

Power Supply Product

Class I & II Medical and Industrial Power Supplies Deliver 600W in 3 x 5" Footprint

February 2020

TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda brand CUS600M AC-DC power supply series in a 3 x 5" footprint. Rated at 600W these compact products meet curve B conducted and radiated EMI in either a Class I or Class II (double insulated) construction, without the need for external filtering. This flexibility allows the CUS600M to be used in a wide range of applications, including home healthcare, medical, dental, test and measurement, broadcast and industrial equipment.

The CUS600M series accepts an 85 to 264Vac input and has a no-load power consumption of less than 0.5W when the output is inhibited. Seven output voltages are available, 12V, 19V, 24V, 28V, 32V, 36V and 48V. A 5V 2A standby voltage, remote on/off, remote sense and a power good signal are fitted as standard. A cover with integral fan option is also available. The open frame models measure 76.2 x 127 x 37mm (WxLxH), or 85 x 157 x 42.5mm with the cover/fan assembly fitted.

Convection cooled the CUS600M can deliver 400W (600W peak) in -20°C to +40°C ambient temperatures, derating linearly to 200W load at +70°C. With forced air cooling or the integral fan fitted, the series provides 600W at +55°C ambient, derating to 420W at +70°C. The efficiency of the series is up to 96%, reducing internal power losses.

The CUS600M has an input to output isolation of 4,000Vac (2 x MoPP), an input to ground isolation of 2,000Vac (1 x MoPP) and an output to ground isolation of 1,500Vac (1 x MoPP) for suitability in B and BF rated medical equipment. The leakage current is <200µA and touch current is <100µA. The maximum operating, transportation and storage altitude is 5,000m.

Safety certifications include IEC/EN/ES 60601-1 and IEC/EN/UL 62368-1 with CE marking for the Low Voltage, EMC and RoHS Directives. The units also comply with EN 55011-B and EN 55032-B conducted and radiated emissions (Class I and II), and meet the EN 61000-3-2 harmonics, IEC60601-1-2 Edition 4 and IEC 61000-4 immunity standards

More information can be obtained at the following TDK-Lambda Americas website, <https://www.us.tdk-lambda.com/lp/products/cus-m-series.htm>, or by calling 800-LAMBDA-4. Product availability for the CUS600M power supply series can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Stock") at <https://www.us.tdk-lambda.com/lp/>.

Major applications

Home healthcare, medical, dental, test and measurement, broadcast and industrial equipment

Main features and benefits

- 400W (600W Peak) convection cooled, 600W with forced air
- Medical certifications (2 x MOPP)
- Class B conducted and radiated EMI
- Suitable for Class I and Class II installations
- Compact 3 x 5 x 1.46" size

Major specifications

Model		CUS600M
Input voltage range	Vac	85 - 265Vac
Output voltages	Vdc	12V, 19V, 24V, 28V, 32V, 36V and 48V
Maximum output power	W	600W with forced air 400W (600W peak) convection cooled
Efficiency	%	Up to 96%
Other features	-	5V 2A standby, remote on/off, remote sense, power good signal
Safety Certifications	-	IEC/EN/ES 60601-1 and IEC/EN/UL 62368-1
Size (L x W x H)	mm	127 x 76.2 x 37mm (5 x 3 x 1.46")
Warranty	-	Five years

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 features passive components such as ceramic, aluminium electrolytic and film capacitors, and 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, 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.

For more details, please pay a visit to <https://www.tdk-lambda.com/>

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