# **40 Watt Industrial**



#### **Features**

- 3 x 2 x 0.75 Inches Form factor
- 40 Watts Convection
- Efficiencies 85% Typical
- No Load Power < 0.3W
- Now IEC/EN/UL62368-1 Compliant New
- 2m Hours, Telcordia -SR332-issue 3 MTBF
- -40 to 70 degree operating temperature\*
- Approved with metal enclosures/accessories

	Electrical Specifications
Input Voltage	85-264 VAC/390 VDC, Universal
Input Frequency	47-63 Hz
Input Current	115 VAC: 0.8 A max. 230 VAC: 0.4 A max.
No Load Power	less than 0.3W typical
Inrush Current	115 VAC – 25 A, 230 VAC – 45 A, 264 VAC – 75 A
Leakage Current	300 uA Typical,
Efficiency	85% Typical
Hold-up Time	40W:60 ms @230VAC
Output Power	40W Convection Cooling
Line Regulation	+/-0.5%
Load Regulation	+/-1%
Transient Response	25% step load change, at 0.1A/uS slew rate, 50% duty cycle, 50/60Hz,max excursion 4%,
	recovery time 5mS.
Rise Time	50ms typical
Set Point Tolerance	2% (3% for 5V model)
Over Current Protection	>110%
Over Voltage Protection	110 to 140%
Short Circuit Protection	Hiccup mode
Switching Frequency	65 KHz Typical
Operating Temperature <sup>4</sup>	- 40 to +70°C, * -40 to 0°C startup is guaranteed with spec deviation
Storage Temperature	-40 to +85°C
Relative Humidity	5% to 95%, noncondensing
Altitude	Operating: 16,000 ft.; Nonoperating: 40,000 ft.
MTBF	2m Hours, Telcordia -SR332-issue 3
Isolation Voltage	Input to Output — 4000 VDC

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# Option 1

Model Number	Description	Voltage	Max. Load	Min. Load	Ripple <sup>1</sup>
ULP40-1305	with Header	5 V	5A	0.0 A	1.5%
ULP40-1312	with Header	12 V	3.33A	0.0 A	1%
ULP40-1315	with Header	15 V	2.67A	0.0 A	1%
ULP40-1324	with Header	24 V	1.67A	0.0 A	1%
ULP40-1330	with Header	30 V	1.33A	0.0 A	1%
ULP40-1348	with Header	48 V	0.83A	0.0 A	1%
ULP40-1358	with Header	58 V	0.69A	0.0 A	1%
MULP40-CK metal cover kit accessory					

# Option 2

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Model Number	Description	Voltage	Max. Load	Min. Load	Ripple <sup>1</sup>	
ULP40-1205	with PCB Mounting	5 V	5A	0.0 A	1.5%	
ULP40-1212	with PCB Mounting	12 V	3.33A	0.0 A	1%	
ULP40-1215	with PCB Mounting	15 V	2.67A	0.0 A	1%	
ULP40-1224	with PCB Mounting	24 V	1.67A	0.0 A	1%	
ULP40-1230	with PCB Mounting	30 V	1.33A	0.0 A	1%	
ULP40-1248	with PCB Mounting	48 V	0.83A	0.0 A	1%	
ULP40-1258	with PCB Mounting	58 V	0.69A	0.0 A	1%	

### Option 3

Model Number	Description	Voltage	Max. Load	Min. Load	Ripple <sup>1</sup>
ULP40-1005	with Screw Terminal	5 V	5A	0.0 A	1.5%
ULP40-1012	with Screw Terminal	12 V	3.33A	0.0 A	1%
ULP40-1015	with Screw Terminal	15 V	2.67A	0.0 A	1%
ULP40-1024	with Screw Terminal	24 V	1.67A	0.0 A	1%
ULP40-1030	with Screw Terminal	30 V	1.33A	0.0 A	1%
ULP40-1048	with Screw Terminal	48 V	0.83A	0.0 A	1%
ULP40-1058	with Screw Terminal	58 V	0.69A	0.0 A	1%
MULP40-CK metal cover kit accessory					

For Power supply unit with Base plate (metal accessory option) add "-B" suffix at the end of model number

For Power supply unit with L bracket (metal accessory option) add "-L" suffix at the end of model number

For Power supply unit with U channel (metal accessory option) add "-U" suffix at the end of model number

For Power supply unit with CK Cover kit (metal accessory option) add "-CK" suffix at the end of model number



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	Connecto	ors	
J1 Option 1 & 3	Pin 1 Pin 2 Pin 3	AC LINE NOT FITTED AC NEUTRAL	
J2 Option 1 & 3	Pin 1,2 Pin 3,4	V1 +VE V1 -VE	

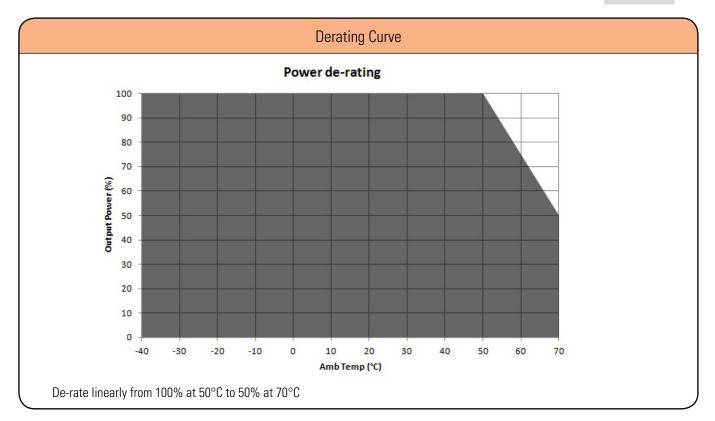
#### Notes

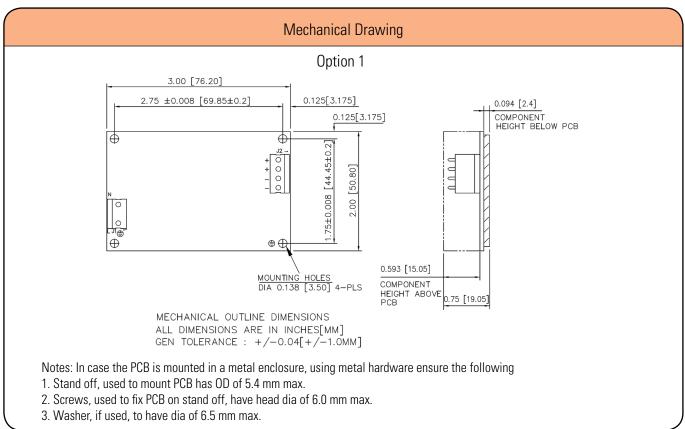
- 1. Ripple is peak to peak with 20 MHz bandwidth and 10  $\mu$ F (Electrolytic capacitor) in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
- 2. For Class II version Enquire with EOS Sales Rep before Order.
- 3. Specifications are for nominal input voltage, 25°C unless otherwise stated.
- 4. Output ripple can be more than 10% of the output voltage.
- 5. When used in Cover Kit, de-rate output power to 70 % under all operating conditions

	Mechanical Specifications		
AC Input Connector (J1) Option 1	Tyco: 640445-3		
	Mating: 647402-3; Pins: 3-647409-1		
DC Output Connector (J2) Option 1	Tyco: 640445-4		
	Mating: 647402-4; Pins: 3-647409-1		
Dimensions	3 x 2 x 0.75 inches		
	(76.20 x 50.8 x 19.05 mm)		
Weight	100 gm approx		
	EMC		
Parameter	Conditions/Description	Criteria	
Conducted Emissions	EN55032-B, CISPR22-B, FCC PART15-B	Pass	
Radiated Emissions	EN 55032 A	Pass	
		Level B with external core (King core K5B	
		RC 25x12x15-M in input cable)	
Input Current Harmonics	EN 61000-3-2	Class A	
Voltage Fluctuation and Flicker	EN 61000-3-3	Pass	
ESD Immunity	EN 61000-4-2	Level 3, Criterion A	
Radiated Field Immunity	EN 61000-4-3	Level 3, Criterion A	
Electrical Fast Transient Immunity	EN 61000-4-4	Level 3, Criterion A	
Surge Immunity	EN 61000-4-5	Level 3, Criterion A	
Conducted Immunity	EN 61000-4-6	Level 3, Criterion A	
Magnetic Field Immunity	EN 61000-4-8	Level 3, Criterion A	
Voltage dips, interruptions	EN 61000-4-11	Criterion A & B	
	Safety		
CE Mark	Complies with LVD Directive		
Approval Agency	Nemko, UL, C-UL		
Safety Standard(s)	EN/IEC/UL 62368-1 (Ed.3)		
Safety File Number(s)	Nemko: Certificate No: No.P20224848, CB Test Certificate No: N0113955, UL: Certificate No: E515384-A6012-UL		

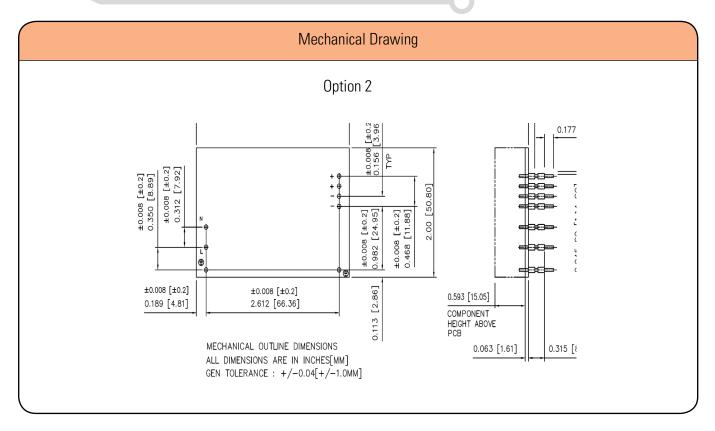


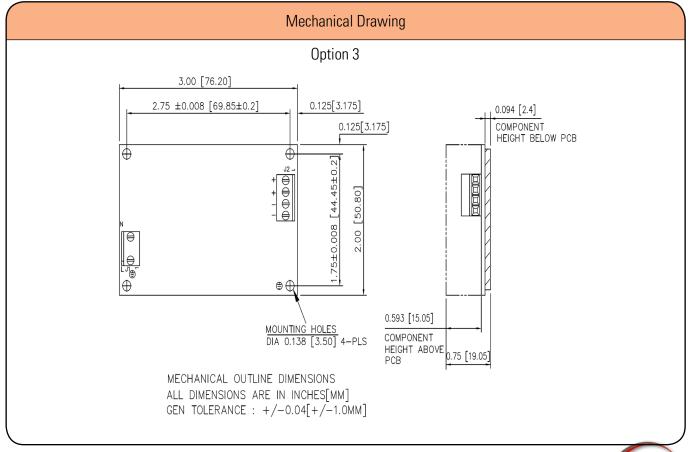
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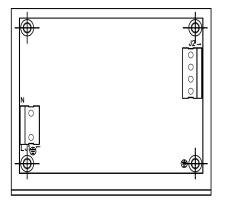


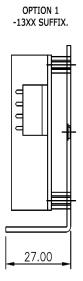
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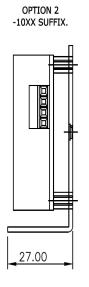


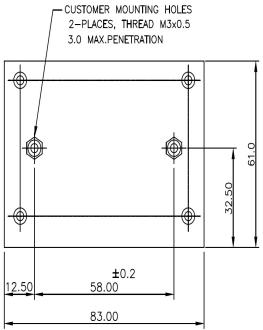


# **ULP40 WITH 'L' BRACKET**



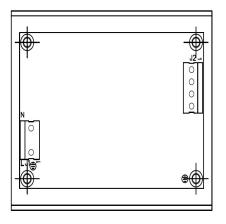




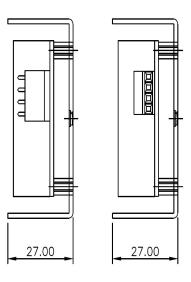


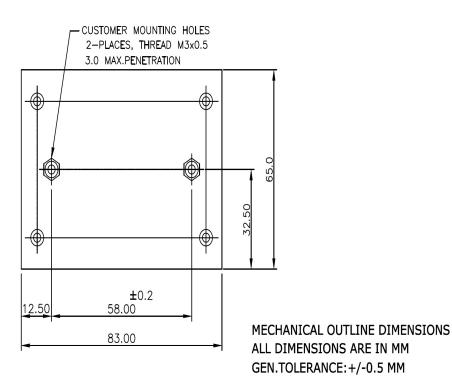
MECHANICAL OUTLINE DIMENSIONS ALL DIMENSIONS ARE IN MM GEN.TOLERANCE:+/-0.5 MM

# **ULP40 WITH 'U' CHANNEL**



OPTION 1 OPTION 2 -13XX SUFFIX. -10XX SUFFIX.

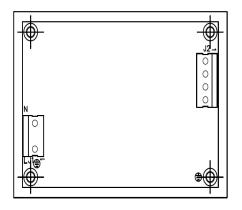




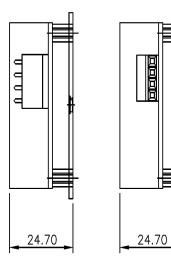
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# **ULP40 WITH BASE PLATE**



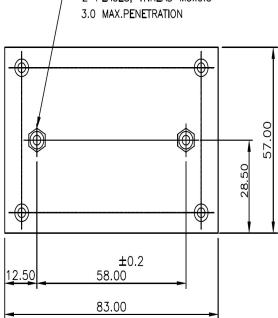




OPTION 2

-10XX SUFFIX.

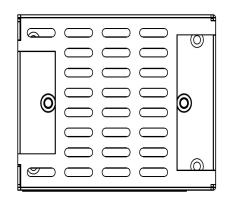
CUSTOMER MOUNTING HOLES 2-PLACES, THREAD M3x0.5 3.0 MAX.PENETRATION



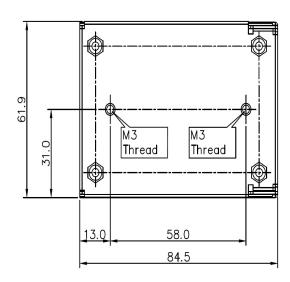
MECHANICAL OUTLINE DIMENSIONS ALL DIMENSIONS ARE IN MM GEN.TOLERANCE: +/-0.5 MM

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# **ULP40 WITH COVER KIT**







MECHANICAL OUTLINE DIMENSIONS ALL DIMENSIONS ARE IN MM. GEN. TOLERANCE:  $\pm 1.0~\text{mm}$ 



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