

Power Supplies

4:1 input 40W and 60W DC-DC converters have a 2"x1" footprint and six-sided shielding for reduced radiated EMI

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TDK Corporation (TSE:6762) announces the introduction of the 40W and 60W rated TDK-Lambda PXD series of 2"x1" DC-DC converters. Capable of operating from a wide input voltage of 9 to 36Vdc or 18 to 75Vdc, these converters have a copper case providing six-sided shielding for reduced EMI, simplifying system compliance. Industrial control, telecom/datacom, test, measurement and battery-operated equipment are some of the many applications for the PXD.

The PXD40 and PXD60 converters comprise of 3.3, 5, 12, 15, 24 and 48Vdc single outputs, and ± 12 , ± 15 and ± 24 Vdc dual output voltages. Using the trim function, the single output models can be adjusted to compensate for voltage drops or to accommodate non-standard system voltages. The wide input ranges can assist with inventory reduction programs with one part number covering multiple nominal voltages.

All models have a negative logic remote on/off function as standard, which can be used to reduce the input current to a low 3mA to prolong battery life for portable equipment in stand-by mode. No minimum loading is required, and the converters are protected against output-overvoltage, overcurrent and overtemperature conditions.

With efficiencies of up to 93%, power losses are minimized allowing the products to operate with a case temperature of -40°C to $+105^{\circ}\text{C}$. Output power derating can be reduced with the use of optional heatsinks and/or system airflow.

All models carry the CE and UKCA marks for the Low Voltage and RoHS Directives and are certified to the IEC/UL/CSA/EN 62368-1 safety standards. The series has an input to output and input to case isolation of 1,600Vdc.

More information on the PXD40 and PXD60 series, including distributor inventory, can be obtained from the TDK-Lambda Americas website at <https://www.us.lambda.tdk.com>.



Main applications

- Industrial control, telecom/datacom, test, measurement and battery-operated equipment.

Main features and benefits

- Wide 4:1 input range
- Compact 2" x 1" industry package
- Certified to IEC/UL/CSA/EN 62368-1 safety standards
- Low no load power consumption
- Six-sided shielding

Key data

Model		PXD40	PXD60
Input voltage ranges	Vdc	9 to 36 or 36 to 75	
Output voltage range	Vdc	3.3, 5, 12, 15, 24, 48, or ±12, ±15 and ±24 dual outputs	
Maximum output power	W	40	60
Efficiency	%	Up to 93	
No load current draw	mA	3 (typical when the on/off function is activated)	
Size (L x W x H)	mm	50.8 x 25.4 x 10.2 (without a heatsink)	
Safety certification		IEC/UL/CSA/EN 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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