

120W Industrial Quarter Brick Converters

Features

- ◆ Standard Quarter Brick Footprint
- ◆ 9-36 or 18-36V Input
- ◆ Up to 91.5% Efficiency
- ◆ Up to 105°C baseplate temperatures
- ◆ 1,500VDC Isolation (2,250VDC or 3,000VDC option)



Key Market Segments & Applications



Specifications								
Model	GQA120							
Nominal Output Voltage (1)	VDC	5V	12V	15V	24V	28V	48V	
Input Voltage Range	VDC	9 - 36V					18 - 36V	
Input Current (Maximum)	A	17A						
Efficiency (100% load, 24V input)	%	90%	89%	89%	87%	89%	91.5%	
Output Voltage Adjustment	VDC	4.5 - 5.5V	10.8 - 13.2V	13.5 - 16.5V	21.6 - 26.4V	25.2 - 30.8V	45.6 - 52.8V	
Ripple & Noise (max) pk-pk	mV	150mV	180mV	200mV	250mV	250mV	300mV	
Line Regulation (typ)	%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	
Load Regulation (typ)	%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	
Overcurrent Protection (typ)	A	37A	14.5A	12A	6.2A	5.1A	4A	
Overvoltage Protection (typ)	V	6.5V	15V	18V	32V	35V	54V	
Remote On/Off	-	Yes; Low = ON, Open = OFF						
Remote Sense	-	Yes			Not as standard			
Operating Temperature	°C	-40°C to +105°C						
Storage Temperature	°C	-55°C to +125°C						
Temperature regulation	%	0.5% across full temperature range						
Cooling	-	Conduction, convection or forced air						
Withstand Voltage	VDC	Input to Output 1,500VDC (-NP7 suffix: 2,250VDC, -0P7 suffix: 3,000VDC), Baseplate to Input or Output 1,500VDC. (-NP7 & -0P7 suffix: 2,250VDC)						
Isolation Resistance	MΩ	>10MΩ						
Safety Agency Certifications	-	IEC/EN/UL/CSA 62368-1, IEC/EN/UL/CSA 60950-1, CE Mark						
Weight (Typ)	g	85g (Flanged baseplate, open frame)						
Size (LxWxH)	in (mm)	Flanged version: 2.39 x 1.95 x 0.5" (60.6 x 49.5 x 12.7); Non-flanged version: 2.39 x 1.56 x 0.5" (60.6 x 39.5 x 12.7)						
Warranty	yrs	3 Years						

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

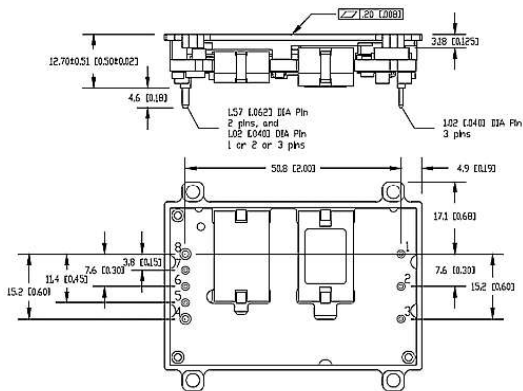
(1) Up to 50V input transient for 1 second

Model Selector

Model	Input Voltage (V)	Output Voltage (V)	Max Current (A)	Maximum Power (W)
GQA2W024A050V-007-R	9 - 36	5	24	120
GQA2W010A120V-007-R	9 - 36	12	10	120
GQA2W008A150V-007-R	9 - 36	15	8	120
GQA2W005A240V-007-R	9 - 36	24	5	120
GQA2W004A280V-007-R	9 - 36	28	4.28	120
GQA24003A480V-007-R	18 - 36	48	2.5	120

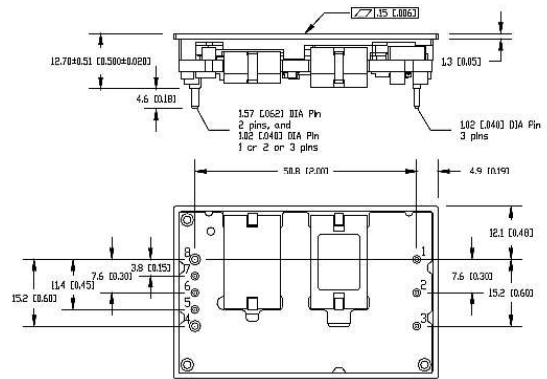
Outline Drawing

Flange Baseplate, Open Frame



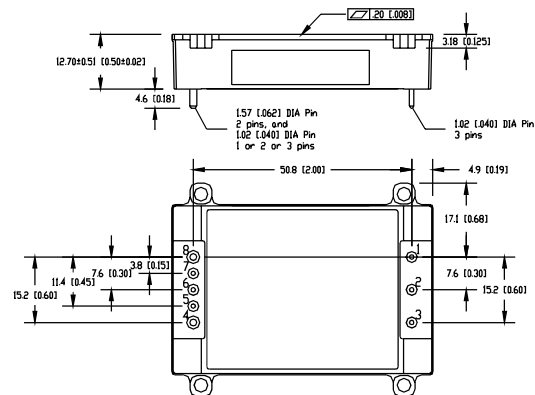
Outline Drawing

Non-Flange Baseplate, Open Frame



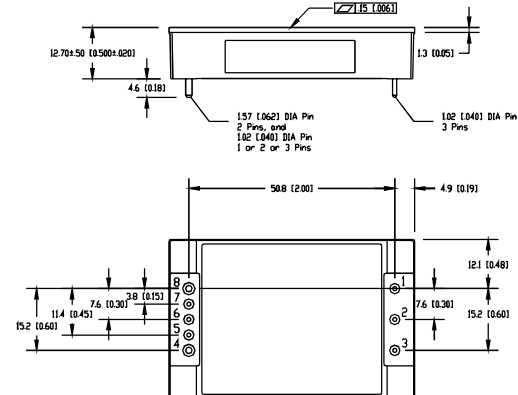
Outline Drawing

With Flange, Potted



Outline Drawing

No Flange, Potted



Options

Suffix	Description
-007-R	Flanged Baseplate, Open Frame
-N07-R	Non-Flanged Baseplate, Open Frame
-0P7-R	Flanged Baseplate, Enclosed With Potting, 3kV Input to Output Isolation
-NP7-R	Non-Flanged Baseplate, Enclosed With Potting

Standard Model *Contact factory for other Voltages or option codes

Pinout

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(+)

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

