

LHV

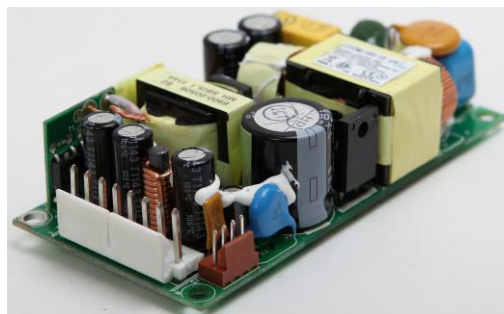
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LVOM-160 Series

Product Features:

- Up to 160 W continuous power
- Industry standard 2"x 4" footprint
- 18 W/in³ power density
- Universal input (85-264 Vac / 125 -373 Vdc)
- 3.3V to 48V outputs available
- Active power correction factor (98%)
- No minimum load required
- Full medical and ITE safety approvals
- Typical efficiency of 90%
- OVP, OTP and short-circuit protection
- Compliant to worldwide safety and EMC standards

**MODEL GUIDE**

Model	V1	Without Air Flow	With Air Flow (400 LFM)	V1 PARD (Pk-Pk)	V2	Without Air Flow	With Air Flow (400 LFM)
LVOM-160-3	3.3V	14A	20A	50mV	12V	0.5A	0.5A
LVOM-160-5	5V	14A	20A	50mV	12V	0.5A	0.5A
LVOM-160-12	12V	8.3A	13.3A	120mV	12V	0.5A	0.5A
LVOM-160-15	15V	6A	8A	50mV	12V	0.5A	0.5A
LVOM-160-24	24V	4.16A	6.66A	240mV	12V	0.5A	0.5A
LVOM-160-48	48V	2.08A	3.33A	480mV	12V	0.5A	0.5A

INPUT

Parameter	Notes/Description	Min	Nom	Max	Units
AC Input Voltage		90	115/230	264	VAC
DC Input Voltage		170		370	VDC
Input Frequency		47	50/60	63	Hz
Input Current	90VAC			2.3	A
Inrush Current	No damage at 230 VAC cold start				
Efficiency	Full load		90		%
Power Factor	90VAC		0.98		

OUTPUT

Parameter	Notes/Description	Min	Nom	Max	Units
Set-Point Accuracy			±1.0		%
Adjustment Range			±5.0		
Line Regulation	90-264 V ac		±0.1		%
Load Regulation	V1		±1		%
	V2		±5		%



Parameter	Notes/Description	Min	Nom	Max	Units
Cross Regulation	V1		±1		%
	V2		±15		%
Transient Response	50% load change, recovery to regulation band within 1msec			10	%
Ripple & Noise	Peak-peak 20MHz bandwidth		±1		%
Rise Time		0.2		5	msec
Startup Time			1		sec
Holdup Time	90 VAC, 160W load		16		msec
Minimum Load		0			A
Temperature Drift			±0.25		mV/C

PROTECTION

Parameter	Notes/Description	Min	Nom	Max	Units
Undervoltage Lockout	No damage, auto-recovery	60	75		VAC
Over-Voltage Protection	Latched shutdown		±15	130	%
Over-Current Protection	Auto-recovery			150	%
Short-Circuit Protection	Auto-recovery				
Over -Temperature	Auto-recovery				
Input Fuse	Line and neutral				
Isolation Input/Ouput	For 1 minute	5656	16		VDC
Isolation Input/Ground	For 1 minute	5656			VAC
Leakage Current	115/230 VAC			110/200	uA

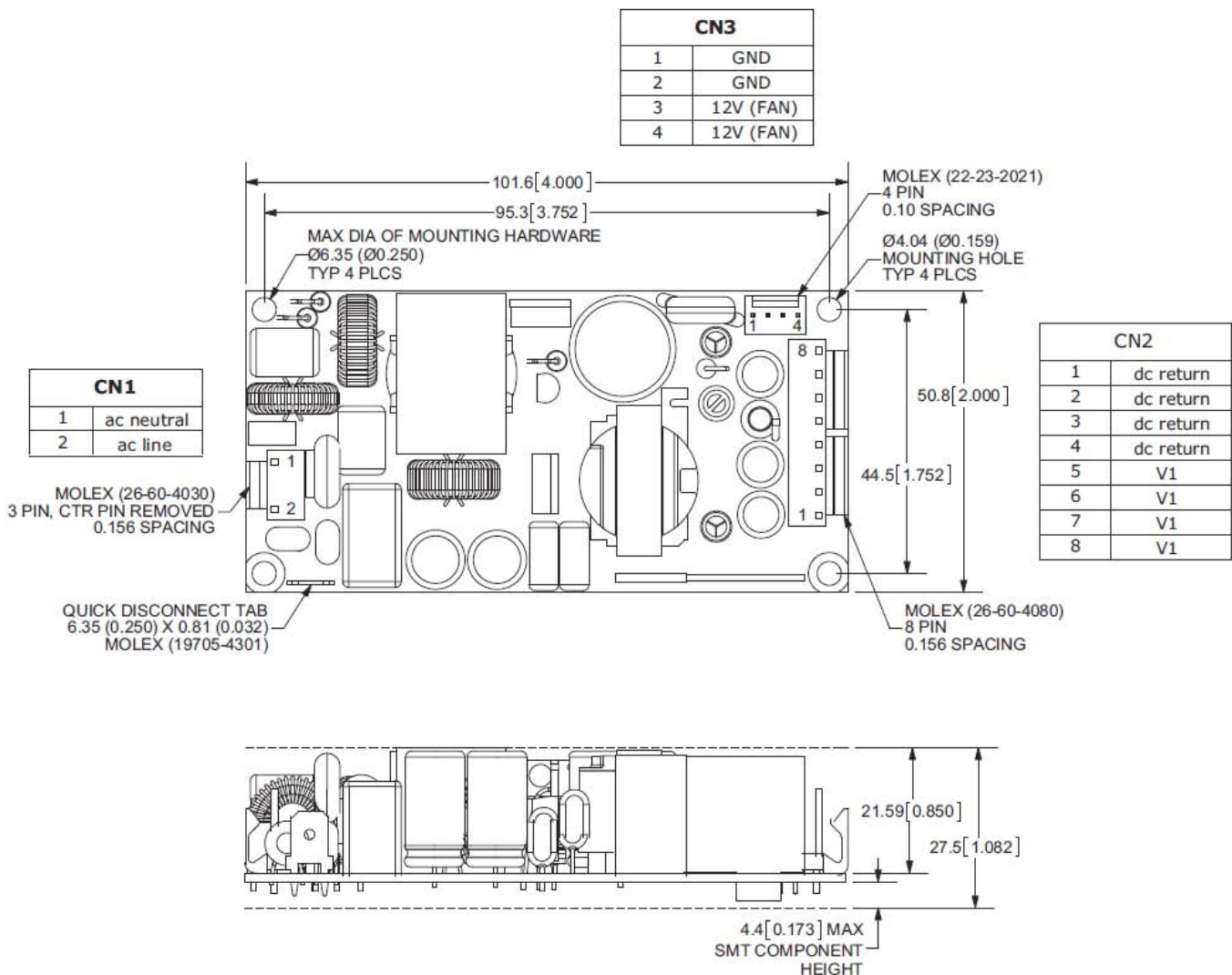
SAFETY & COMPLIANCE

IEC 61000 Family	Standard	Condition	Criteria
ESD	EN61000-4-2	15KV air discharge 8KV contact discharge	A
Radiated Field	EN61000-4-3	3V/m, 80-1000MHz, 80% AM, 3m distance	A
EFT	EN61000-4-4	±2kV on AC power port±1kV on signal/control lines	A
Surge	EN61000-4-5	±1KV line-to-line, ± 2 KV line to earth±0.5 kV for outdoor cables	A
Conducted RF Immunity	EN61000-4-6	3Vrms, 0.15-80Mhz, 80% AM	A
Magnetic Field Immunity	EN61000-4-850	50 and 60 Hz, 3A/m	A
Dips & Interruptions	EN61000-4-11	Dip to 40% for 5 cycles (100msec)	B
		Dip to 70% for 25 cycles (500msec)	B
		Dropout to 5% for 10 msec	B
		Interrupts > 95% for 5 sec	C
Voltage Fluctuation	EN61000-3-3		
Emissions	Standard	Condition	Criteria
Conducted EMI	EN55022	Class B	4dB margin
Radiated EMI	EN55022	ClassA	4dB margin
Harmonic currents	EN61000-3-2		
Safety Agency Approvals			
Agencies	VDE, UL, c-UL		
Standards	EN60950, IEC60950, UL60950, EN60601-1, IEC60601, UL 60601-1		

ENVIRONMENTAL

Parameter	Notes/Description	Min	Max	Units
Operating Temperature	50% of max power at 70°C Linearly derated over 50°C	-20	70	°C
Storage Temperature		-20	80	°C
Cooling	3.3V model: above 46W power 5V model: above 70W power 15V model: above 90W power Other models: above 100W power	400		LFM
Relative Humidity	Non Condensing		95	%
Operating Altitude			3000	m
Shock	Half-sine 3 axis, operating		10	G
Vibration	10-300Hz, 3 axis, operating		0.5	G
MTBF	75% load	200,000		Hours

MECHANICAL DRAWING



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