

## MTBF RESULTS 10/7/03

From: Marshall Wright

Subject: MTBF data

Several of the field RM's have requested MTBF data or calculations. Elpac believes that demonstrated MTBF is FAR superior to calculated MTBF. There are a lot of games that can be done in calculating MTBF, and we prefer to run real units under higher than normal temperature ranges, and stress the units with severe on/off cycling and extended full load/ high temperature runs – repeating the on/off cycling and extended full load/high temperature runs. This cycle is repeated until either a failure occurs or the tests are terminated.

The following results are as of today. Some of the units are still undergoing tests, and some are complete. You are welcome to share this information as you see appropriate.

### Medical Units:

2359	175,200 hours	Test completed – no failures
MW24 series (3 models)	84,000 hours	Testing ongoing – no failures
MW4012 series	146,784 hours	Test completed – 1 fuse failure
MW4018 series	146,784 hours	Test completed – no failures
MW4024 series	146,784 hours	Test completed – no failures

### Switcher Units:

FW18 series (2 models)	108,960 hours	Test completed – no failures
FW30 series (4 models)	160,800 hours	Test completed – no failures
FW50 series (4 models)	303,512 hours	Test completed – no failures
FW72 series (2 models)	143,232 hours	Test completed – no failures
FW100 series	143,232 hours	Test completed – no failures
FWP80 series (2 models)	51,840 hours	Test ongoing – no failures
FWP100 series (2 models)	102,000 hours	Test completed – no failures
LED lighting power supply	114,576 hours	Test completed – no failures
MI series (14 models done)	350,400 hours max 28,800 hours min.	Test completed – no failures Test completed – no failures
M2/M3 series (15 models)	319,200 hours max	Test completed – no failures
W72 series (3 models)	100,800 hours	Test completed – no failures
W100 series	115,200 hours	Test completed – no failures
WM0705 series (2 models)	80,625 hours	Test still running – no failures
WM07 series	45,000 hours	Test ongoing – no failures
WM10 series	100,800 hours	Test completed – no failures
WP12 series (4 models)	102,000 hours	Test completed – no failures
WRI single output series	175,200 hours	Test completed – no failures
WRI multiple output series	175,200 hours	Test completed – 1 fuse failure

### Linear Units:

WM-1950 series	70,080 hours	Test completed – no failures
WM113 redo series	27,360 hours	Retest complete – no failures