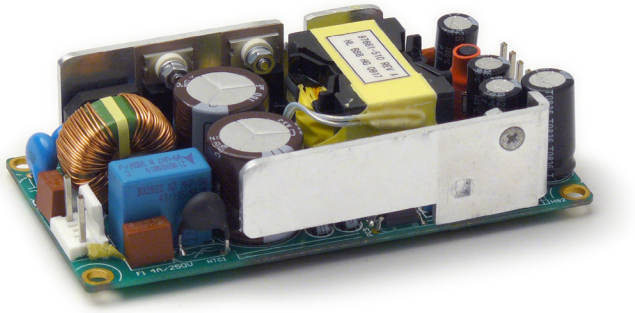
# ELPAC MTB080 SERIES

## 65 - 100 Watt
## Medical Open Frame Power Supply



- High Efficiency: Level V
- High Power Density 12.5W/in$^3$
- Output Floating
- Lifetime Expectation >5 years
- Hold-up Time >20ms
- Medical Approval - EN60601-1 Class I

| INPUT | |
|---|---|
| Input Voltage | 85 – 264VAC<br>100 – 240VAC Nominal |
| Input Frequency | 47 – 63Hz |
| Input Current | <2A rms |
| Inrush Current | <37A at 230VAC cold start |
| Zero Load Power Consumption | <0.3W |
| Earth Leakage Current (Typical) | <5mA @ 264VAC / 60Hz @NC |
| | <10mA @ 264VAC / 60Hz @SFC |
| Patient Leakage Current | <100µA @ 264VAC / 60Hz @NC |
| | <500µA @ 264VAC / 60Hz @SFC |

| OUTPUT | |
|---|---|
| Output Voltage | See Table |
| Total Regulation | +/-5% |
| Minimum Load | No minimum load required |
| Start-Up Delay | <1.5s |
| Hold-Up Time | >20ms |
| Ripple & Noise | <1% pk-pk * |
| Over Voltage Protection | 120 – 150% |
| Over Temperature Protection | Active - Recoverable; plus<br>Passive - Non Recoverable |
| Over Current Protection | 110 – 190% |
| Short Circuit Protection | Shutdown, auto-restart (hiccup mode) |

**Notes**
*Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.

Inventus Power
1200 Internationale Parkway
Woodridge, IL 60517, USA

# ELPAC MTB080 SERIES

## 65 - 100 Watt
## Medical Open Frame Power Supply

| Model Number | Output Voltage | Output Current [1] | Peak Current [2] | Total Regulation [3] | Typical Efficiency [4] |
|---|---|---|---|---|---|
| MTB080009A | 9.0V | 8.9A | 10.7A | ±5% | 88% |
| MTB080012A | 12.0V | 6.7A | 8.0A | ±5% | 90% |
| MTB080015A | 15.0V | 5.3A | 6.4A | ±5% | 90% |
| MTB080018A | 18.0V | 4.5A | 5.3A | ±5% | 90% |
| MTB080024A | 24.0V | 3.3A | 4.0A | ±5% | 91% |

Notes
1) Maximum load current with natural convection cooling
2) Maximum peak load lasting up to 4 seconds with natural convection cooling, or maximum continuous output current with minimum 5 CFM airflow.
3) Includes initial setting, line regulation, load, regulation, and thermal drift.
4) Typical at 115VAC and full load (65W)

### General

| | |
|---|---|
| Efficiency | Avg. Efficiency 89.6% @ 115VAC; 90.3% @ 230VAC |
| MTBF | min. 200,000 hours demonstrated |
| Size | 4.00" (101.6mm) x 2.00" (50.8mm) x 1.01" (25.7mm) |
| Weight | 0.37 lbs (.166 kg) |
| Power Density | 12.5W/in$^3$ |

### Environmental

| | |
|---|---|
| Operating Temperature | 0 – 50°C (Full load to 50°C, derate linearly to 50% load at 70°C) |
| Storage Temperature | -40°C to +85°C |
| Relative Humidity | 5-95%, non-condensing |
| Cooling | Natural Convection |
| Vibration | Using MIL-STD-810G vibration of Figure 514.6C-1 and the value of Table 514.6C-II, test duration shall be one hour in each axis. |

### EMC & Safety

| | |
|---|---|
| Emissions | FCC class B, CISPR11 class B EN61000-3-2, -3 |
| Immunity | EN61000-4-2, -3, -4, -5, -6, -8, -11 |
| Certified by TUV to the following: | cTUVus |
| | UL 60601-1 |
| | CAN/CSA-22.2 No.601.1-M90 |
| | CB per IEC60601-1 |
| | CE marked to LVD |

### Input Configuration

| | |
|---|---|
| Connection on Power Supply Body | AMP p/n 640445-3 (or equivalent) |
| Mating Connector | AMP p/n 640250-3 (or equivalent) |

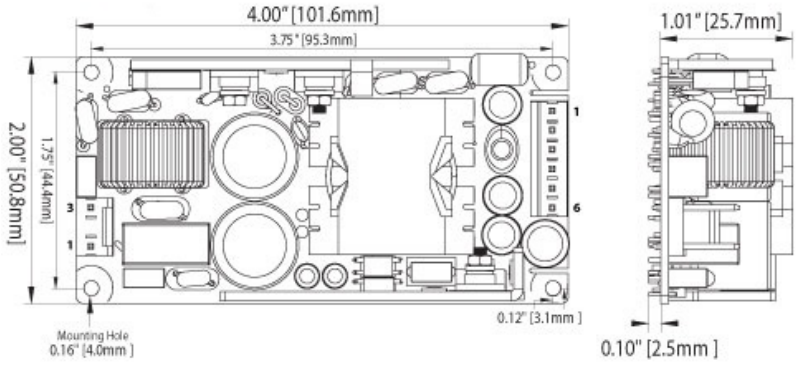
### Output Configuration

| | |
|---|---|
| Connector (PSU Side) | AMP p/n 640445-6 (or equivalent) |
| Mating Connector | AMP p/n 640250-6 (or equivalent) |

### Output Pin Assignments (P2)

| | |
|---|---|
| Pin 1 | +Vout |
| Pin 2 | +Vout |
| Pin 3 | Return |
| Pin 4 | Return |
| Pin 5 | N/C |
| Pin 6 | N/C |

### Mechanical Drawing




Inventus Power
1200 Internationale Parkway
Woodridge, IL 60517, USA