



## ISOLATED SWITCH-MODE POWER SUPPLY

- 3500W IN 6.3" x 6.3" x 11.3" OEM PACKAGE
- ELECTRONIC POWER FACTOR CORRECTION
- C E MARKED AND APPROVED TO UL 60601-1 MEDICAL SAFETY STANDARD
- LOW LEAKAGE CURRENT
- LOW EMI
- HIGH EFFICIENCY
- REMOTE HV PROGRAMMING



### DESCRIPTION:

The **Model 5754** Isolated Switch-Mode Power Supply uses a proprietary power conversion technique to charge energy storage capacitors and maintain this output level for switched, variable pulsewidth solid-state laser applications. The **Model 5754** provides the highest power density of any similar supply on the market today and can be configured for either positive or negative output voltage. The **Model 5754** is designed to meet the isolation and leakage current requirements for the most stringent medical requirements and the control interface can be tailored to meet your present needs. For lower power applications requiring a smaller package, ask about the AMI **Model 5724**.

### SPECIFICATIONS:

#### Input

|            |  |
|------------|--|
| Voltage    | 198 to 253VAC, 1 $\phi$ , 50/60Hz  |
| HV Control | 0 to 10V proportional control<br>10k $\Omega$ input impedance (standard) |
| Inhibit    | 3.5 to 24VDC, 10k $\Omega$ input impedance                               |

#### Connections

|         |                       |
|---------|-----------------------|
| HV      | Fischer D105 Series   |
| Control | DB-15S, 15 pin D-sub  |
| Power   | 3 pos. terminal block |

#### Cooling

Forced air, fan included

#### Operating Temperature

0° to +40°C

#### Output

|                    |   |
|--------------------|---|
| Power              | 3500W, 400V $\leq$ V <sub>MAX</sub> $\leq$ 1000V<br>Output power will be reduced when operating at <90% of V <sub>MAX</sub> .<br>(See power derating curve on reverse.) |
| Voltage (Maximum)  | 400V to 1000V (specify in part number)<br>Negative output (add -N to part number)   |
| Regulation         | 0.1% (typical)  |
| Efficiency         | 85% to 90% (typical)  |
| Power Factor       | >0.9 (typical)  |
| Charged Indication | 22VDC via 1k $\Omega$ output (typical)<br>$\approx$ 150 $\mu$ A (typical)   |

#### Leakage Current

#### Protection

Open Circuit, Short Circuit,  
Thermal Overload, Over-Voltage

#### Size Weight

6.3" x 6.3" x 11.3"  
15 lbs



Specifications subject to change without notice.

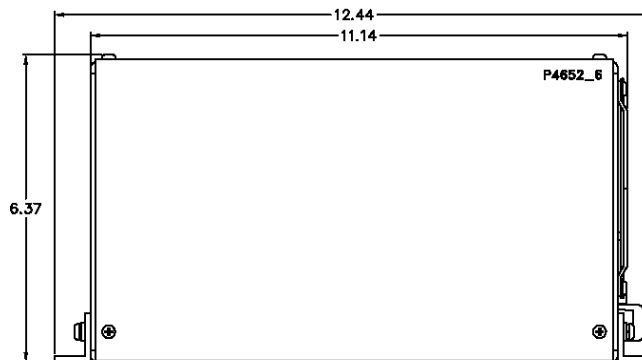
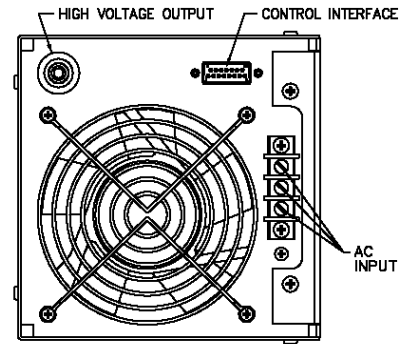
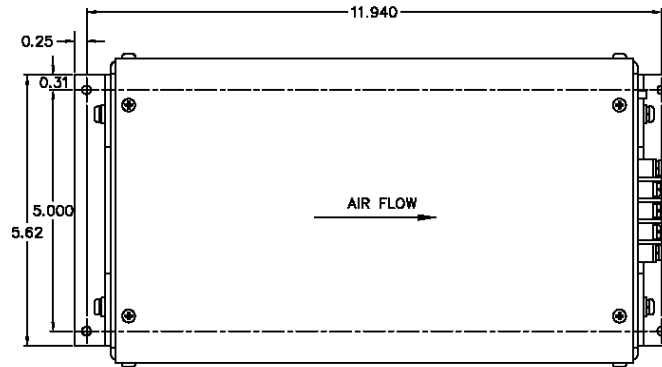
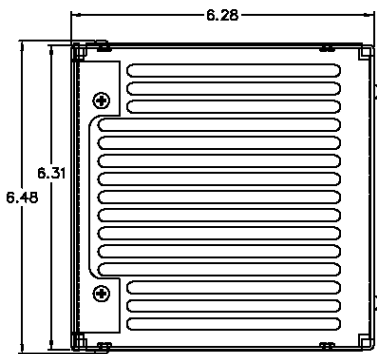
### APPLICATIONS:

*Constant Voltage Output for Solid-State Lasers*

|                             |               |                        |
|-----------------------------|---------------|------------------------|
|                             |               | <b>MODEL 5754-XXXX</b> |
|                             |               | OUTPUT POWER           |
| Output Voltage<br>(Maximum) | 400V to 1000V | 3500W                  |

**Typical Part Number:** 5754-1000N-2 =

Output Voltage: -1000VDC (Negative)  
 Output Power: 3500W  
 Input Voltage: 230VAC, 1Ø, 50/60Hz, terminal block



I/O INTERFACE (-2)

| PIN | DESCRIPTION                  |
|-----|------------------------------|
| 1   | INHIBIT                      |
| 2   | N/C RESERVED                 |
| 3   | OVERTEMP STATUS INDICATOR    |
| 4   | PROGRAM RTN / GND            |
| 5   | PROGRAM VOLTAGE              |
| 6   | OVERVOLTAGE STATUS INDICATOR |
| 7   | VOUT PEAK HOLD               |
| 8   | VOUT MONITOR                 |
| 9   | +12VDC                       |
| 10  | N/C RESERVED                 |
| 11  | +10V REFERENCE               |
| 12  | SIGNAL RETURN                |
| 13  | END OF CHARGE INDICATOR      |
| 14  | SIGNAL RETURN                |
| 15  | GROUND INTERLOCK             |

