

Power Supplies

1512W full brick power factor correction AC-DC module is suitable for high voltage distributed power systems

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TDK Corporation (TSE:6762) announces the introduction of the TDK-Lambda brand PF1500B-360 full brick power module. Rated at 1512W with an input of 170 to 265V or 1008W from 85 to 265V, the module delivers a non-isolated, regulated 360Vdc output with a 0.98 power factor. The PF1500B-360 is ideally suitable for high voltage power systems using isolated DC-DC converters in a distributed power architecture configuration, or for loads requiring a high voltage source. Other applications include LED lighting, semiconductor fabrication and custom power supplies using power module-based solutions.

The PF1500B-360 is packaged in the industry standard full brick footprint, measuring 116.8mm in length, 61mm wide and 12.7mm high (4.6 x 2.4 x 0.5 inches) enabling low profile designs. The module can operate reliably with baseplate temperatures of 100°C and in ambient temperatures of -40 to 85°C due to efficiencies of up to 96.5%.

Standard features include a 10 - 16V 10mA auxiliary voltage, remote on/off, inverter good and a signal indicating the output voltage is more than 350V to enable isolated DC-DC converters to begin operating. Up to three modules may be connected in parallel with current sharing to provide additional power.

The input and output to ground isolation is 2,500Vac. Safety certification is to the IEC/EN/CSA/UL 62368-1 standard and has CE / UKCA marks to the Low Voltage and RoHS Directives. With external circuitry the PF1500B-360 will meet radiated and conducted emissions and comply with the IEC 61000-4 immunity standards.

More information on the PF1500B-360 series, including distributor inventory, can be obtained from the TDK-Lambda Americas website at https://www.us.lambda.tdk.com.

Main applications

 High voltage distributed power architectures, LED lighting, semiconductor fabrication and custom power supplies utilizing power module-based solutions.

Main features and benefits

- Suitable for developing custom supplies
- Up to 96.5% efficient
- Compact full brick package (116.8 x 61 x 12.7mm)
- Up to 100°C rated baseplate temperature
- Conduction cooled via baseplate



Key data

Model		PF1500B-360		
Input voltage range	Vac	85 to 265		
Output voltage	Vdc	360		
Maximum output power	W	1008 (85-265Vac input)	1512 (170-265Vac input)	
Efficiency	%	Up to 96.5		
Isolation	Vac	Input / Output - ground 2,500		
Size (W x L x H)	mm	61 x 116.8 x 12.7		
Safety certification		IEC/EN/CSA/UL 62368-1		

About TDK Corporation

TDK Corporation is a world leader in electronic solutions for the smart society based in Tokyo, Japan. Built on a foundation of material sciences mastery, TDK welcomes societal transformation by resolutely remaining at the forefront of technological evolution and deliberately "Attracting Tomorrow." It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's comprehensive, innovation-driven 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 automotive, industrial and consumer electronics, and information and communication technology. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2022, TDK posted total sales of USD 15.6 billion and employed about 117,000 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/

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