and noise[3] max (mVp-p)	efficiency[4] typ (%)
VMS-130-12	12	10.8	130	120	93
VMS-130-24	24	5.4	130	240	93
VMS-130-36	36	3.6	130	360	94
VMS-130-48	48	2.7	130	480	94

Notes:
1. Maximum output power of 130 W with 10 CFM forced air cooling, and 100 W with natural convection. See derating curves.
2. With forced air (10 CFM).
3. At full load, nominal input, 20 MHz bandwidth oscilloscope with 10 µF electrolytic and 0.1 µF ceramic capacitors.
4. At 230 Vac, 25°C, 75% load.

PART NUMBER KEY



INPUT

parameter	conditions/description	min	typ	max	units
voltage		80		264	Vac
frequency		47		63	Hz
current	at 240 Vac at 100 Vac			0.8 1.5	A A
inrush current	at 240 Vac, cold start			100	A
leakage current				0.1	mA

OUTPUT

parameter	conditions/description	min	typ	max	units
initial set point accuracy	at full load		±2		%
line regulation	100 ~ 240 Vac, full load		±0.5		%
load regulation	10 ~ 100% load		±1		%
hold-up time	at 230 Vac, 25°C	20			ms
temperature coefficient			±0.05		%/°C
switching frequency			105		kHz

PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	auto recovery 12 Vdc output model 24 Vdc output model 36 Vdc output model 48 Vdc output model			 13.5 30 42 54	 Vdc Vdc Vdc Vdc
short circuit protection	auto recovery, hiccup				

SAFETY & COMPLIANCE

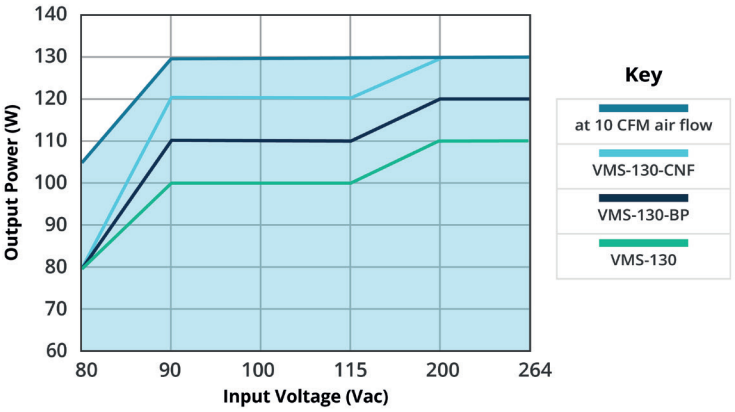
parameter	conditions/description	min	typ	max	units
isolation voltage	input to output	4,000			Vac
safety approvals	certified to 60601: IEC/EN/UL				
safety class	class I, class II				
conducted emissions	EN55011 Class B when test condition is Class I, Class II				
radiated emissions	EN55011 Class B when test condition is Class I EN55011 Class A when test condition is Class II				
harmonic current	IEC 61000-3-2				
voltage fluctuations and flicker	IEC 61000-3-3:2013				
ESD	IEC 61000-4-2				
radiated immunity	IEC 61000-4-3				
EFT/burst	IEC 61000-4-4				
surge	IEC 61000-4-5				
conducted immunity	IEC 61000-4-6				
voltage dips and interruptions	IEC 61000-4-11				
MTBF	as per MIL-HDBK-217F at 25°C	400,000			hours
RoHS	yes				

ENVIRONMENTAL

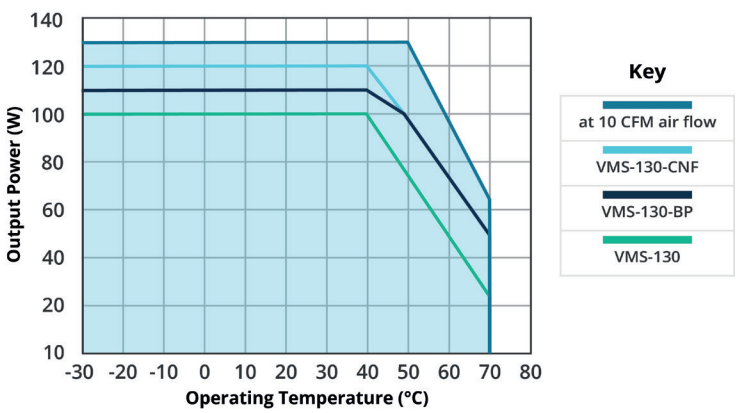
parameter	conditions/description	min	typ	max	units
operating temperature	see derating curve	-30		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing			93	%

DERATING CURVES

INPUT VOLTAGE DERATING CURVE



TEMPERATURE DERATING CURVE



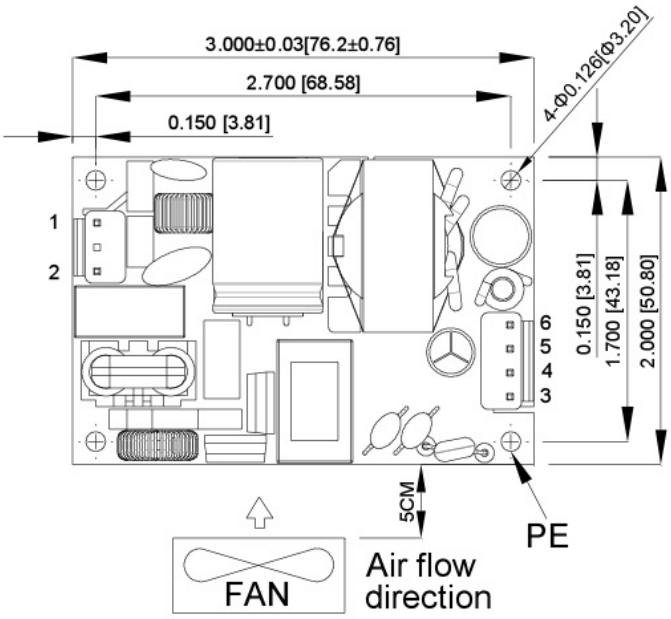
MECHANICAL

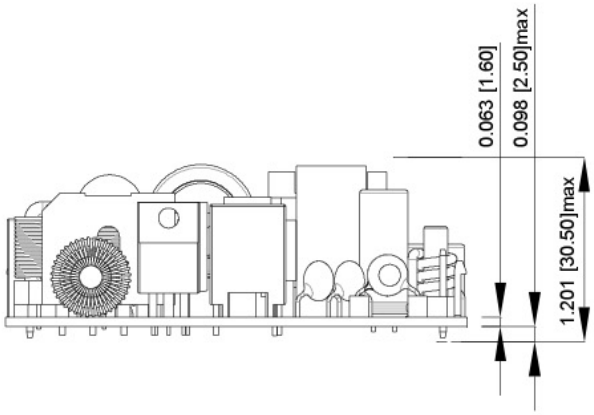
parameter	conditions/description	min	typ	max	units
dimensions	open frame models: 3.000 x 2.000 x 1.200 [76.2 x 50.8 x 30.5 mm] base plate models: 3.598 x 2.000 x 1.299 [91.4 x 50.8 x 33.0 mm] covered models: 3.598 × 2.520 × 1.358 [91.4 x 64.0 x 34.5 mm]				inches inches inches
weight	open frame models base plate models covered models		135 170 218		g g g
cooling	natural convection (no integrated fan), see derating curve 10 CFM		100 130		W W

MECHANICAL DRAWING

Open-frame
units: inch [mm]
general tolerance: ±0.02 [±0.5]

PIN-OUT	
PIN	Function
1	AC (L)
2	AC (N)
3	-Vo
4	-Vo
5	+Vo
6	+Vo

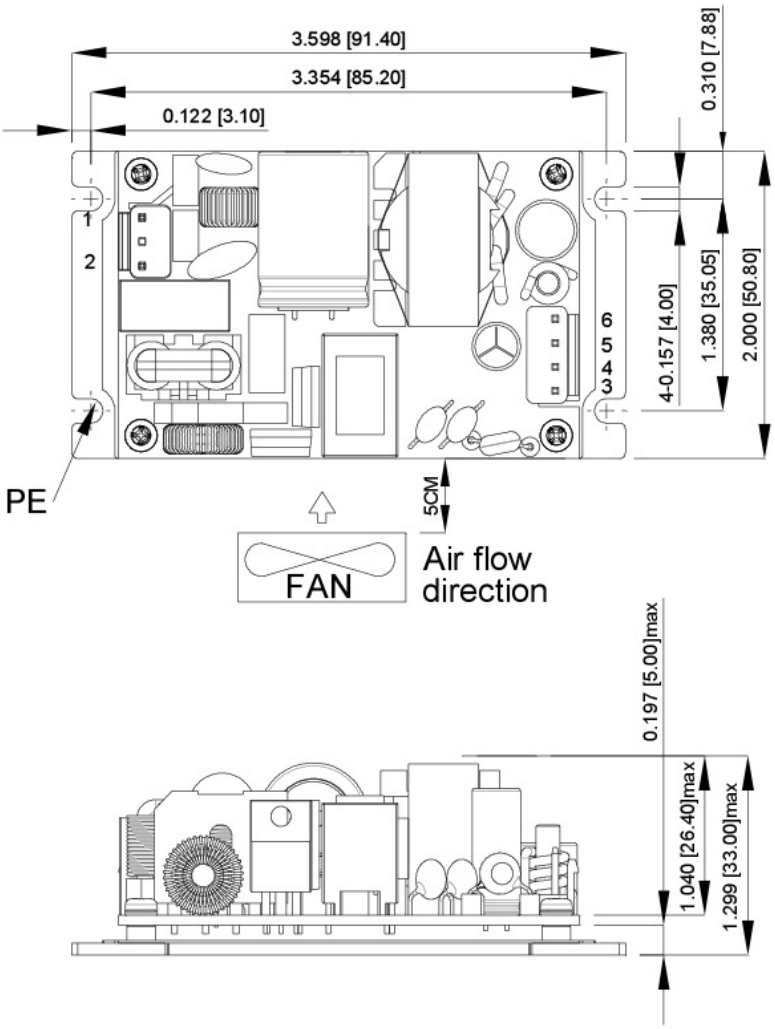




MECHANICAL DRAWING (CONTINUED)

Base plate
units: inch [mm]
general tolerance: ±0.02 [±0.5]

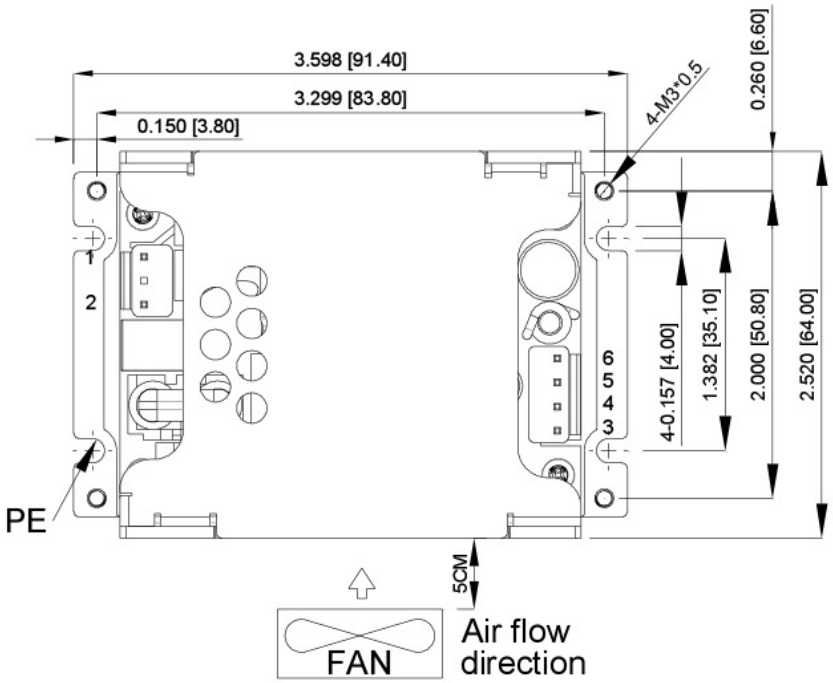
PIN-OUT	
PIN	Function
1	AC (L)
2	AC (N)
3	-Vo
4	-Vo
5	+Vo
6	+Vo

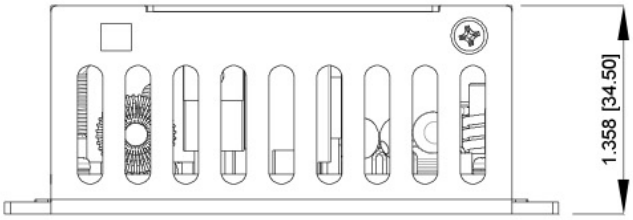


MECHANICAL DRAWING (CONTINUED)

Covered
units: inch [mm]
general tolerance: ±0.02 [±0.5]

PIN-OUT	
PIN	Function
1	AC (L)
2	AC (N)
3	-Vo
4	-Vo
5	+Vo
6	+Vo





REVISION HISTORY

rev.	description	date
1.0	initial release	11/09/2021
1.01	mechanical drawing updated	07/13/2022
1.02	medical icon added	05/04/2023

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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