



PAF600F

24V & 48V Input Full Brick DC-DC Converters

- 12V output for driving non-isolated converters
- Safety Approved
- Full power at 100°C baseplate
- Opto Isolated Remote On / Off
- Wide Adjustable Output Range

Key Market Segments & Applications

| | |
|---------------------|--|
| Central Office: | ATM, Sonet, DSL, ISDN, Frame Relay |
| Broadband: | Switching Equipment, Routers |
| Wireless/Cellular: | Micro Cells (larger in size/10 sq. mi.) Pico Cells (smaller in size/1 to 2 sq. mi.) |
| Remote Electronics: | Fixed Local Loop, Fiber Optic Transmission, Microwave Transmission, Wireless Local Loop Base Station Power Amplifiers |

PAF600F Features and Benefits

Features

- Wide adjustment range
- Parallel Pin
- ASIC Design
- 24V & 48V Inputs

Benefits

- Reduces need for custom modules
- Modules can be connected together for higher current
- Reduced component count, increased MTBF
- Suitable for remote & central office applications

Specifications

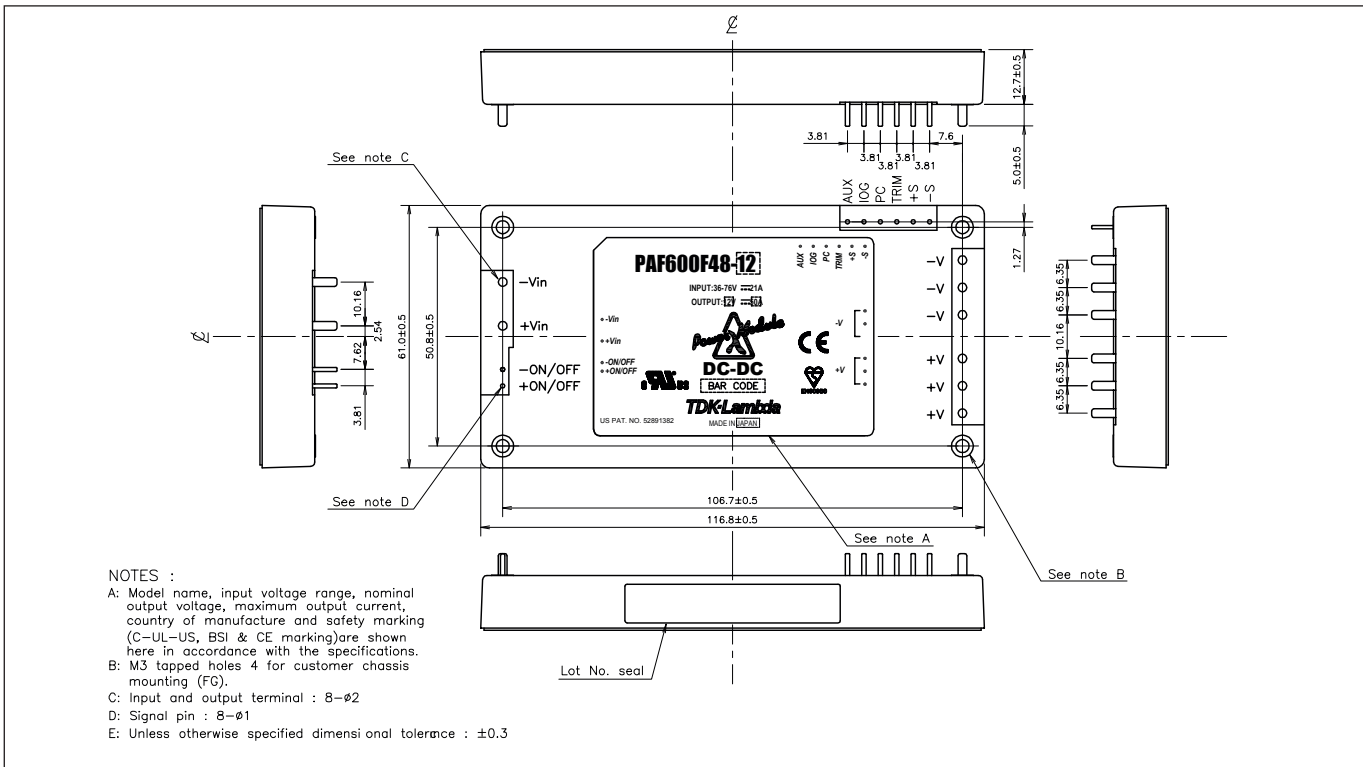
| ITEMS | MODEL | PAF600F24-12 PAF600F48-12 | | PAF600F24-28 PAF600F48-28 | |
|----------------------------------|--------|--|--|------------------------------|--|
| | | | | | |
| Nominal Output Voltage | VDC | 12 | | 28 | |
| Output Current (Max) | A | 50 | | 21.5 | |
| Output Power (Max) | W | 600 | | 602 | |
| Efficiency (Typ) | % | 89 to 90% | | | |
| Input Voltage Range | VDC | 20-36 / 36-76 | | 19-36 / 36-76 | |
| Input Current (Typ) 24/48V input | A | 28.9 / 14.2 | | 28.9 / 14.1 | |
| Output Voltage Accuracy | % | ±1 | | | |
| Output Voltage Adjustment | VDC | 7.2 - 13.2 | | 16.8 - 30.8 | |
| Ripple & Noise (Max) | mV | 200 | | 280 | |
| Line Regulation (Max) | mV | 24 | | 56 | |
| Load Regulation (Max) | mV | 24 | | 56 | |
| Temperature Coefficient | - | 0.02%/°C | | | |
| Overcurrent Protection | % | 105 - 140% | | | |
| Overvoltage Protection | % | 115-135% | | | |
| Signals & Control | - | Remote sense, remote On/Off, Parallel Pin, DC Good, 7-10V Auxiliary voltage | | | |
| Operating Temperature | - | -40°C to +100°C baseplate | | | |
| Humidity (operating) | - | 30-95% RH Non condensing | | | |
| Humidity (storage) | - | 10-95% RH Non condensing | | | |
| Cooling | - | Conduction (See Installation Manual for heatsink selection) | | | |
| Isolation Voltage | VDC | Input - Baseplate 1500V, Input - Output 1500V, Output-Baseplate 500V (for 1 min.) | | | |
| Shock | - | 196.1m/s ² | | | |
| Vibration | - | Non Operating, 10-55Hz (sweep for 1 min.) Amplitude 0.825mm constant (Max 49 m/s ²) X,Y,Z 1 hour each | | | |
| Safety Agency Approvals | - | UL60950-1, CSA60950-1, EN60950-1, CE LVD (48V model only) | | | |
| Weight (Typ) | g | 250 | | | |
| Size (WxHxD) | in(mm) | 2.4 x 0.5 x 4.6 (61 x 12.7 x 116.8) See outline drawing | | | |
| Warranty | - | 2 years | | | |

Note: See Installation Manual for full details, test methods of parameters and application notes.

| Pinout | |
|-----------------|---------------------------------|
| Pin Description | Function |
| -Vin | Negative Input Terminal |
| +Vin | Positive Input Terminal |
| - ON/OFF | Remote On/Off Negative Terminal |
| +ON/OFF | Remote On/Off Positive Terminal |
| +V | Positive Output Terminal |
| -V | Negative Output Terminal |
| AUX | 7-10V Aux Voltage |
| IOG | DC Good |
| PC | Parallel Control Connection |
| TRIM | Output Adjustment Trim Pin |
| +S | Positive Remote Sense |
| -S | Negative Remote Sense |

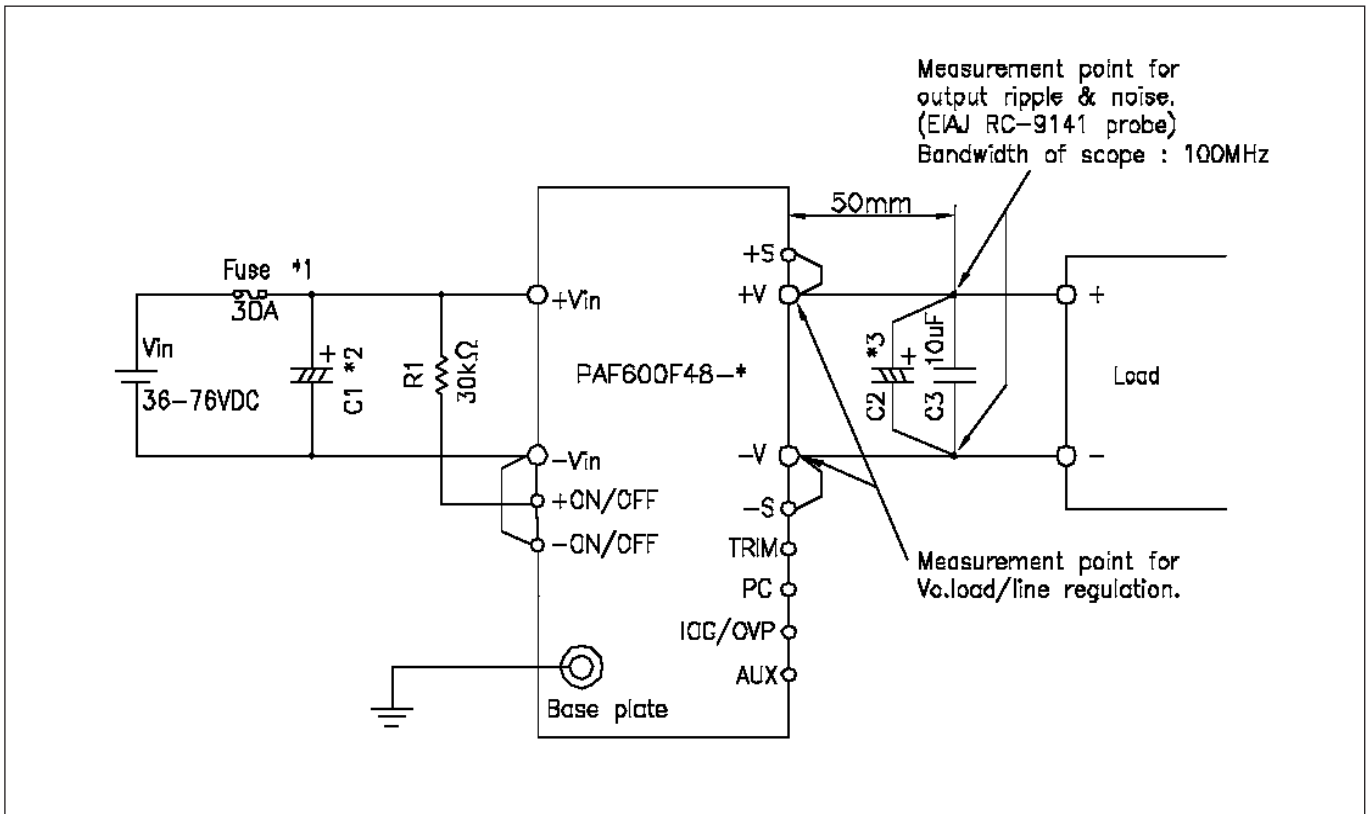
| Options | |
|---------|-----------------------------|
| Suffix | Description |
| Blank | |
| /T | No thread in mounting holes |

Outline Drawing PAF600F

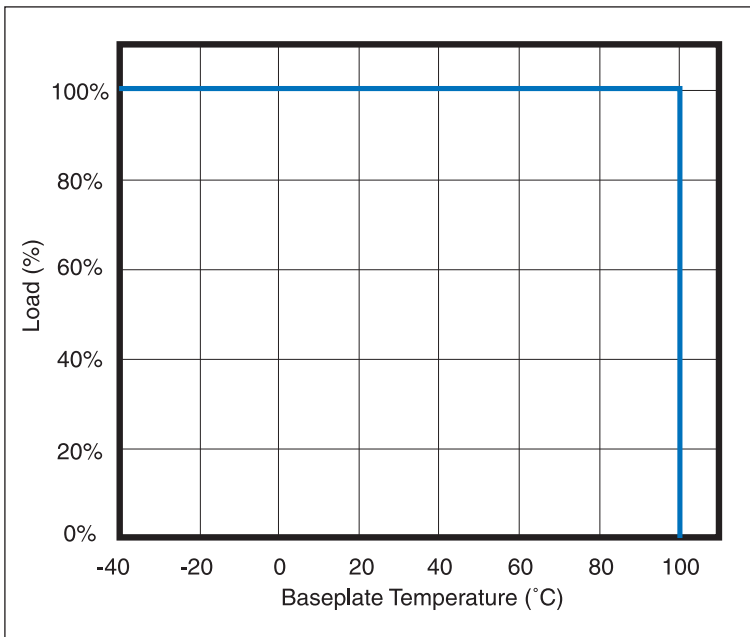


| Heatsink Table | | |
|----------------|-------------------|--------------------|
| Heatsink | Size (mm) | Thermal Resistance |
| HAF-10L | 116.8 x 25.4 x 61 | 2.2°C/W |
| HAF-15L | 116.8 x 38.1 x 61 | 1.9°C/W |
| HAF-15T | 116.8 x 38.1 x 61 | 1.5°C/W |

Connection Example



Derating Curve PAF600F Series



For full data and drawings please visit
www.emea.tdk-lambda.com/www/paf

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