

## Power Supply Products

### Ultra Compact Onboard Type

### AC-DC Power Supply KWS-A Series

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- Ultimate convenience: All-in-one design eliminates the need for external components
- Extremely small dimensions: 66% smaller footprint compared to existing product (KWS10)

October 1, 2015

TDK Corporation announces the successful development of the KWS-A series of ultra compact onboard type power supplies to be marketed under the TDK-Lambda brand. The lineup comprises four models rated for 5 W, 10 W, 15 W, and 25 W, to meet a wide range of customer needs. TDK-Lambda Corporation will start accepting orders for the new product from October, and shipping will begin in November 2015.

The KWS-A series products are onboard type switching AC-DC power supplies developed for use mainly on control boards in a wide range of equipment. The series adopts an all-in-one design aimed at maximizing user convenience by making board design as easy as possible for the customer. There is no need to provide parts such as fuses or electrolytic capacitors externally.

The new product also contributes to significant space savings. Compared to the existing product (KWS10), a reduction in footprint requirements by as much as 66% has been achieved through drastic miniaturization. Requirements such as high efficiency and low standby power consumption are being met through improved efficiency which is 6% better than earlier model (KWS10-12 with 200 V AC input). No-load power consumption has been reduced to 0.5 watts or less. In addition, the products are rated for a wide operating temperature range (-10°C to +85°C, start up at -40°C to -10°C).

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#### Main applications

- Control boards in control and measuring equipment, NC machine tools, semiconductor manufacturing equipment, communication equipment, traffic supervision equipment etc.

#### Main features

- Ultimate convenience: All-in-one design eliminates need for external components such as fuses and electrolytic capacitors
- Extremely compact dimensions: 66% smaller footprint compared to existing product (KWS10)
- High efficiency: 88% (KWS25A-24, with 200 V AC input)
- No-load power consumption: 0.5 W or less
- Wide operating temperature range: -10°C to +85°C  
(-10°C to +55°C, load factor 100% \*start up at -40°C to -10°C)

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**Key data KWS-A series**

Model	KWS5A	KWS10A	KWS15A	KWS25A
Input Voltage Range	85 to 265 VAC / 120 to 370 VDC			
Efficiency at 24V (200VAC typ.)	77%	84%	85%	88%
Nominal Output Voltage	5/12/15/24 VDC			
Maximum Output Power	5 W	10 W	15 W	25 W
Operating Temperature	-10°C to +85°C (with output derating) *Start up at -40°C to -10°C			
No Load Power Consumption (typ.) (with 200VAC input)	0.5 W Max			
Safety	UL60950-1, CSA60950-1, EN60950-1			
EMI	EN55011/EN55022-B, FCC-B, VCCI-B (Need External parts) EN55011/EN55022-A, FCC-A, VCCI-A (No Need External parts)			
Size (W x H x D mm)	25.4 x 21.5 x 38.1 (1" x 1.5")		25.4 x 24 x 50.8 (1" x 2")	25.4 x 29 x 63.5 (1" x 2.5")
Board Type	Double-Sided Board			
Warranty	3 years			

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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 portfolio includes electronic components, modules and systems\* marketed under the product brands TDK and EPCOS, power supplies, magnetic application products as well as energy devices, flash memory application devices, and others. TDK focuses on demanding markets in the areas of information and communication technology and consumer, automotive and industrial 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 2015, TDK posted total sales of USD 9.0 billion and employed about 88,000 people worldwide.

\* The product portfolio includes ceramic, aluminum electrolytic and film capacitors, ferrites, inductors, high-frequency components such as surface acoustic wave (SAW) filter products and modules, piezo and protection components, and sensors.

**About TDK-Lambda Corporation**

TDK-Lambda Corporation, a group company of TDK Corporation, is a leading global power supply company providing highly reliable power supplies for industrial equipment worldwide. TDK-Lambda Corporation meets the various needs of customers with our entire range of activities, from research and development through to manufacturing, sales, and service with bases in five key areas, covering Japan, Europe, America, China, and Asia.

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The text of this release and related images can be downloaded from  
[http://www.tdk-lambda.co.jp/about/press/20151001\\_1.html](http://www.tdk-lambda.co.jp/about/press/20151001_1.html).  
 Further information on the products can be found under  
[www.tdk-lambda.com/products/sps/ps\\_onboard/kws-a/indexe.html](http://www.tdk-lambda.com/products/sps/ps_onboard/kws-a/indexe.html).

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