TDK·Lambda PAE50/100 Series

High Efficiency Eighth Brick DC-DC Converters

Features

- Industry Standard Package and Pin Out
- Output Currents up to 30 Amps
- Designed for Telecom Standards
- Output Voltage Adjustment
- Remote On / Off
- High Efficiency
- Same Pinout as Quarter Bricks
- Meets Basic Isolation



Key Market Segments & Applications

Test COMM

RoHS

Specifications

Model			PAE50S48-1R8 PAE100S48-1R8	PAE50S48-2R5 PAE100S48-2R5	PAE50S48-3R3 PAE100S48-3R3	PAE50S48-5 PAE100S48-5
Nominal Output Voltage			1.8	2.5	3.3	5
Input Voltage Range		VDC	36-76			
Output Voltage Accuracy		%	±1			
Max Ripple & Noise		mV	100			
Max Line Regulation		mV	10			
Max Load Regulation		mV	10			
Overcurrent Protection	(1)	-	PAE50 models 105% - 150%, PAE100 models 105% - 140%			
Overvoltage Protection (max)	(2)	-	115% - 135%			120%-140%
Remote Sense		-	Yes			
Remote On / Off		-	Yes (open = off; short to 0V = on			
Operating Temperature		-	-40°C to +85°C (See website for derating)			
Operating Humidity		-	5 - 95% RH (non-condensing)			
Storage Temperature		-	-40°C to +100°C			
Storage Humidity		-	5 - 95% RH (non-condensing)			
Cooling		-	Convection or Forced Air			
I/O Isolation Voltage		-	Input to Output 1500VDC			
Vibration (non operating)		-	10 - 55Hz (1 minute), Amplitude 0.825mm (49m/s^2 max) X, Y, Z 1 hour			
Shock		-	< 196.1 m/s^2			
Safety Agency Approvals		-	IEC/EN/UL/CSA60950-1, IEC/EN/UL/CSA62368-1 and CE Mark			
Weight (Typ)		g	25			
Size (WxHxD)		mm	22.76 X 8.5 X 57.9 (See Outline Drawing)			
Warranty		yrs	Two Years			

Notes:

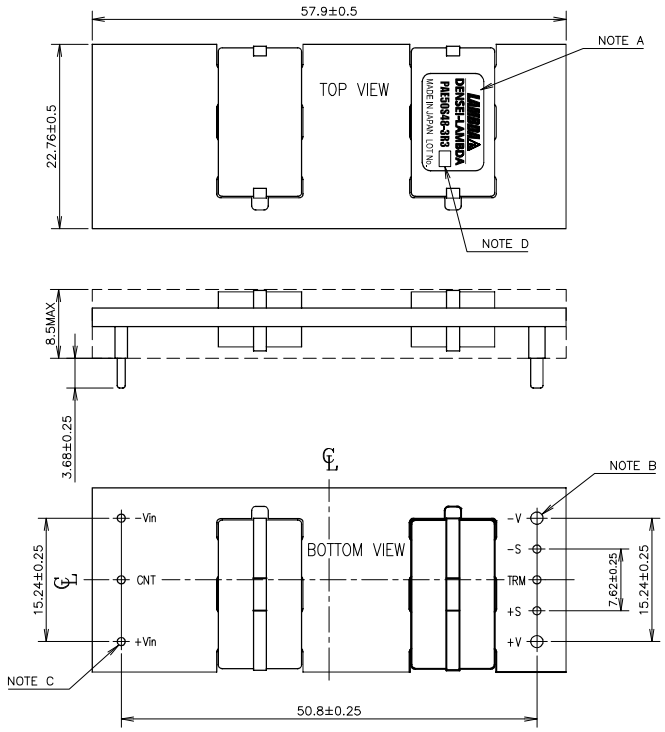
(1) Converter shut down, auto restart

(2) Auto restart on /V models

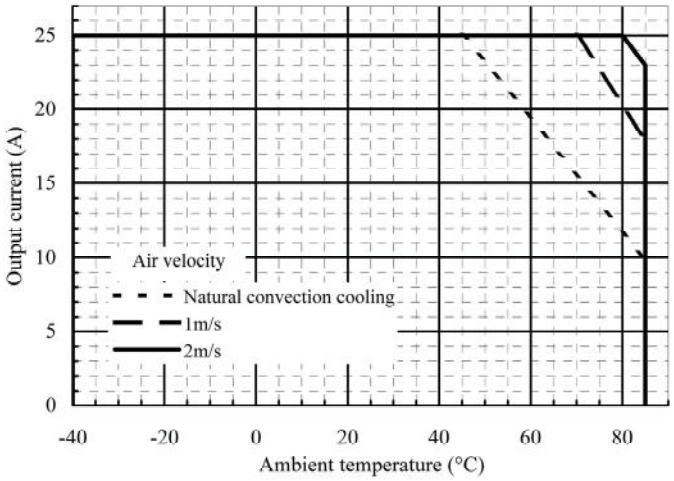
PAE Models

Models	Voltage (V)	Adjust Range	Max. Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)	Input Curr. (A)
PAE50S48-1R8/V	1.8	1.44 - 1.98	20	36.0	87	0.87
PAE100S48-1R8/V	1.8	1.44 - 1.98	30	54.0	87	1.30
PAE50S48-2R5/V	2.5	2.00 - 2.75	18	45.0	89	1.06
PAE100S48-2R5/V	2.5	2.00 - 2.75	25	62.5	89	1.47
PAE50S48-3R3/V	3.3	2.64 - 3.63	16	52.8	90	1.23
PAE100S48-3R3/V	3.3	2.64 - 3.63	25	82.5	90	1.91
PAE50S48-5/V	5.0	4.25 - 5.75	10	50.0	90	1.16
PAE100S48-5/V	5.0	4.25 - 5.75	20	100.0	90	2.32

Outline Drawing



Derating Curve



Other DC-DC Products

PX	10-40W, 12-48V I/P DC-DC
CC-E	1.5-25W, 5V, 12V, 24V & 48V I/P DC-DC
PAQ, PAH, PAF	50-700W quarter, half & full bricks

For Additional Information, please visit
https://product.tdk.com/info/en/products/power/index.html

Options

Suffix	Description
Blank	Manual Reset
/V	Auto Reset (Preferred)