

# JHW060A0-Series Power Modules; dc-dc Converters: 36 Vdc to 75 Vdc Input, 1.5 Vdc to 3.3 Vdc Output; 60 A

# **Applications**

- Distributed power architectures
- Communications equipment
- Computer equipment

## **Options**

- Heat sinks available for extended operation
- Negative remote on/off logic
- Overtemperature, overvoltage, and overcurrent protection (all hiccup-mode)
- Pin for synchronization to an external clock
- Pin for paralleling to other modules with forced current sharing
- \* ISO is a registered trademark of the International Organization for Standardization.
- † *UL* is a registered trademark of Underwriters Laboratories, Inc.
- ‡ CSA is a registered trademark of Canadian Standards Association
- § VDE is a trademark of Verband Deutscher Elektrotechniker e.V.
  \*\*\* IEC is a trademark of International Elecktrotechniker Commission.
- ††This product is intended for integration into end-use equipment. All the required procedures for CE marking of end-use equipment should be followed. (The CE mark is placed on selected products.)

#### **Features**

- 60 A output current in a half-brick open-frame: 61.0 mm x 57.9 mm x 11.4 mm (2.40 in. x 2.28 in. x 0.45 in.)
- High density
- High efficiency: 90% typical
- Low output noise and ripple
- Tight regulation
- Constant frequency
- Industry-standard pinout
- Metal baseplate with ground pin
- 2:1 input voltage range
- Overtemperature, overvoltage, and overcurrent protection (all latched)
- Remote on/off logic and remote sense
- Adjustable output voltage
- Manufacturing facilities registered against the ISO\* 9000 series standards
- Meets the voltage isolation requirements for ETSI 300-132-2 and complies with and is Licensed for Basic Insulation rating per EN60950 (-B version only)
- *UL*<sup>†</sup> 60950 Recognized, *CSA*<sup>‡</sup> C22.2 No. 60950-00 Certified, and *VDE* § 0805 (*IEC*\*\*60950, 4th Edition) Licensed
- CE mark meets 73/23/EEC and 93/68/EEC directives<sup>††</sup>

# **Description**

The JHW060A0-Series Power Modules are open-frame dc-dc converters that operate over an input voltage range of 36 Vdc to 75 Vdc and provide a precisely regulated dc output. The output is fully isolated from the input, allowing versatile polarity configurations and grounding connections. These modules have a maximum output current of 60 A. The JHW060A0F module has a typical operating efficiency of 90% at full load.

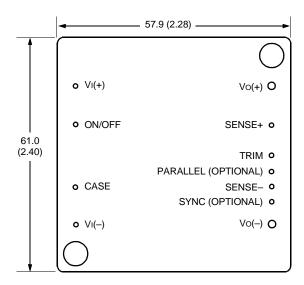
These open-frame modules provide a metal baseplate for excellent thermal performance. Threaded-through holes are provided to allow easy mounting or addition of a heat sink for high-temperature applications. The standard feature set includes remote sensing, output trim, and remote on/off for convenient flexibility in distributed power applications. Optional pins are available for synchronization to an external clock and for paralleling with forced current sharing.

# Outline Diagram of JHW060A0-Series Open-Frame Module

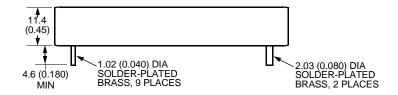
Dimensions are in millimeters and (inches).

Tolerances:  $x.x \text{ mm} \pm 0.5 \text{ mm} (x.xx \text{ in.} \pm 0.02 \text{ in.})$  $x.xx \text{ mm} \pm 0.25 \text{ mm} (x.xxx \text{ in.} \pm 0.010 \text{ in.})$ 

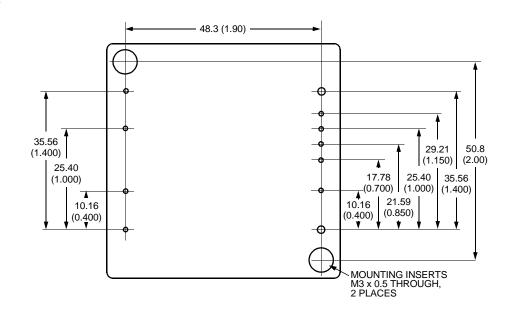
#### **Top View**



#### Side View



#### **Bottom View**

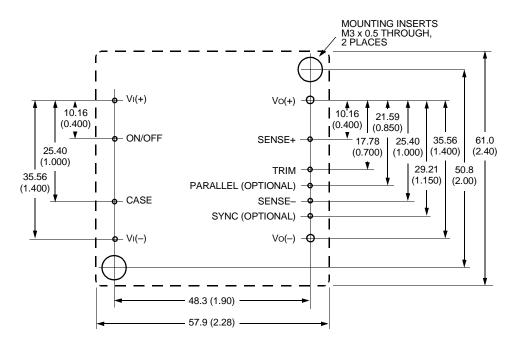


8-3404(F).a

### **Recommended Hole Pattern**

Component-side footprint.

Dimensions are in millimeters and (inches).



8-3404(F).a

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# **Ordering Information**

Please contact your Tyco Electronics' Account Manager or Field Application Engineer for pricing and availability.

**Table 1. Device Codes** 

Input Voltage	Output Voltage	Output Power	Output Current	Device Code	Comcode
48 Vdc	3.3 Vdc	198 W	60 A	JHW060A0F	TBD
48 Vdc	2.5 Vdc	150 W	60 A	JHW060A0G	TBD
48 Vdc	2.0 Vdc	120 W	60 A	JHW060A0D	TBD
48 Vdc	1.8 Vdc	108 W	60 A	JHW060A0Y	TBD
48 Vdc	1.5 Vdc	90 W	60 A	JHW060A0M	TBD

Optional features can be ordered using the suffixes shown in Table 2. The suffixes follow the last letter of the device code and are placed in descending order. For example, the device code for a JHW060A0F module with the following options are shown below:

Negative remote on/off logic & pin for paralleling with forced current sharing JHW060A0F1-P

**Table 2. Device Options** 

Option	Suffix
Overtemperature, overvoltage, and overcurrent protection (all hiccup-mode)	4
Pin for synchronization to external clock	3
Negative remote on/off logic	1
Pin for paralleling with forced current sharing	-P
Approved for Basic Insulation	-B



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