

## 36-83W Sixteenth Brick Converter

### Features

- ◆ Standard Sixteenth Brick Footprint (DOSA)
- ◆ 36 - 75VDC Input
- ◆ 1.2V 30A - 12V 6.5A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ Low 12.7mm Profile
- ◆ 1500VDC Basic Isolation
- ◆ High operating efficiency (up to 90%)
- ◆ Constant switching frequency
- ◆ 44% smaller than eighth bricks



### Key Market Segments & Applications



Specifications		iSA480					
Model		1.2	1.5	1.8	3.3	5	12
Nominal Output Voltage	VDC	1.2	1.5	1.8	3.3	5	12
Input Voltage Range	VDC	36 - 75					
Input Current (max)	A	4					
Output Voltage Tolerance	VDC	1.164-1.236	1.45-1.55	1.74-1.86	3.20-3.40	4.85-5.15	11.58-12.42
Ripple & Noise (max) (pk - pk)	mV	75mV		100mV		200mV	
Line Regulation (typical)	mV	2		7		10	
Load Regulation (typical)	mV	3		8		10	
Overload Protection (typ)	A	39		40	32	22	9.5
Overvoltage Protection	VDC	1.5 - 2.0V	1.7 - 2.3	2.1 - 2.6	3.75-4.65	5.7-6.7	13.6-15.7
Remote Sense	-	Yes					
Remote On / Off	-	Yes					
Temperature (operating)	°C	-40 to 125					
Temperature (storage)	°C	-55 to 125					
Humidity (operating)	-	20-95% RH Non condensing					
Humidity (storage)	-	10-95% RH Non condensing					
Cooling	-	Convection or forced air					
Isolation Voltage	VDC	1500					
Vibration (non operating)	-	5 to 50Hz @ 0.5g (4.9m/s <sup>2</sup> ), and 50 to 500Hz @ 1.5g (14.7m/s <sup>2</sup> ) per Bellcore TR-EOP-000063-5.4.4					
Shock	-	196.1m/s <sup>2</sup>					
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950), CE Mark (LVD)					
Weight	g	30.4					
Size	mm	33 x 22.9 x 12.7					
Warranty	-	3 Years					

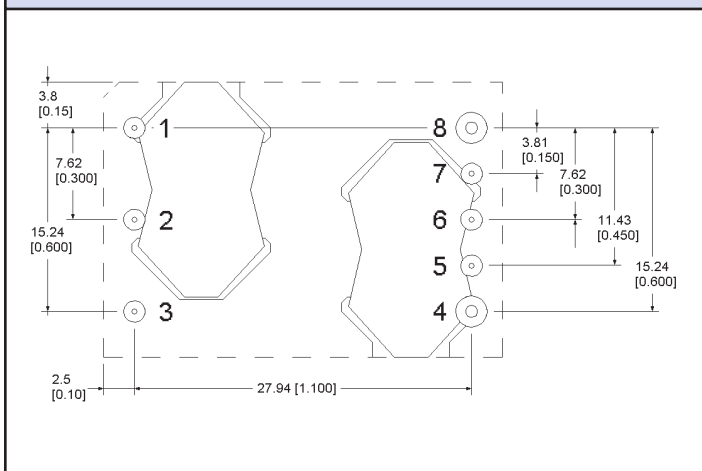
Notes: See website for detailed specifications

## Model Selector

Model	Output Voltage (V)	Output Adjust (V)	Output Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)	Pos. Logic On/Off	Neg. Logic On/Off	Pin Length
iSA48030A012V-000-R	1.2	1.08 - 1.32	30	36	75	X	-	0.145
iSA48030A012V-001-R	1.2	1.08 - 1.32	30	36	75	-	X	0.145
iSA48030A015V-001-R	1.5	1.35 - 1.65	30	45	79	-	X	0.145
iSA48030A018V-001-R	1.8	1.62 - 1.98	30	54	82	-	X	0.145
iSA48025A025V-001-R	2.5	2.25 - 2.75	25	62.5	85	-	X	0.145
iSA48025A033V-000-R	3.3	2.97 - 3.63	25	82.5	88	X	-	0.145
iSA48025A033V-001-R	3.3	2.97 - 3.63	25	82.5	88	-	X	0.145
iSA48015A050V-001-R	5	4.5 - 5.5	15	75	90	-	X	0.145
iSA48007A120V-001-R	12	10.8 - 13.2	6.5	78	90	-	X	0.145
iSA48007A120V-007-R	12	10.8 - 13.2	6.5	78	90	-	X	0.180

## Preferred Model

### Recommended Footprint (Top View)



### Pinout

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

For Additional Information, please visit [us.tdk-lambda.com/lp/products/isa-series.htm](http://us.tdk-lambda.com/lp/products/isa-series.htm)



## Other DC-DC Products

Series	Isolation	Rating	Output	Input
CC-E	Isolated	1.5 - 30W	1 -2 Outputs	5 - 48VDC
PX	Isolated	10 - 60W	1 -3 Outputs	12 - 48VDC
iSA	Isolated	36 - 82.5W	1.2 - 12V	36 - 75VDC
iEA	Isolated	48 - 78W	5 - 28V	36 - 75VDC
iEH	Isolated	300 - 317W	9.6 - 12V	36 - 75VDC
PAE50/100	Isolated	50 - 100W	1.8 - 5V	36 - 76VDC
iQL	Isolated	72 - 308W	1.2 - 28V	18 - 75VDC
iQE	Isolated	49.4 - 204W	3.3 - 12V	18 - 75VDC
iQG	Isolated	300 - 450W	9.6 - 12V	36 - 75VDC
iHG	Isolated	300 - 456W	12V	36 - 75VDC
PAH	Isolated	30 - 450W	2.5 - 48V	18 - 76VDC
PAF	Isolated	450 - 700W	3.3 - 48V	36 - 75VDC
iJB	POL, Digital	60A	0.6 - 2.0V	8 - 14VDC
i6A	POL	250W	3.3 - 20V	9 - 40VDC
iA,iB,iC	POL	3,6,12,20A	0.6 - 5.5V	2.4 - 14VDC