

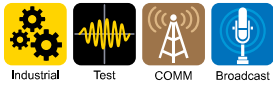
## 300W Eighth Brick Converter

### Features

- ◆ Standard Eighth Brick Footprint
- ◆ 36-75VDC Input
- ◆ 12V Nominal Output
- ◆ Through Hole Mounting
- ◆ 2250VDC Basic Isolation
- ◆ Digital adaptive control for fast transient response
- ◆ High Operating Efficiency (up to 94.6%)
- ◆ Constant Switching Frequency
- ◆ Baseplate Cooled



### Key Market Segments & Applications



| Specifications                    |        |   |            |
|-----------------------------------|--------|---|------------|
| Model                             |        | iEH300  |            |
| Nominal Output Voltage            | VDC    | 10.8  | 12         |
| Input Voltage Range               | VDC    | 36-75*  |            |
| Ripple & Noise (max) (pk-pk) (1)  | mV     | 150   | 120        |
| Line Regulation (max)             | mV     | 50  | 60         |
| Load Regulation (max)             | mV     | 100   | 60         |
| Overload Protection Threshold (3) | A      | 36  | 29.5       |
| Overvoltage Protection (Typ) (2)  | VDC    | 13.1  | 14.8       |
| Overtemperature Protection (3)    | -      | Yes   |            |
| Remote On / Off                   | -      | Negative Logic  |            |
| Temperature (operating)           | °C     | -40 to 124  | -40 to 130 |
| Temperature (storage)             | °C     | -55 to 125  |            |
| Humidity (operating)              | %RH    | 20-95% RH Non condensing  |            |
| Humidity (storage)                | %RH    | 10-95% RH Non condensing  |            |
| Cooling                           | -      | Conduction, convection or forced air (see detailed datasheet for derating)  |            |
| Isolation Voltage                 | VDC    | 2250VDC Input to Output, 1500VDC Input to Baseplate   |            |
| Vibration (non operating)         | -      | 5-50Hz @ 0.5g (4.9m/s <sup>2</sup> ), and<br>50-500Hz @ 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), CB scheme IEC 60950-1 (2nd edition) AM1,<br>CE Mark EN 60950-1/A12                           |            |
| Weight (max)                      | g      | 50  |            |
| Size                              | mm/in. | 58.42 x 22.86 x 12.70 / 2.02 x 0.9 x 0.49   |            |
| Warranty                          | yrs    | 3 Years   |            |

\*When operating below 40V input, the module will operate, but load regulation may be out of specification.

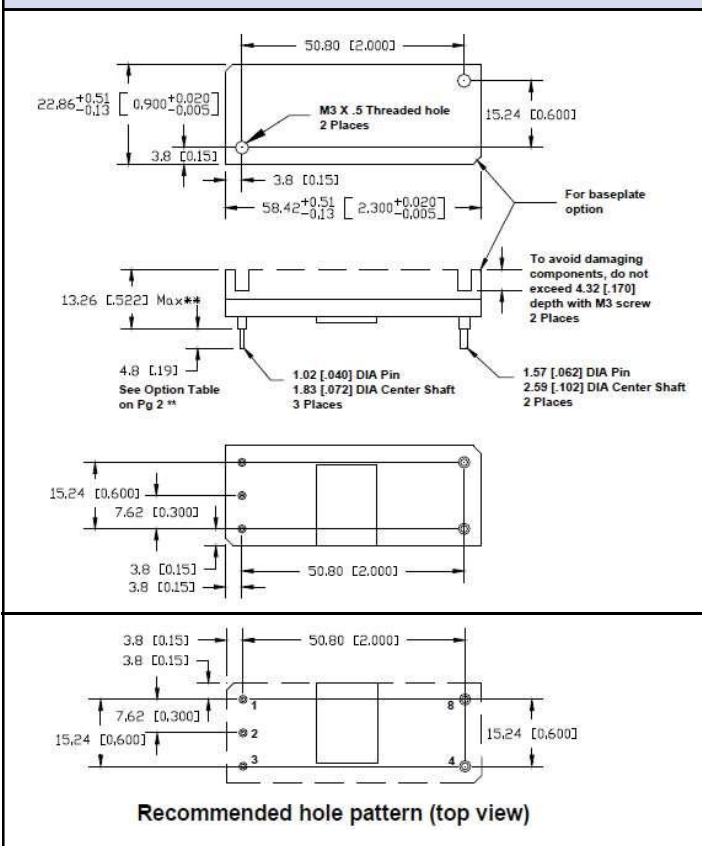
- (1) See website for detailed specification and test methods.  
 (2) See model selector  
 (3) Non-Latching

## Model Selector

| Model               | Input Voltage (V) | Output Voltage (V) | Drop Share | Max. Curr. (A) | Max. Output Power (W) | Base Plate | OVP       | Efficiency at Full Load (%) | Pin Length |
|---------------------|-------------------|--------------------|------------|----------------|-----------------------|------------|-----------|-----------------------------|------------|
| iEH48028A108V-103-R | 36-75             | 10.8               | No         | 28             | 300                   | Yes        | Non-Latch | 94                          | 0.145      |
| iEH48028A108V-109-R | 36-75             | 10.8               | No         | 28             | 300                   | Yes        | Latch     | 94                          | 0.190      |
| iEH48025A120V-003-R | 36-75             | 12                 | No         | 25             | 300                   | No         | Non-Latch | 94.6                        | 0.145      |
| iEH48025A120V-103-R | 36-75             | 12                 | No         | 25             | 300                   | Yes        | Non-Latch | 94.6                        | 0.145      |
| iEH48025A120V-107-R | 36-75             | 12                 | No         | 25             | 300                   | Yes        | Non-Latch | 94.6                        | 0.190      |
| iEH48025A120V-109-R | 36-75             | 12                 | No         | 25             | 300                   | Yes        | Latch     | 94.6                        | 0.190      |

Preferred model

## Outline Drawing



## Pinout

| PIN | Function | PIN | Function |
|-----|----------|-----|----------|
| 1   | Vin (+)  | 5   | none     |
| 2   | On / Off | 6   | none     |
| 3   | Vin (-)  | 7   | none     |
| 4   | Vo (-)   | 8   | Vo (+)   |

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



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