TOTAL POWER INT'L

TPS40-1/2/3 40 WATT OPEN-FRAME SWITCHING POWER SUPPLY



KEY FEATURES

**Universal input*
** Built-in EMI filter*
**Optional±12VDC/±24VDC/±48VDC input*

APPLICATIONS

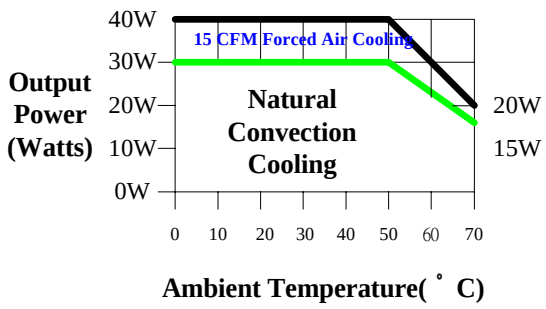
**Telecommunications*
**Computer peripherals/ Lan & Hub*
**Test & industrial equipments*
**Medical instruments*
**Business machines*

ELECTRICAL SPECIFICATIONS

INPUT
*Input range----------90~264 VAC, universal
*Frequency----------47~63Hz
*Inrush current--------25A typical, Cold start @25℃,115VAC
*Efficiency----------65% ~80% typical at full load
*EMI filter----------FCC Class B conducted, CISPR 22 Class B conducted, EN55022 class B Conducted
*Line regulation----- +/- 0.5% typical

OUTPUT
*Maximum power----40W with 15 CFM forced air (Refer next page)
*Hold-up time --------10ms typical at full load and 115 VAC nominal line
*Overload protection-Short circuit protection
*Overvoltage protection ----------Main output 20% to 40% above nominal output
*Ripple/Noise -------- +/- 1% Max. @full load (Optional +/-0.5% per inquiry)

Power Derating Curve



Ambient Temperature(° C)

EMI & EMC

*FCC part 15, Class B
*CISPR 22 / EN55022, Class B
*VCCI ,Class 2
*CE, EN 61000-3-2 (Class A) and –3; EN 61000-4-2, -3,-4.-5,-6 and -11

SAFETY APPROVAL

*UL1950 / c UL
*Optional CSA 22.2, LEVEL 3 (COMPLY WITH)
*TUV EN60950
*Optional UL 2601 (EMI Class A)(COMPLY WITH)

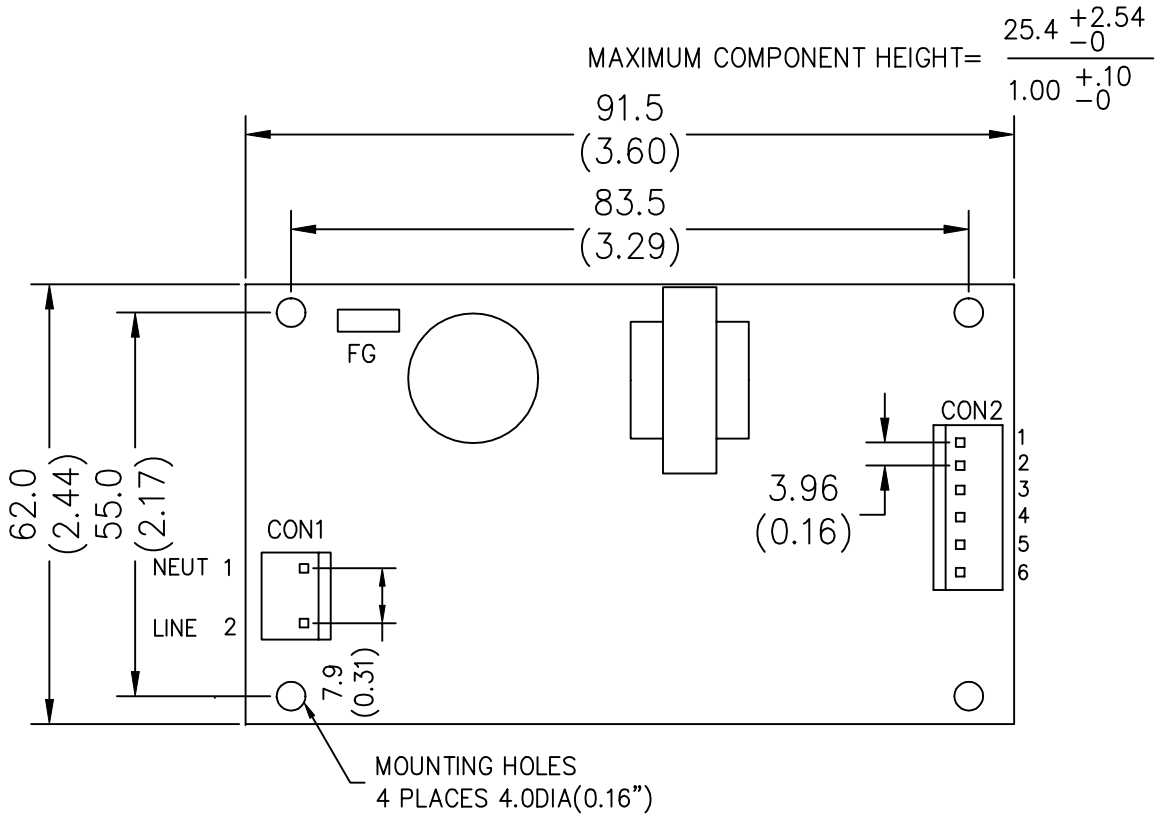
ENVIRONMENTAL

*Operating temperature :
0 to 50℃ ambient; derate each output at 2.5% per degree from 50℃ to 70℃
*Humidity:
Operating; non-condensing, 5% to 95%
*Vibration :
10~55 Hz at 1G 3 minutes period, 30 minutes along X, Y and Z axis
*Storage temperature:
-40 to 85℃
*Temperature coefficient:
+/- 0.05% per degree C
*MTBF demonstrated:
>100,000 hours at full load and 25℃ ambient conditions

MODEL	OUTPUT VOLTAGE	ADJUSTMENT RANGE	MAXIMUM OUTPUT CURRENT	PEAK OUTPUT CURRENT(NOTE1)	MINIMUM OUTPUT CURRENT	TOTAL REGULATION(NOTE3)	RIPPLE & NOISE %P-P(NOTE2)	PEAK OUTPUT POWER(NOTE1)
SI NGLE OUTPUT MODEL SELECTION CHART								
TPS40-10	+5V	±10% Typical	8A	10A	0A	±3%	±1%	50W Typical
TPS40-11	+12V	±10% Typical	3.3A	4.1A	0A	±3%	±1%	50W Typical
TPS40-12	+15V	±10% Typical	2.6A	3.2A	0A	±3%	±1%	50W Typical
TPS40-13	+24V	±10% Typical	1.6A	2A	0A	±3%	±1%	50W Typical
TPS40-14	+48V	±10% Typical	0.8A	1A	0A	±3%	±1%	50W Typical
TPS40-15	+3.3V	±10% Typical	9.6A	12A	0.96A	±5%	±1.5%	50W Typical
TPS40-16	+28V	±10% Typical	1.4A	1.8A	0A	±3%	±1%	50W Typical
DUAL OUTPUT MODEL SELECTION CHART								
TPS40-20	+5 V	±10% Typical	6A	9.6A	0.6A	±5%	±1%	50W Typical
	+12V	Fixed	1A	1.6A	0.1A	±5%	±1%	
TPS40-21	+5 V	±10% Typical	6A	9.6A	0.6A	±5%	±1%	50W Typical
	+48V	Fixed	0.25A	0.4A	0.03A	±5%	±1%	
TPS40-22	+5 V	±10% Typical	6A	9.6A	0.6A	±5%	±1%	50W Typical
	- 5V	Fixed	2A	3.2A	0.2A	±10%	±1%	
TPS40-23	+12V	±10% Typical	1.6A	2.5A	0.16A	±5%	±1%	50W Typical
	- 12V	Fixed	1.6A	2.5A	0.16A	±10%	±1%	
TPS40-24	+15V	±10% Typical	1.3A	2A	0.13A	±5%	±1%	50W Typical
	- 15V	Fixed	1.3A	2A	0.13A	±10%	±1%	
TPS40-25	+3.3V	±10% Typical	10A	16A	1A	±5%	±1.5%	50W Typical
	+5V	Fixed	1.5A	2.4A	0.15A	±5%	±1%	
TRIPLE OUTPUT MODEL SELECTION CHART								
TPS40-30	+ 5V	±10% Typical	5A	8A	0.5A	±5%	±1%	50W Typical
	+12V	Fixed	0.75A	1.2A	0.08A	±5%	±1%	
	- 5 V	Fixed	1.2A	1.9A	0.12A	±10%	±1%	
TPS40-31	+ 5V	±10% Typical	5A	8A	0.5A	±5%	±1%	50W Typical
	+12V	Fixed	0.75A	1.2A	0.08A	±5%	±1%	
	-12V	Fixed	0.5A	0.8A	0.05A	±10%	±1%	
TPS40-32	+ 5V	±10% Typical	5A	8A	0.5A	±5%	±1%	50W Typical
	+15V	Fixed	0.5A	0.8A	0.05A	±5%	±1%	
	-15V	Fixed	0.5A	0.8A	0.05A	±10%	±1%	
TPS40-33	+5V	±10% Typical	4A	6.4A	0.4A	±5%	±1%	50W Typical
	+15V	Fixed	1A	1.6A	0.1A	±5%	±1%	
	-5V	Fixed	1A	1.6A	0.1A	±10%	±1%	
TPS40-34	+5V	±10% Typical	4A	6.4A	0.4A	±5%	±1%	50W Typical
	+15V	Fixed	0.8A	1.2A	0.08A	±5%	±1%	
	-12V	Fixed	0.7A	1.1A	0.07A	±10%	±1%	
TPS40-35	+ 5V	±10% Typical	4A	6.4A	0.4A	±5%	±1%	50W Typical
	+24V	Fixed	0.5A	0.8A	0.05A	±5%	±1%	
	-12V	Fixed	0.7A	1.1A	0.07A	±10%	±1%	
TPS40-36	+ 5V	±10% Typical	4A	6.4A	0.4A	±5%	±1%	50W Typical
	+12V	Fixed	0.75A	1.2A	0.08A	±5%	±1%	
	-12V	Fixed	1A	1.6A	0.1A	±10%	±1%	
TPS40-37	+5V	±10% Typical	4A	6.4A	0.4A	±5%	±1%	50W Typical
	+12V	Fixed	0.75A	1.2A	0.08A	±5%	±1%	
	+24V	Fixed	0.5A	0.8A	0.05A	±10%	±1%	
TPS40-38	+5V	±10% Typical	2.4A	3.8A	0.24A	±5%	±1%	50W Typical
	+12V	Fixed	1.2A	1.9A	0.12A	±5%	±1%	
	+48V	Fixed	0.3A	0.5A	0.03A	±10%	±1%	

NOTES: 1) Peak loads for lasting <30 seconds with a maximum 10% duty cycle are acceptable. Please contact us if need special peak load.
2) Maximum peak to peak noise expressed as a percentage of output voltage, 20MHz bandwidth, input not less nominal line,0.1 μ F and 47 μ F Cap. on outputs.
3) Loading test conditions are set for all outputs at minimum, middle and maximum of loads. Special cross loading requirement is welcomed.
4) Detailed engineering specification of each model is available for inquiry.
5) Special output voltage/current inquiry is welcomed.
6) Specifications subject to change without notice.
7) 25% derated if 24 VDC input version;50% derated if 12 VDC input version;25% derated if additional cover.

PPS40-1/2/3



CON1=CONNECTOR,MOLEX#09-65-2038(OR EQUIVALENT)
(MATING CONECT.=MOLEX#09-50-3031)
CON2=CONNECTOR,MOLEX#09-65-2068(OR EQUIVALENT)
(MATING CONECT.=MOLEX#09-50-3061)
ALL MATING TERMINAL=MOLEX#08-50-0106(OR EQUIVALENT)

TOLERANCE : mm±0.5 / (inch)±0.02

UNIT: mm / (inch)

CON1 (CONNECTORS) CONFIGURATION

AC INPUT	1	2
	NEUT	LINE

CON2 (CONNECTORS) CONFIGURATION

Multiple Output	1	2	3	4	5	6
	V2(NC)	RET		V1		V3(NC)

CON1(CONNECTORS) CONFIGURATION

DC INPUT	1	2
	−	+