



Note: Specific model may differ from photo.

FMA55P SERIES 55 WATT MEDICAL SWITCHING POWER SUPPLIES

OUTPUT SPECIFICATIONS

Output Voltage / Current:	See rating chart
Total Output Power:	0 to 55 watts
Ripple and Noise:	1% peak to peak max.
Overvoltage Protection:	Provided on output #1 only; set at 112-132% of it's nominal output voltage
Overcurrent Protection:	All outputs protected to short circuit conditions
Temperature Coefficient:	All outputs $\pm 0.04\%$ / $^{\circ}\text{C}$ maximum
Transient Response:	Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 μs after a 25% step load change

UNIVERSAL INPUT

FEATURES

- ◆ 15 Standard desktop models
- ◆ Single, dual or triple outputs
- ◆ Optional output connectors
- ◆ Optional on/off switch
- ◆ 100% burn-in
- ◆ Wide input range 85 to 264 VAC
- ◆ Input surge current protection
- ◆ Overvoltage protection
- ◆ Overcurrent protection

DESCRIPTION

The FMA55P series of AC/DC switching power supplies are for 40 - 55 watts of continuous output power. They are enclosed in a 94V-1 rated polyphenylene-oxide case with an IEC 320 inlet to mate with an interchangeable cord for worldwide use. All models meet CISPR 11 and FCC class B emission limits, and comply with UL, CSA, VDE, IEC and CE requirements.

INPUT SPECIFICATION

Input Voltage:	85 to 264 VAC
Input Frequency:	47 ~ 440Hz
Input Current:	1.5A (rms) for 115 VAC 0.9A (rms) for 230VAC
Leakage Current:	50 μA max. @ 110 VAC, 60Hz 100 μA max. @ 240 VAC, 50Hz

GENERAL SPECIFICATIONS

Switching Frequency:	40kHz \pm 5kHz
Efficiency:	70% min. on single output with $V_o \geq 10\text{V}$, 65% min. on the others
Hold-up Time:	10 mS min. at 110 VAC
Line Regulation:	$\pm 0.5\%$ max. at full load
Inrush Current: (25 $^{\circ}$ C cold start)	15 amps. @ 115VAC, or 30 amps @ 230 VAC
Withstand Voltage:	4,000VAC input to output 1,500VAC input to ground 500VAC output to ground
MTBF: (25 $^{\circ}$ C ambient)	100,000 hours min. at full load
EMI Requirements:	In compliance with CISPR 11 (EN 55011) Class B and FCC Class B
Safety Requirements:	Meets or exceeds: (a) UL 2601-1 (b) CSA C22.2 No. 601.1 (c) EN 60601-1 (IEC 601-1)

ENVIRONMENTAL SPECIFICATIONS

Operating Temp.:	0 $^{\circ}$ to +70 $^{\circ}\text{C}$
Storage Temperature:	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$
Relative Humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50 $^{\circ}\text{C}$ to lineally to 50% at +70 $^{\circ}\text{C}$.



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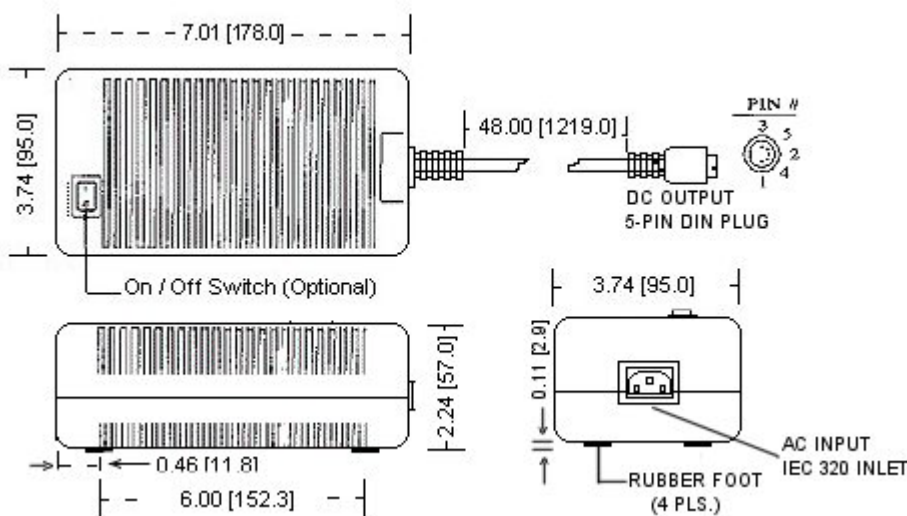


OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Output #1				Output #2				Output #3				Max. Output
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
FMA55P10	5-6V	0A	8.0A	5%	(N/A)				(N/A)				40W
FMA55P10-1	6-8V	0A	7.5A	5%	(N/A)				(N/A)				45W
FMA55P11	9-11V	0A	5.0A	5%	(N/A)				(N/A)				50W
FMA55P12	11-13V	0A	4.6A	5%	(N/A)				(N/A)				55W
FMA55P13	13-17V	0A	3.7A	3%	(N/A)				(N/A)				55W
FMA55P13-1	17-21V	0A	3.1A	3%	(N/A)				(N/A)				55W
FMA55P14	21-27V	0A	2.3A	3%	(N/A)				(N/A)				55W
FMA55P16	27-33V	0A	1.9A	3%	(N/A)				(N/A)				55W
FMA55P17	33-39V	0A	1.6A	3%	(N/A)				(N/A)				55W
FMA55P18	48V	0A	1.2A	3%	(N/A)				(N/A)				55W
FMA55P23	+5V	1A	5.0A	5%	+12V	0.5A	3.0A	5%	(N/A)				45W
FMA55P24	+5V	1A	5.0A	5%	+15V	0.4A	2.5A	5%	(N/A)				45W
FMA55P25	+5V	1A	5.0A	5%	+24V	0.3A	2.0A	5%	(N/A)				45W
FMA55P31	+5V	1A	5.0A	5%	+12V	0.5A	3.0A	5%	-12V	0.1A	0.5A	10%	45W
FMA55P32	+5V	1A	5.0A	5%	+15V	0.4A	2.5A	5%	-15V	0.1A	0.5A	10%	45W

- Notes: (1) The output voltage of a single output model, except FMA55P18, can be adjusted by user in the stated range, or set by factory to a wanted value in the range at the request of a user when ordering.
- (2) The output voltages of a multiple output model may go outside of the stated tolerance when an output load current is out of stated limits. All models may be operated at no-load without damage.

MECHANICAL SPECIFICATIONS



NOTES:

1. Dimensions shown in inch (mm)
2. Tolerance 0.02 (0.5) maximum
3. Weight: 700 grams approx.
4. Contact Fortron / Source for information on optional output connectors
5. To order a model with on / off switch, add suffix "S" to the model number, e.g. FMA55P10-S

PIN CHART

MODEL	PIN	1	2	3	4	5
FMA55P10	FMA55P10-1	FMA55P11				
FMA55P12	FMA55P13	FMA55P13-1	Return	Return	Output # 1	Return
FMA55P14	FMA55P16	FMA55P17				Output # 1
FMA55P18						
FMA55P23	FMA55P24		Common	Common	Output # 1	Common
FMA55P25			Return	Return		Return
FMA55P31	FMA55P32		Common	Common	Output # 1	Output # 3
			Return	Return		Output # 2

Note: All data are subject to change without notice

