



Industrial



Cots



Comm

85W Harsh Environment Quarter Brick Converters



Features	Benefits
• Standard Quarter Brick Footprint	• Assists System Integration
• 9-40VDC Input	• Designed for 28V DC Networks
• Up to 92% Efficiency	• Easier System Thermal Management
• Up to 115°C Baseplate Temperatures	• Suitable for Conduction Cooling
• Rugged Package with Encapsulation	• For Rugged Environments
• No Optocouplers Used	• Allows High Temperature Operation

Specification						
Model		HQA				
Nominal Output Voltage	VDC	5V	12V	15V	24V	28V
Input Voltage Range	VDC	9 - 40V				
Input Current	A	13A Maximum				
Efficiency (100% load, 24V input)	%	91	90	92	87	88.5
Output Voltage Adjustment	VDC	4.5 - 5.5	10.8 - 13.2	13.5 - 16.5	21.6 - 26.4	25.2 - 30.8
Output Voltage Accuracy	%	±3%				
Ripple & Noise (max) pk-pk	mV	150	200	200	250	200
Line Regulation (typ)	%	0.05	0.05	0.05	0.05	0.05
Load Regulation (max)	%	0.03	0.03	0.03	0.03	0.03
Overcurrent Protection (typ)	A	27	11	8	5.2	4.2
Overvoltage Protection (typ)	V	6.5	15	18	32	35
Remote On/Off	-	Yes; Low = ON, Open = OFF				
Remote Sense	-	Yes		Not as standard		
Operating Temperature	°C	Standard screening: -40°C to +115°C				
Storage Temperature	°C	-65°C to +125°C				
Temperature regulation	%	0.5% across full temperature range				
Cooling	-	Conduction, convection or forced air				
Withstand Voltage	VDC	Input to baseplate, Input to Output 2250VDC				
Isolation Resistance	MΩ	>10MΩ				
Safety Agency Certifications	-	IEC/EN/UL/CSA 62368-1, IEC/EN/UL/CSA 60950-1, CE Mark				
Qualification Methods	-	Consistent with MIL-STD-883F and MIL-STD-202G				
Weight (Typ)	g	100 (Flanged version)				
Size (LxWxH)	mm	Flanged version: 60.6 x 55.9 x 12.7 Non-flanged version: 60.6 x 39 x 12.7				
Warranty	yrs	3				

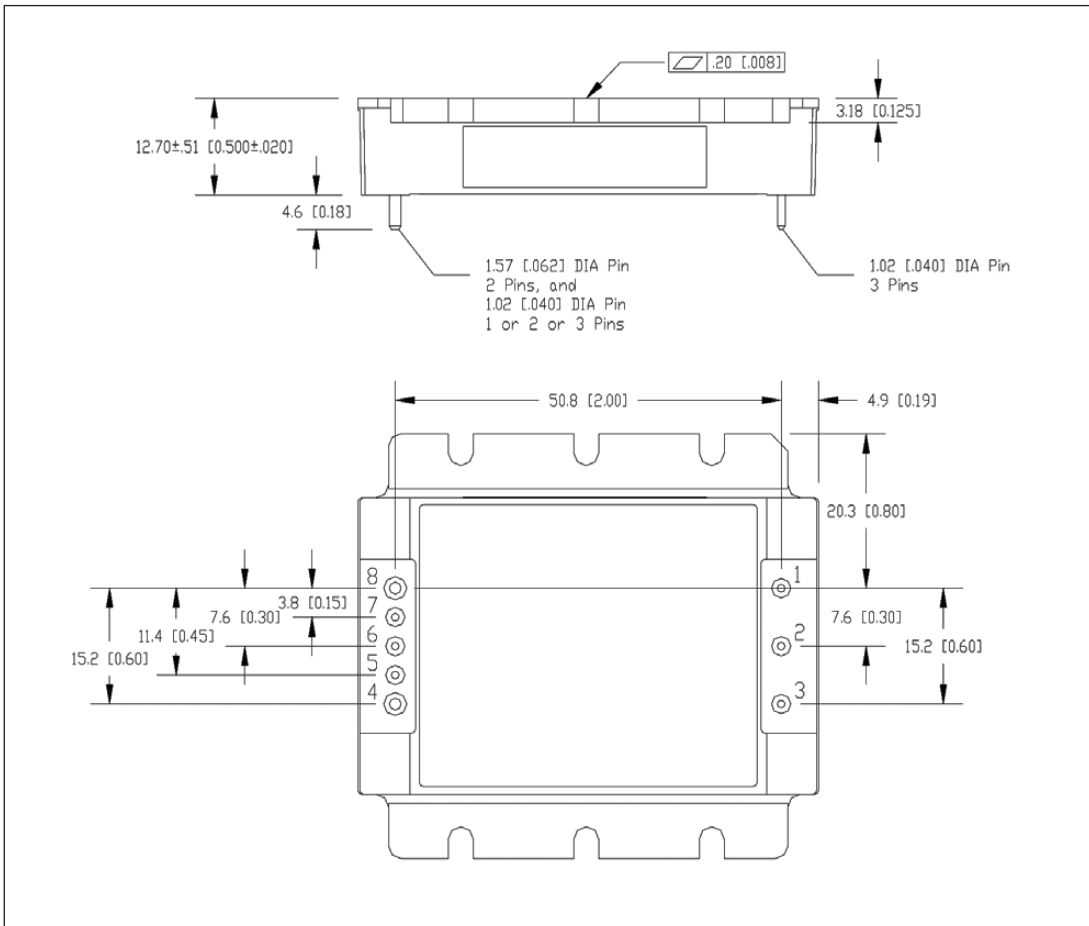
Notes: See Installation Manual for full details, test methods of parameters and application notes

Model Selector				
Model	Input Voltage (V)	Output Voltage (V)	Max Current (A)	Maximum Power (W)
HQA2W085W050V-007-S	9 - 40	5	17	85
HQA2W085W120V-007-S	9 - 40	12	7.1	85
HQA2W085W150V-007-S	9 - 40	15	5.7	85
HQA2W085W240V-007-S	9 - 40	24	3.5	85
HQA2W085W280V-007-S	9 - 40	28	3	85

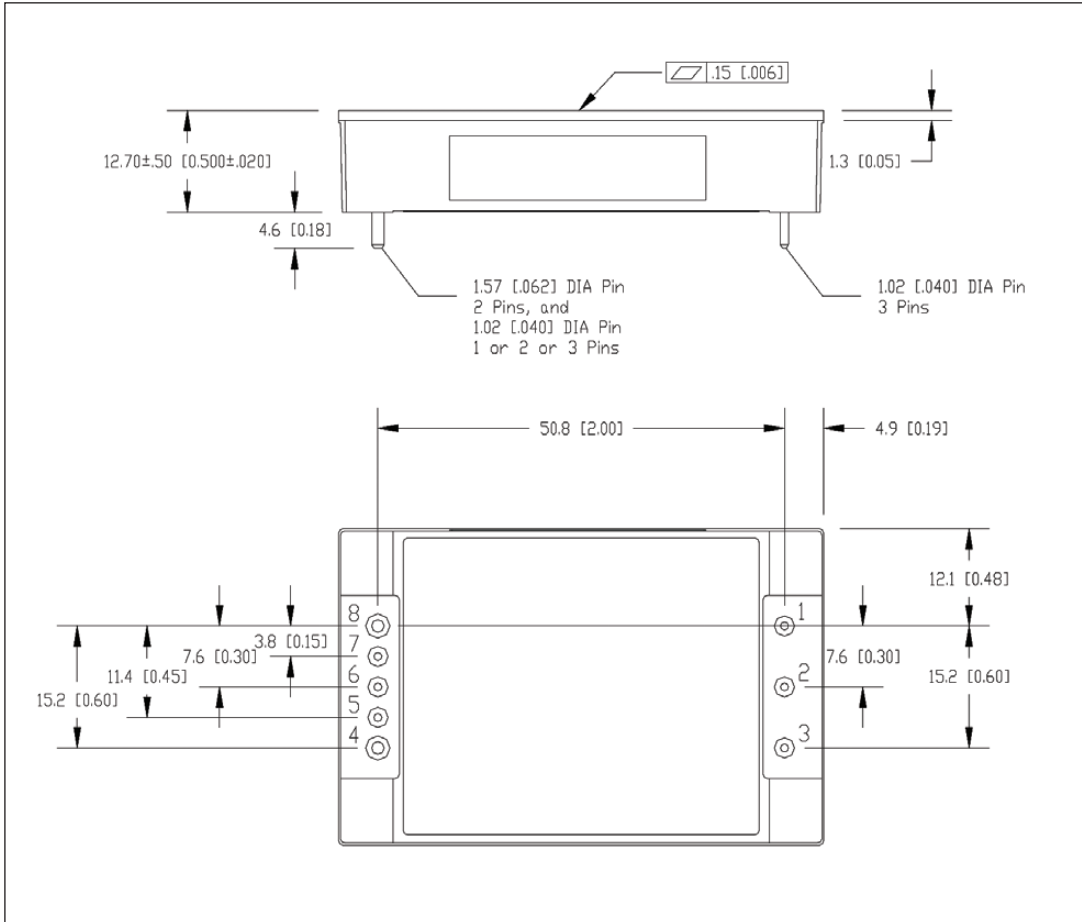
Options	
Suffix	Description
-007-S	Flanged Baseplate, Standard Screening
-N07-S	Non-Flanged Baseplate, Standard Screening

Note: Contact Sales Office for other voltages or option

Outline Drawing HQA85 Series Flange version



Outline Drawing HQA85 Series Non-Flange version



Pin Assignment

PIN	Function	PIN	Function
1	Vin (+)	5	Sense (-) select models
2	On / Off	6	Trim
3	Vin (-)	7	Sense (+) select models
4	Vo (-)	8	Vo (+)

Screening

Operation	S-Grade (Standard Screening)
Functional Test	Room and Hot Test
Burn in	Yes
Temperature Cycling	No
Hi-Pot	2250VDC



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