50W to 200W 48V Input Half brick DC-DC Converters

Features

- Industry Standard Footprint & Pinouts
- 12V output for driving non-isolated converters
- Safety Approved
- Full power at 100ºC baseplate
- Wide Adjustable Output Range
- Zero Pre-load
- ASIC Design
- No potting materials



Key Market Segments & Applications

Industrial COTS Test COMM

RoHS

Specifications

Model		2.5V	3.3V	5V	12V	15V	24V	28V	48V
Efficiency (Typ)	%	75-76	79-80	83-84	85-86		86-88		88
Input Voltage range	VDC	36-76							
Output Voltage Accuracy	%	±1.6							
Max Ripple & Noise	mV	150			200		280		250
Max Line Regulation	mV	10			24	30	48	56	96
Max Load Regulation	mV	10			24	30	48	56	96
Overcurrent Protection	%	105 - 150% automatic recovery							
Overvoltage Protection (1)	%	120-160	120-140	125-145					135-155
Remote Sense	-	Yes							
Remote On/Off	-	Standard; Low = ON, Open = OFF /P option; Low = OFF, Open = ON)							
Operating Temperature	ºC	-40ºC to +100ºC baseplate							
Overtemperature	ºC	Shutdown between 105 - 130ºC, Auto restart							
Cooling	-	Conduction (See Installation Manual for heatsink selection)							
Isolation Voltage	V	Input - Baseplate 1500VAC, Input - Output 1500VAC, Output-Baseplate 500VDC							
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							
Weight (Typ)	g	80							
Size (WxHxD)	in(mm)	2.28x0.5x2.4 (57.9x12.7x61) See outline drawing							
Warranty	yrs	2 Years							

(1) See options table.
General: See Installation Manual for full details, test methods of parameters and application notes

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Model Selector

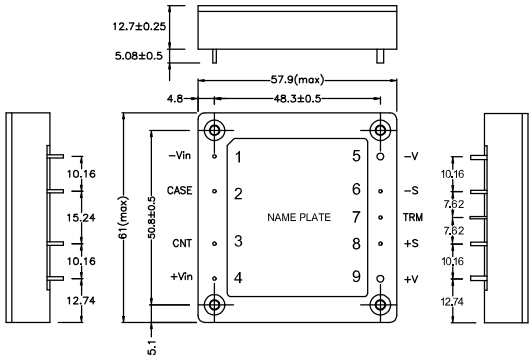
Model Name	Output Voltage	Adjustment	Output Current	Maximum Power
PAH50S48-2.5	2.5	2.25 - 2.75	11.70	29.3
PAH75S48-2.5	2.5	2.25 - 2.75	17.50	43.8
PAH100S48-2.5	2.5	2.25 - 2.75	23.40	58.5
PAH150S48-2.5	2.5	2.25 - 2.75	35.00	87.5
PAH50S48-3.3	3.3	2.97 - 3.63	11.70	38.6
PAH75S48-3.3	3.3	2.97 - 3.63	17.50	57.8
PAH100S48-3.3	3.3	2.97 - 3.63	23.40	77.2
PAH150S48-3.3	3.3	2.97 - 3.63	35.00	115.5
PAH50S48-5	5.0	3.0 - 5.75	10.00	50.0
PAH75S48-5	5.0	3.0 - 5.75	15.00	75.0
PAH100S48-5	5.0	3.0 - 5.75	20.00	100.0
PAH150S48-5	5.0	3.0 - 5.75	30.00	150.0
PAH50S48-12	12.0	7.2 - 13.2	4.20	50.4
PAH75S48-12	12.0	7.2 - 13.2	6.30	75.6
PAH100S48-12	12.0	7.2 - 13.2	8.40	100.8
PAH150S48-12	12.0	7.2 - 13.2	12.50	150.0
PAH200S48-12	12.0	7.2 - 13.2	16.70	200.4
PAH50S48-15	15.0	9.0 - 16.5	3.40	51.0
PAH75S48-15	15.0	9.0 - 16.5	5.00	75.0
PAH100S48-15	15.0	9.0 - 16.5	6.70	100.5
PAH150S48-15	15.0	9.0 - 16.5	10.00	150.0
PAH200S48-15	15.0	9.0 - 16.5	13.40	201.0
PAH50S48-24	24.0	14.4 - 26.4	2.10	50.4
PAH75S48-24	24.0	14.4 - 26.4	3.20	76.8
PAH100S48-24	24.0	14.4 - 26.4	4.20	100.8
PAH150S48-24	24.0	14.4 - 26.4	6.30	151.2
PAH200S48-24	24.0	14.4 - 26.4	8.40	201.6
PAH50S48-28	28.0	16.8 - 30.8	1.80	50.4
PAH75S48-28	28.0	16.8 - 30.8	2.70	75.6
PAH100S48-28	28.0	16.8 - 30.8	3.60	100.8
PAH150S48-28	28.0	16.8 - 30.8	5.40	151.2
PAH200S48-28	28.0	16.8 - 30.8	7.20	201.6
PAH150S48-48	48.0	38.4 - 57.6	3.20	153.6

Options

Suffix	ON/OFF Control	Overvoltage
-	Negative	Manual Reset
/P	Positive	Manual Reset
/V*	Negative	Auto Reset
/PV	Positive	Auto Reset

* Standard US Stock Item.

Outline Drawing



Pinout

Pin Description	Function
-Vin	Negative Input Terminal
+Vin	Positive Input Terminal
Case	Baseplate Terminal
CNT	On / Off Control terminal
+V	Positive Output Terminal
-V	Negative Output Terminal
TRIM	Output adjustment Trim pin
+S	Positive Remote sense
-S	Negative Remote sense

Other DC-DC Products

PAF	400-700W Full Brick DC-DC
PAH75D	Dual output Half Bricks
PAH200H	High Efficiency Half Brick
PAQ	Quarter brick DC-DC
CC-E	1.5 to 30W, 5-48V Input DC-DC
PX	10-60W, 12-48VDC Input DC-DC converters

For Additional Information, please visit
us.tdk-lambda.com/lp/products/pah-series.htm

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