

50-150W, 200 to 425VDC Input DC-DC Converters

Features

- ◆ 200 - 425VDC Input
- ◆ Base-plate Cooled
- ◆ Full Power at 100°C base plate
- ◆ Quarter Brick Footprint



Key Market Segments & Applications



Specifications								
Model								
Nominal Output Voltage	VDC	3.3V	5V	12V	15V	24V	28V	48V
Input Voltage Range	VDC	200 - 425VDC						
Input Current	A	0.42 - 0.62A (model dependant)						
Output Voltage Adjustment	VDC	2.97 - 3.96	4 - 6	9.6 - 13.2	12 - 16.5	19.2 - 26.4	22.4 - 30.8	38.4 - 52.8
Ripple & Noise (max) pk-pk	mV	100	100	150	150	240	280	400
Line Regulation (max)	mV	10	10	24	30	48	56	96
Load Regulation (max)	mV	10	10	24	30	48	56	96
Overcurrent Protection	%1	02 - 150% (Constant current style)						
Overvoltage Protection (1)	%	130 - 200	125 - 150	115 - 145	115 - 145	115 - 145	115 - 145	115 - 145
Remote Sense	-	Yes						
Remote On/Off	-	Yes; Low = ON, Open = OFF						
Operating Temperature	°C	-40°C to +100°C Base-plate, -40°C to +85°C Ambient						
Storage Temperature	°C	-55°C to +100°C						
Temperature Coefficient	%/°C	0.02%/°C						
Humidity (non condensing)	%RH	5 - 95% RH Operating and Non Operating						
Cooling	-	Conduction (See Installation Manual for heatsink selection)						
Withstand Voltage	VAC	Input to Base-plate: 2.5kVAC; Input to Output 3.0kVAC for 1 min.; Output to Base-plate: 500VAC for 1 min						
Isolation Resistance	-	>100M at 25°C and 70%RH, Output to Base plate 500VDC						
Vibration	-	Non Operating, 10-55Hz (sweep for 1 min.) Amplitude 0.825mm constant (Max 49 m/s ²) X,Y,Z 1 hour each						
Shock	-	196.1m/s ²						
Safety Agency Certifications	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark						
Weight (Typ)	g	55						
Size (WxHxD)	in (mm)	1.46 x 0.5 x 2.30" (37.2 x 12.7 x 58.3)						
Warranty	-	5 Years						

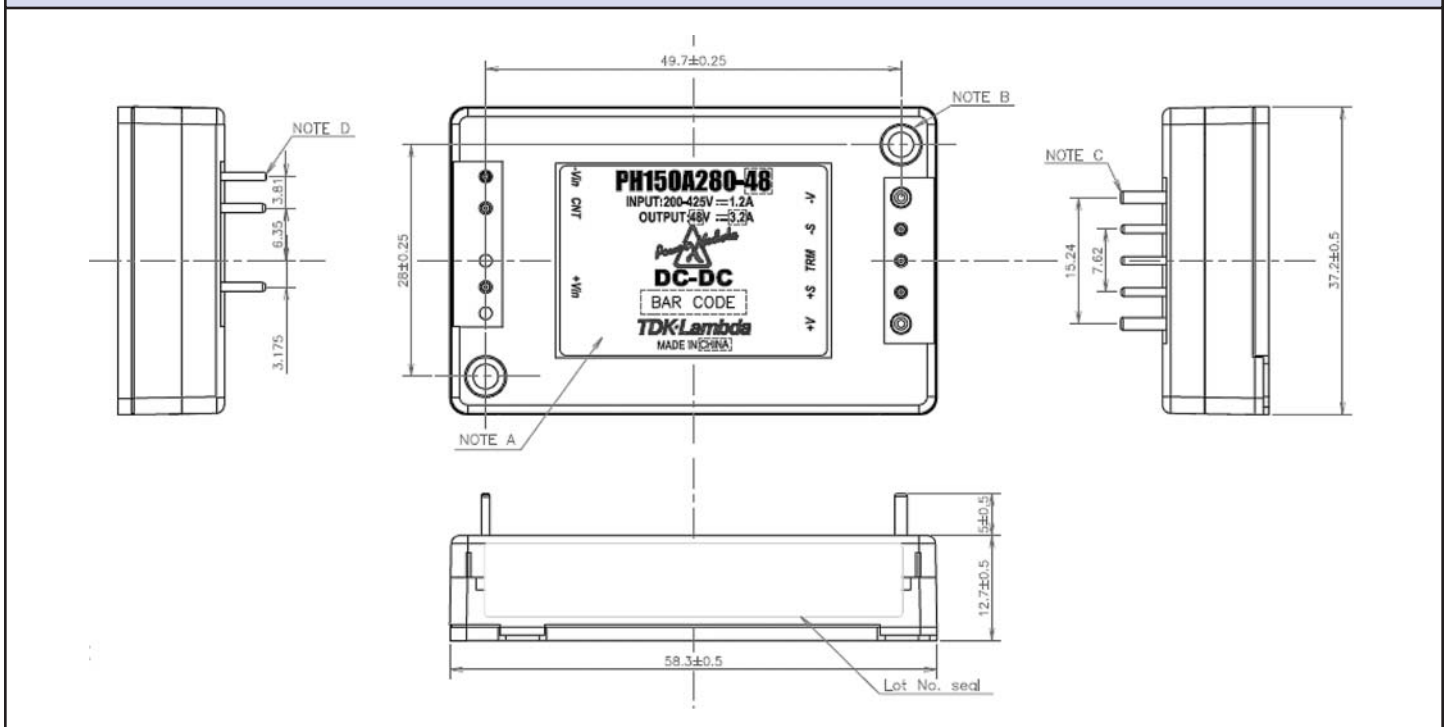
Note: See Installation Manual for full details, test methods of parameters and application notes

(1) Cycle input or remote on/off to reset

Model Selector

Model	Voltage (V)	Output Current (A)	Maximum Power (W)	Input Current (A)	Efficiency (%) (100% load, 280VDC In)
PH75A280-3.3	3.3	15	49.5	0.22	83
PH100A280-3.3	3.3	20	66	0.29	83
PH50A280-5	5	10	50.0	0.21	86
PH75A280-5	5	15	75.0	0.32	86
PH100A280-5	5	20	100.0	0.42	86
PH50A280-12	12	4.2	50.4	0.21	88
PH75A280-12	12	6.3	75.6	0.31	88
PH100A280-12	12	8.4	100.8	0.41	88
PH150A280-12	12	12.5	150.0	0.62	88
PH75A280-15	15	5	75.0	0.3	90
PH150A280-15	15	10	150.0	0.6	90
PH50A280-24	24	2.1	50.4	0.21	88
PH75A280-24	24	3.2	76.8	0.31	89
PH100A280-24	24	4.2	100.8	0.41	89
PH150A280-24	24	6.3	151.2	0.61	89
PH75A280-28	28	2.7	75.6	0.3	90
PH150A280-28	28	5.4	151.2	0.61	90
PH50A280-48	48	1.1	52.8	0.21	89
PH75A280-48	48	1.6	76.8	0.31	90
PH100A280-48	48	2.1	100.8	0.4	90
PH150A280-48	48	3.2	153.6	0.6	90

Outline Drawing



Other DC-DC Products

CN-A110 50 to 200W Quarter & Half Brick, 60 - 160VDC Input

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

