



# American Power Design, Inc.

"The best DC/DC design solution"

Distributed By:  
B. J. Wolfe Enterprises  
(800) 554-1224, (818) 889-8412  
Fax (818) 889-8417

## D60 SERIES 60 WATT DC/DC CONVERTERS

### FEATURES

- \* Customer Selects Output Voltage
- \* Outputs to 28 Vdc
- \* Wide Input Ranges (10-20Vdc, 18-36Vdc, 20-60Vdc)
- \* Excellent Line & Load Regulation
- \* Low Output Ripple
- \* 100 kHz Switching Frequency
- \* 500 Vdc Output Isolation
- \* Continuous Short Circuit Protected
- \* Available in Chassis Mount

The D60 Series of DC/DC converters is available with single, dual, and triple outputs which are isolated from the input. They are enclosed in a six-sided metal case. Their small size, low output ripple, and excellent regulation characteristics make them ideally suited for applications that demand a high degree of performance. All models will tolerate a short circuit indefinitely.



### ELECTRICAL SPECIFICATIONS

|                        |            |                                   |            |
|------------------------|------------|-----------------------------------|------------|
| Voltage Accuracy ..... | +/-1%      | Output Trim (Single Output) ..... | +/-10%     |
| Line Regulation .....  | +/- 1%     | Input Filter .....                | PI Network |
| Load Regulation .....  | +/- 1%     | Short Circuit Protection .....    | Continuous |
| Output Ripple .....    | < 100mVp-p | Switching Frequency .....         | 100 kHz    |
|                        |            | Isolation .....                   | 500 Vdc    |

\* 18-36Vdc Input add suffix /A, 20-60 Vdc input add suffix /B

### GENERAL SPECIFICATIONS

|                               |               |                         |                          |
|-------------------------------|---------------|-------------------------|--------------------------|
| Temp. Stability .....         | +/-0.02%/°C   | Cooling .....           | Convection or Forced Air |
| Temp. (Operating, Case) ..... | -25 to +85°C  | Thermal Shut Down ..... | 100°C/+/- 5°C            |
| Temp. (Storage) .....         | -40 to +125°C |                         |                          |

### PHYSICAL SPECIFICATIONS

|                  |                         |                     |  |
|------------------|-------------------------|---------------------|--|
| Dimensions ..... | 3.5 x 5.5 x 0.91 inches | Case Material ..... | Black Coated Metal<br>(With Non-Conductive Base Plate) |
| Weight .....     | 22 Oz                   |                     |  |

## OTHER OUTPUT VOLTAGES & CURRENTS AVAILABLE



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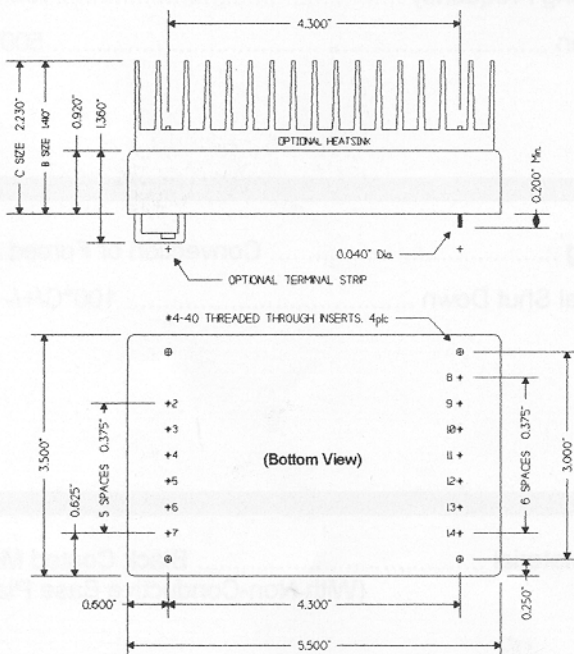
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### REPRESENTATIVE MODEL LISTING

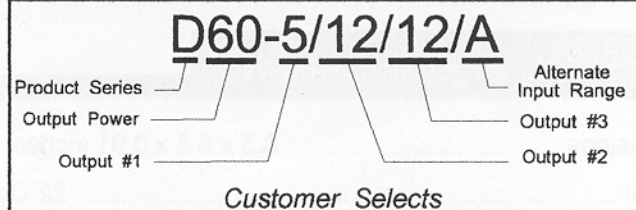
| MODEL NUMBER | INPUT SPECIFICATIONS |               | OUTPUT SPECIFICATION |         |           |         |           |         |
|--------------|----------------------|---------------|----------------------|---------|-----------|---------|-----------|---------|
|              | INPUT VOLTAGE        | INPUT CURRENT | OUTPUT #1            |         | OUTPUT #2 |         | OUTPUT #3 |         |
|              |                      |               | VOLTAGE              | CURRENT | VOLTAGE   | CURRENT | VOLTAGE   | CURRENT |
| D60-5        | 10V - 20Vdc          | 5.15 A        | +5 Vdc               | 12 A    | -         | -       | -         | -       |
| D60-5/5      | 10V - 20Vdc          | 5.35 A        | +5 Vdc               | 6 A     | -5 Vdc    | 6 A     | -         | -       |
| D60-6        | 10V - 20Vdc          | 5.15 A        | +6 Vdc               | 10 A    | -         | -       | -         | -       |
| D60-6/6      | 10 - 20Vdc           | 5.35 A        | +6 Vdc               | 5 A     | -6 Vdc    | 5 A     | -         | -       |
| D60-12       | 10V - 20Vdc          | 6.25 A        | +12 Vdc              | 5 A     | -         | -       | -         | -       |
| D60-12/12    | 10V - 20Vdc          | 6.25 A        | +12 Vdc              | 2.5 A   | -12 Vdc   | 2.5 A   | -         | -       |
| D60-15       | 10V - 20Vdc          | 6.25 A        | +15 Vdc              | 4 A     | -         | -       | -         | -       |
| D60-15/15    | 10V - 20Vdc          | 6.25 A        | +15 Vdc              | 2 A     | -15 Vdc   | 2 A     | -         | -       |
| D60-12/5     | 10V - 20Vdc          | 6.25 A        | +12 Vdc              | 2.5 A   | -5 Vdc    | 6 A     | -         | -       |
| D60-15/5     | 10V - 20Vdc          | 6.25 A        | +15 Vdc              | 2 A     | -5 Vdc    | 6 A     | -         | -       |
| D60-24       | 10V - 20Vdc          | 6.0 A         | +24 Vdc              | 2.5 A   | -         | -       | -         | -       |
| D60-28       | 20V - 20Vdc          | 6.0 A         | +28 Vdc              | 2.1 A   | -         | -       | -         | -       |
| D60-5/12/12  | 10V - 20Vdc          | 5.8 A         | +5 Vdc               | 6 A     | +12 Vdc   | 1.25 A  | -12 Vdc   | 1.25 A  |
| D60-5/15/15  | 10V - 20Vdc          | 5.8 A         | +5 Vdc               | 6 A     | +15 Vdc   | 1 A     | -15 Vdc   | 1 A     |
| D60-12/5/5   | 10V - 20Vdc          | 5.8 A         | +12 Vdc              | 2.5 A   | +5 Vdc    | 3 A     | -5 Vdc    | 3 A     |
| D60-15/5/5   | 10V - 20Vdc          | 5.8 A         | +15 Vdc              | 2 A     | +5 Vdc    | 3 A     | -5 Vdc    | 3 A     |

18-36 Vdc input add suffix /A , 20-60 Vdc add suffix /B



| Pin # | Single  | Dual       | Triple     |
|-------|---------|------------|------------|
| 2,3   | - INPUT | - INPUT    | - INPUT    |
| 4,5   | + INPUT | + INPUT    | + INPUT    |
| 6     | ON/OFF  | ON/OFF     | ON/OFF     |
| 7     | CASE    | CASE       | CASE       |
| 8     | - V out | - V1 Sense | - V1 Sense |
| 9     | - V out | - V1 out   | - V1 out   |
| 10    | + V out | + V1 out   | + V1 out   |
| 11    | + V out | + V1 Sense | + V1 Sense |
| 12    | - Sense | - V2 out   | - V2 out   |
| 13    | Trim    | Trim       | Com 2 & 3  |
| 14    | + Sense | + V2 out   | + V3 out   |

### PART NUMBERING SYSTEM



**OTHER OUTPUT VOLTAGES & CURRENTS AVAILABLE**