

## Power Supplies

### **OVC III certified 600W half-brick power module operates from a 200 to 425Vdc input**

April, 2020

TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda PH600A280-24 DC-DC converter. Rated at 24V 600W, this further extends the 280Vdc nominal input PH-A series from 50W to 600W. The PH-A series is utilized in HVDC (High Voltage Direct Current) equipment for data communications, high voltage transmission, renewable energy applications, robot controllers and factory automation.

Certification to the safety standard EN 62477-1 (Over Voltage Category III) benefits users requiring compliance to the machinery safety standard IEC 60204-1. The PH600A280 does not require an isolation transformer on the distribution panel, reducing cost, size and weight.

The PH600A280-24 accepts a wide range 200 to 425Vdc input delivering 24V at 12.5A. The output voltage can be set between 14.4 and 28.8V using the trim terminal. With an efficiency of 93%, the module can operate at full load with baseplate temperatures of -40°C to +85°C, derating linearly to 80% load at +100°C. Conduction cooling through the baseplate enables the PH-A to be used in outdoor sealed enclosures or liquid cooled equipment.

Following the industry standard, the half-brick package measures 61.0 x 12.7 x 57.9mm (WxHxL). The PH600-A has remote on-off, over-current and over-voltage protection and a five-year warranty. Input to output isolation is 3,000Vac and is safety certified to IEC/EN/UL/CSA 62368-1, EN 62477-1 (OVC III) with CE marking for the Low Voltage and RoHS Directives

More information on the PH-A series, including distributor inventory, can be obtained from the TDK-Lambda Americas website at <https://www.us.lambda.tdk.com>.

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#### **Main applications**

- Data communications, high voltage transmission, renewable energy applications, robot controllers and factory automation

#### **Main features and benefits**

- Very compact half-brick package
- Up to 93% efficient
- Baseplate cooled
- -40 to 100°C baseplate temperature range
- Certified to EN62477-1 (OVC III)

## Key data

Model		PH600A280-24
Input voltage range	Vdc	200 to 425
Output voltage	Vdc	24
Maximum output power	W	600
Efficiency	%	Up to 93
Other features	-	Remote on/off, remote sense, overcurrent and overvoltage protection
Safety Certifications	-	IEC/EN/UL 62368-1, EN 62477-1 (OVC III)
Size (W x H x L)	mm	61.0 x 12.7 x 57.9
Warranty	Yrs	Five

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### About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's comprehensive portfolio features passive components such as ceramic, aluminum electrolytic and film capacitors, as well as magnetics, high-frequency, and piezo and protection devices. The product spectrum also includes sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK focuses on demanding markets in the areas of information and communication technology and automotive, industrial and consumer electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2019, TDK posted total sales of USD 12.5 billion and employed about 105,000 people worldwide.

### About TDK-Lambda Corporation

TDK-Lambda Corporation is a trusted, innovative leader and global supplier of highly reliable power conversion products for industrial and medical equipment worldwide.

TDK-Lambda Corporation is aligned for fast responses to any customer need with R&D, manufacturing, sales and service locations in five key geographic regions, namely Japan, EMEA, Americas, China and ASEAN.

For more details, please pay a visit to: [www.jp.lambda.tdk.com/en/](http://www.jp.lambda.tdk.com/en/)

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