

- Low standby power consumption ≤ 0.11 Watt
- Wide input voltage range 85 to 264VAC, 47 to 63HZ
- Also supports DC-DC (input 120 to 370VDC)
- Convection cooled
- Built-in EMI filter
- Output voltage adjustable
- Open frame dimensions 2.00" x 3.00" x 1.00"
- 3000VAC input to output reinforced insulation
- Protection type Class I or Class II
- Low leakage current:
 $\leq 75\mu\text{A}$ at 264VAC ($33\mu\text{A}$ at 115VAC)
- Operating temperature -40°C to $+85^{\circ}\text{C}$
- Operating altitude 5000M
- 3 year warranty

Packaging Choices

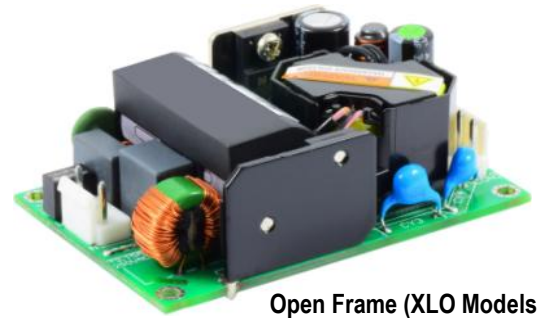
The XL40 is not only one of the smallest 40 Watt power supplies on the market, it is also available in a choice of four different packages to suit diverse application requirements – XLO Open Frame models, XLU U-Frame models, XLE Enclosed models and XLD DIN Rail models. Despite its small size, the full 40W output power is delivered with convection cooling only – no need for a fan!

Applications

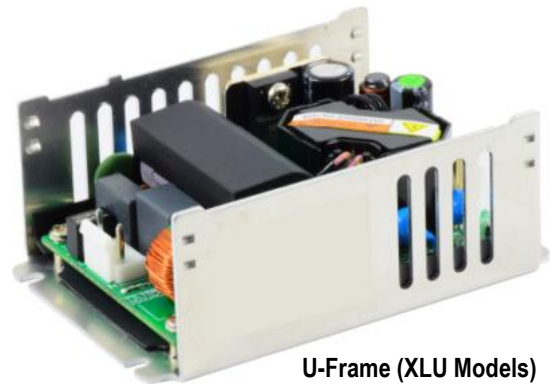
The excellent operating characteristics of the XL40 Series plus its wide range of international compliance certifications make it the ideal choice for use in diverse applications that include personal computers, wireless networking, measurement equipment, telecom/datacom, industrial control systems and automation.

Connector Options

Choose from JST, Molex or Terminal Block connectors:



Open Frame (XLO Models)



U-Frame (XLU Models)



Enclosed (XLE Models)



DIN Rail (XLD Models)

MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%) (4)	MAXIMUM CURRENT (A)	RIPPLE & NOISE (P-P)
XLO40-05 XLU40-05 XLE40-05 XLD40-05 XLO40-05B XLU40-05B XLE40-05B XLD40-05B	400570-14-3 400569-14-3 400568-14-3 400567-14-3 400570-01-1 400569-01-1 400568-01-1 400567-01-1	V _{OUT}	5	±0.7	8	75 mV
XLO40-7P5 XLU40-7P5 XLE40-7P5 XLD40-7P5 XLO40-7P5B XLU40-7P5B XLE40-7P5B XLD40-7P5B	400570-18-5 400569-18-5 400568-18-5 400567-18-5 400570-05-2 400569-05-2 400568-05-2 400567-05-2	V _{OUT}	7.5	±0.5	5.34	75 mV
XLO40-09 XLU40-09 XLE40-09 XLD40-09 XLO40-09B XLU40-09B XLE40-09B XLD40-09B	400570-19-3 400569-19-3 400568-19-3 400567-19-3 400570-06-0 400569-06-0 400568-06-0 400567-06-0	V _{OUT}	9	±0.5	4.45	75 mV
XLO40-12 XLU40-12 XLE40-12 XLD40-12 XLO40-12B XLU40-12B XLE40-12B XLD40-12B	400570-15-1 400569-15-1 400568-15-1 400567-15-1 400570-02-9 400569-02-9 400568-02-9 400567-02-9	V _{OUT}	12	±0.5	3.34	75 mV
XLO40-15 XLU40-15 XLE40-15 XLD40-15 XLO40-15B XLU40-15B XLE40-15B XLD40-15B	400570-20-1 400569-20-1 400568-20-1 400567-20-1 400570-07-8 400569-07-8 400568-07-8 400567-07-8	V _{OUT}	15	±0.5	2.67	75 mV
XLO40-18 XLU40-18 XLE40-18 XLD40-18 XLO40-18B XLU40-18B XLE40-18B XLD40-18B	400570-16-9 400569-16-9 400568-16-9 400567-16-9 400570-03-7 400569-03-7 400568-03-7 400567-03-7	V _{OUT}	18	±0.5	2.23	75 mV
XLO40-24 XLU40-24 XLE40-24 XLD40-24 XLO40-24B XLU40-24B XLE40-24B XLD40-24B	400570-17-7 400569-17-7 400568-17-7 400567-17-7 400570-04-5 400569-04-5 400568-04-5 400567-04-5	V _{OUT}	24	±0.5	1.67	75 mV

INPUT SPECIFICATIONS	
Nominal Input Voltage:	85 – 264 VAC 120 – 370 VDC
Input Frequency Range:	47 – 63 Hz
Input Current:	1.0 A @ 100 VAC 0.5 A @ 240 VAC
Input Protection:	15 A / 250 VAC fuse
Safety Isolation:	3000 VAC in to out 2500 VAC in to ground
Inrush Current:	60 A @ 230 VAC, 25° C
Leakage Current:	75 µA @ 264 VAC 33 µA @ 115 VAC
OUTPUT SPECIFICATIONS	
Total Output:	40 W
Output Voltages:	5 V to 53 V
Voltage adjustability	±10%
Voltage Tolerance (2)	±1.0%
Line Regulation (3)	±0.2% (2)
Setup / Rise Time (5)	1 sec / 20ms, at full load
Hold-up Time:	Minimum 25 ms at 115 VAC, full load
Efficiency:	Up to 93%
Minimum Load:	No load
Over / Under Shoot:	Max 1% at turn-on
PROTECTION	
Overvoltage Protection:	Latch mode at 125 - 140% of V _{OUT}
Overload Protection:	Hiccup mode at 145% of I _{OUT} rated
Short Circuit Protection:	Continuous protection, with auto recovery
Isolation Resistance	500 VDC @ 0.1 GΩ
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature:	-40 to +85° C
Storage Temperature:	- 40 to +85° C
Operating altitude:	5000 m
Convection Cooling:	40W
Relative Humidity:	5% to 95% (non-cond.)
MTBF (full load at 25° C):	3,010,000 hours

Notes

- (1) All specifications valid at normal input voltage, full load and +25° C after warm-up time, unless otherwise stated.
- (2) Tolerance includes setup time tolerance, line regulation and load regulation.
- (3) Line regulation is measured from low line to high line at rated load.
- (4) Load regulation is measured from 0% to 100% rated load.
- (5) Length of setup time is measured at first cold start. Turning ON/OFF the power supply continuously may increase the setup time.

Continued on next page...

MODEL	PART NUMBER	OUTPUT	VOLTAGE	REGULATION (%) ⁽⁴⁾	MAXIMUM CURRENT (A)	RIPPLE & NOISE (P-P)
XLO40-28 XLU40-28 XLE40-28 XLD40-28 XLO40-28B XLU40-28B XLE40-28B XLD40-28B	400570-22-7 400569-22-7 400568-22-7 400567-22-7 400570-09-4 400569-09-4 400568-09-4 400567-09-4	V _{OUT}	28	±0.5	1.43	75 mV
XLO40-36 XLU40-36 XLE40-36 XLD40-36 XLO40-36B XLU40-36B XLE40-36B XLD40-36B	400570-24-2 400569-24-2 400568-24-2 400567-24-2 400570-11-0 400569-11-0 400568-11-0 400567-11-0	V _{OUT}	36	±0.5	1.12	75 mV
XLO40-48 XLU40-48 XLE40-48 XLD40-48 XLO40-48B XLU40-48B XLE40-48B XLD40-48B	400570-25-0 400569-25-0 400568-25-0 400567-25-0 400570-12-8 400569-12-8 400568-12-8 400567-12-8	V _{OUT}	48	±0.5	0.84	150 mV
XLO40-53 XLU40-53 XLE40-53 XLD40-53 XLO40-53B XLU40-53B XLE40-53B XLD40-53B	400570-26-8 400569-26-8 400568-26-8 400567-26-8 400570-13-6 400569-13-6 400568-13-6 400567-13-6	V _{OUT}	53	±0.5	0.77	150 mV

Model numbers without the suffix 'B' comply with Protection Class I. Those with suffix 'B' comply with Protection Class II.

Compliance *

USA / Canada

Safety:

UL 60950-1 second edition

International

IEC 60950-1

EMC:

FCC part 15, subpart B

(Radiative, Class A)

(Conductive, Class B)

EN55011

EN 55032

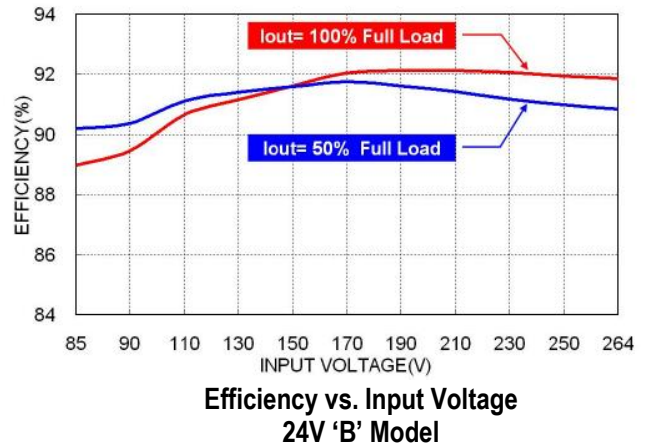
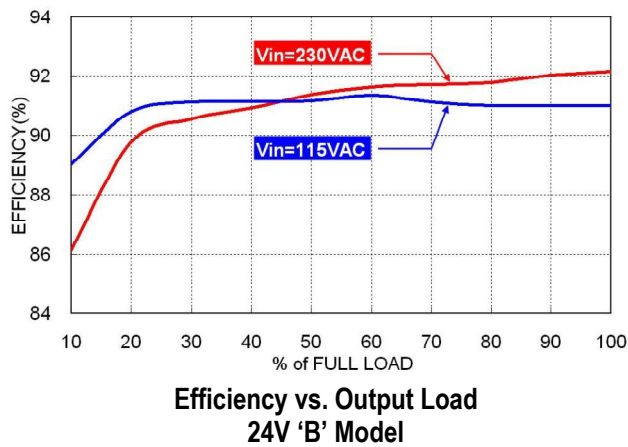
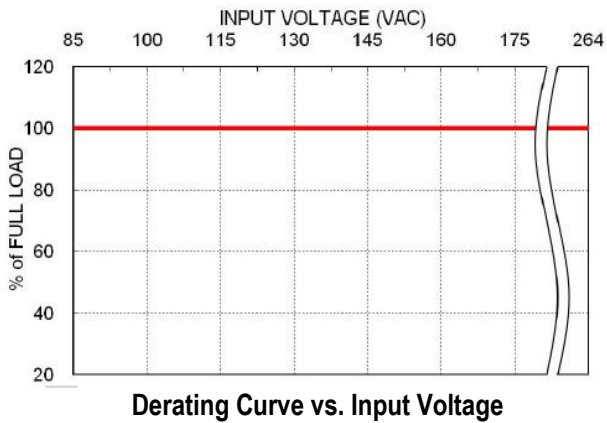
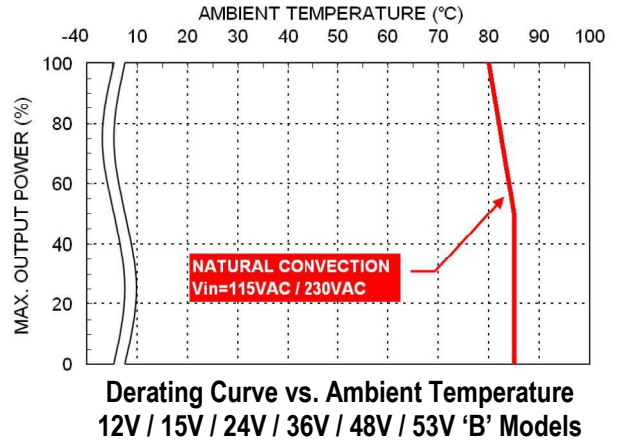
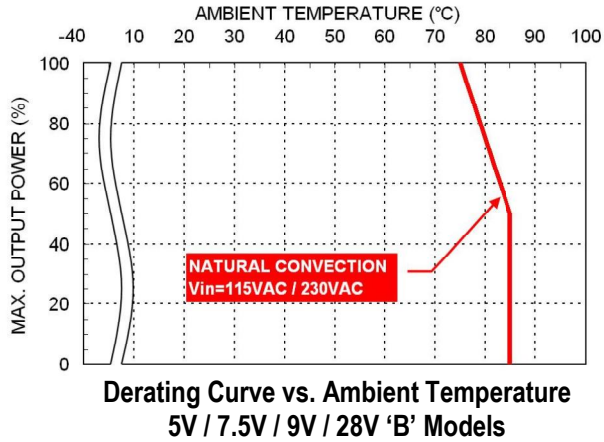
(Radiative, Class A)

(Conductive, Class B)

* The power supply is considered a component of the final product in which it is integrated. The final product itself must be tested separately for compliance with all applicable standards.

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OPERATING CHARACTERISTICS



MECHANICAL DRAWINGS

Connector Pin Assignments

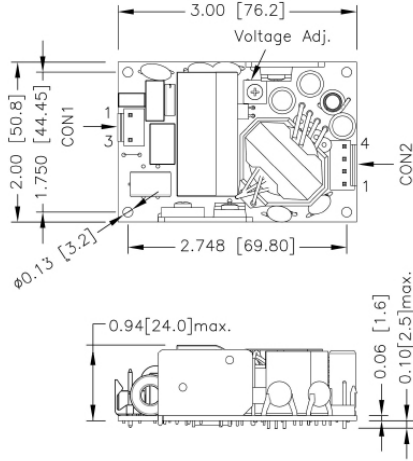
CON1 – Input Connector	
Pin 1	Line
Pin 3	Neutral

CON2 – Output Connector	
Pin 1, 2	-V _{out}
Pin 3, 4	+V _{out}

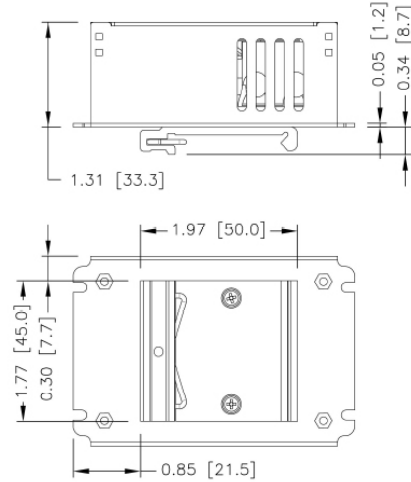
Notes

1. All dimensions are in inches [mm]
2. Tolerance: x.xx±0.02 (x.x±0.5) x.xxx±0.01 (x.xx±0.25)
3. M3x0.5 screw locked torque MAX 5Kgf.cm/0.49N.m
4. Any one of the four screw holes of the Open Frame chassis can be used as a PG connection point for CLASS I application.

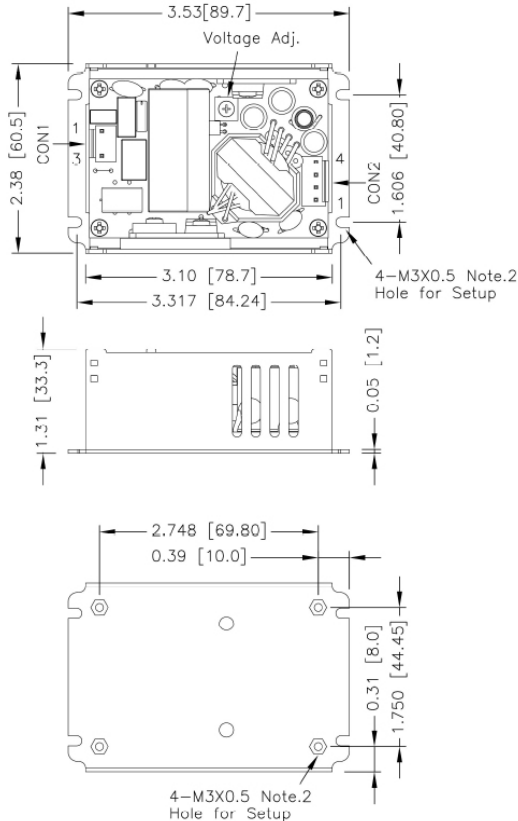
Open Frame type



DIN Rail type



U-Frame type



Enclosed type

