

Power Supplies

Buffer modules offer an extra 380ms hold-up in an open frame package for 12V, 15V and 24V power supplies

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TDK Corporation (TSE 6762) announces the introduction of the TDK-Lambda brand ZBM20 12V, 15V and 24V 20A rated open-frame buffer modules. The ZBM20 series provides an extended 380ms hold-up time to power supplies preventing data loss during brief power interruptions or allowing equipment to safely shutdown. Applications include industrial automation, robotics, test, communication and semiconductor fabrication equipment.

Energy is stored in electrolytic capacitors, replacing the need for batteries and their associated maintenance and servicing. A remote on/off function can be activated to avoid an unsafe discharge of stored energy. The charge and discharge status can be monitored locally or remotely via a DC OK relay, an LED indicator and photo-coupled signals. If a longer hold-up time is desired, modules can be connected in parallel. The 24V model has a switch that can be used to select either fixed or variable voltage buffer levels. In fixed mode, it will provide power when the input voltage drops to 22.4V, in variable mode when the input decreases by 1V.

Measuring 175 x 85 x 57mm (L x W x H), the units will operate without derating in ambient temperatures of -25°C to +70°C. The five-year warranty ZBM20 has protection against both input overvoltage and overcurrent conditions, has inrush current reduction and internal fusing. Safety certification includes IEC/UL/CSA/EN 62368-1 with CE marking to the Low Voltage, EMC and RoHS Directives.

More information can be obtained at the following TDK-Lambda Americas website, <https://product.tdk.com/en/power/zbm>, or by calling 800-LAMBDA-4. Product availability for the ZBM20 power supply can be found via the link to TDK-Lambda's distributor network (see "Check Distributor Inventory") at <https://www.us.lambda.tdk.com>.

Main applications

Industrial automation, robotics, test, communication and semiconductor fabrication equipment

Main features and benefits

- Provides 380ms additional hold-up time at up to 448W
- Utilizes electrolytic capacitors to store energy
- Five year warranty
- Parallel capable
- Output remote on/off function

Key data

Model		ZBM20-12	ZBM20-15	ZBM20-24
Input voltage range	Vdc	11.5 – 14.4	14.4 - 18	Fixed mode: 23 - 30, VIN-1 mode: 24 - 30
Output voltage	Vdc	11	13.8	22.4
Maximum current	A	20		
Average buffer power	W	220	276	448
Signals and indicators	-	DC OK relay, photo-coupled signals and LED		
Safety Certifications	-	IEC / UL / CSA / EN 62368-1 and CE mark		
Size (Lx W x H)	mm	175 x 85 x 57		
Warranty	-	Five years		

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 2020, TDK posted total sales of USD 12.5 billion and employed about 107,000 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/

Contacts for regional media

Region	Contact	Phone	Mail
Americas	Tom Tillman TDK-Lambda Americas	(619) 575 4400	tom.tillman@us.tdk-lambda.com