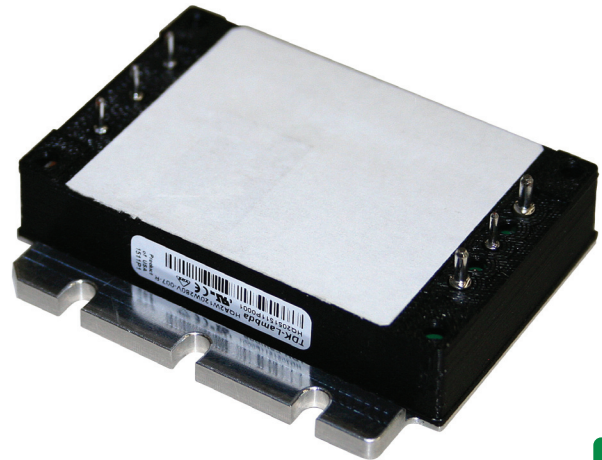


120W Harsh Environment Quarter Brick Converters

Features

- ◆ Standard Quarter Brick Footprint
- ◆ 9-40, 18-40VDC Inputs
- ◆ 5 to 48V Nominal Outputs
- ◆ Up to 90% Efficiency
- ◆ Through Hole Mounting
- ◆ 2250VDC Isolation
- ◆ Encapsulated for Rugged Environments
- ◆ No optocouplers used
- ◆ Enhanced Screening Option



Key Market Segments & Applications



Specifications							
Model		HQA					
Nominal Output Voltage	VDC	5V	12V	15V	24V	28V	48V
Input Voltage Range	VDC	9 - 40V					18 - 40V
Input Current	A	16A Maximum					
Efficiency (100% load, 24V input)	%	TBD	90	TBD	TBD	89	TBD
Output Voltage Adjustment	VDC	TBD	10.8 - 13.2	13.5 - 16.5	22.6 - 26.4	25.2 - 30.8	43.2 - 52.8
Output Voltage Accuracy	%	±3%					
Ripple & Noise (max) pk-pk	mV	TBD	150	TBD	TBD	250	TBD
Line Regulation (typ)	%	TBD	0.05	TBD	TBD	0.05	TBD
Load Regulation (max)	%	TBD	0.03	TBD	TBD	0.03	TBD
Overcurrent Protection (typ)	A	TBD	14.5	TBD	TBD	5.2	TBD
Overvoltage Protection (typ)	V	TBD	15	TBD	TBD	35	TBD
Remote On/Off	-	Yes; Low = ON, Open = OFF					
Remote Sense	-	Yes			Not as standard		
Operating Temperature	OC	Standard screening: -40°C to +115°C, Enhanced screening: -55°C to +115°C					
Storage Temperature	OC	-65°C to +125°C					
Temperature regulation	%	0.5% across full temperature range					
Humidity (non condensing)	%RH	TBD % RH Operating and Non Operating					
Cooling	-	Conduction, convection or forced air					
Withstand Voltage	VDC	Input to baseplate, Input to Output 2250VDC					
Isolation Resistance		>10M					
Vibration		TBD					
Shock		TBD					
Safety Agency Certifications	-	UL60950-1, CSA60950-1, EN60950-1, CE Mark					
Weight (Typ)	g	100 (Flanged version)					
Size (WxHxD)	in(mm)	Flanged version: 2.39 x 2.2 x 0.5" (60.6 x 55.9 x 12.7); Non-flanged version: 2.39 x 1.54 x 0.5" (60.6 x 39 x 12.7)					
Warranty	yrs	3 Years					

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

PRELIMINARY

Model Selector

Model	Input Voltage (V)	Output Voltage (V)	Max Current (A)	Maxumim Power (W)	Flange	Screening
HQA2W120W050V-007-S	9 - 40	5	24	120	Y	Standard
HQA2W120W050V-N07-S	9 - 40	5	24	120	N	Standard
HQA2W120W120V-007-S	9 - 40	12	10	120	Y	Standard
HQA2W120W120V-N07-S	9 - 40	12	10	120	N	Standard
HQA2W120W150V-007-M	9 - 40	15	8	120	Y	Enhanced
HQA2W120W150V-007-S	9 - 40	15	8	120	Y	Standard
HQA2W120W150V-N07-S	9 - 40	15	8	120	N	Standard
HQA2W120W240V-007-M	9 - 40	24	5	120	Y	Enhanced
HQA2W120W240V-007-S	9 - 40	24	5	120	Y	Standard
HQA2W120W240V-N07-S	9 - 40	24	5	120	N	Standard
HQA2W120W280V-007-S	9 - 40	28	4.2	118	Y	Standard
HQA2W120W280V-N07-S	9 - 40	28	4.2	118	N	Standard
HQA24120W050V-007-M	18 - 40	5	24	120	Y	Enhanced
HQA24120W120V-007-M	18 - 40	12	10	120	Y	Enhanced
HQA24120W280V-007-M	18 - 40	28	4.2	118	Y	Enhanced
HQA24120W480V-007-M	18 - 40	48	2.5	120	Y	Enhanced
HQA24120W480V-007-S	18 - 40	48	2.5	120	Y	Standard
HQA24120W480V-N07-S	18 - 40	48	2.5	120	N	Standard

Screening

Operation	S-Grade	M-Grade
Functional Test	Room and Hot Test	Cold, Room, and Hot Test
Burn in	Yes	Extended, 96 hour
Temperature Cycling	No	10 Cycles
Hi-Pot	2250VDC	2250VDC
Visual Inspection	Yes	Yes

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



PRELIMINARY