

Power Supplies Open Frame & Din Rail Mount Buffer modules offer extended hold-up

- ZBM-AC: Connected to primary side of specific AC-DC power supply
- DBM20/DBM20: Connected to DC outputs of AC-DC/DC-DC Power Supplies
- ZBM-AC/ZBM20: Open frame & DBM: Din-Rail mount

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TDK Corporation (TSE:6762) announces the new DBM20/ZBM20 and ZBM-AC of TDK-Lambda buffer modules. TDK-Lambda Corporation (President and CEO: Sanai Hattori) will start accepting orders from February 2022.

Buffer modules, collectively named “e-hold^{*1}” are the first in TDK-Lambda lineup. e-hold family includes ZBM-AC connected to primary side of specific AC-DC^{*2} and DBM/ZBM connected to DC outputs of general AC-DC/DC-DC power supplies.

e-hold supports growing market demand for extended hold up time coming from SEMI F47 and industrial automation. Multiple modules can be paralleled for longer buffer times. The extended hold-up time allows equipment to safely shutdown and avoid data loss during AC power interruptions

Certification is to the IEC 62368-1 safety standards with UL/cUL508 approval for DBM20 and IEC/EN62477-1 (OVCIII) approval for ZBM-AC.

Main applications

- Industrial Automation, Robotics, Semiconductor fabrication equipment, Building automation, Communication equipment.

Main features and benefits

- Space saving in customer applications
- Supports various connection (primary side & DC outputs of power supplies)
- Seamless hold up operation with ZBM-AC
- Certified to international safety standards

¹ e-hold is registered trademark of TDK-Lambda

² Specific power supply : ZWS300RC-24/BM and ZWS300RC-24/RBM

Key Data : ZBM-AC

Model	ZBM-AC162	ZBM-AC162/S
Upper Limit Input Voltage	395VDC max	
Hold-up Time (Typ.) ^{*3}	200ms *in case of 290W	
Charging Time (Typ.)	4s	
Auxiliary Power Supply	-	Yes (24VDC, 0.2A output)
Operating Temperature	-10 ~ +70°C	
Cooling	Convection	
Safety	IEC/UL/EN/CSA62368-1, IEC/EN62477-1 (OVCIll)	
Size (W×H×D)	54.0 × 42.0 × 170.0 mm	
Function	Power Fail Signal (Monitor module operation)	

Key Data : ZBM20/DBM20

Model	ZBM20-12	ZBM20-15	ZBM20-24 DBM20 (Fix mode)	ZBM20-24 DBM20 (VIN-1 mode)
Input Voltage Range	12VDC (11.5-14.4VDC)	15VDC (14.4-18.0VDC)	24VDC (23.0-30.0VDC)	24VDC (24.0-30.0VDC)
Output Voltage	11VDC	13.8VDC	22.4VDC	23.0 ~ 29VDC
Buffer Time (Typ.) ^{*3} in case of 20A	380ms	380ms	ZBM20-24: 380ms @22.4VDC DBM20: 250ms @22.4VDC	
Nominal Buffer Power	220W	276W	448W	580W @29VDC
Charging Time (Typ.)	40s			
Operating Temperature	-25 to +70 °C			
Cooling	Convection Cooling			
Safety	IEC / UL / CSA62368-1, UL/cUL508 for DBM20			
Size (W×H×D)	85.0 × 57.0 × 175.0 mm		ZBM20-24 : 85.0 × 57.0× 175.0 mm DBM20 : 49.0 × 123.6 × 115.4 mm	
Function	DC OK Signal (Monitors DC input) Buffer Signal (Monitors DC output) Ready Signal (Monitors module conditions) Inhibit Signal (Used to safety discharge energy stored in built-in bulk capacitor)			

^{*3} With maximum load. Hold-up time can be extended with lighter load.

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 2021, TDK posted total sales of USD 13.3 billion and employed about 129,000 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/

You can download this text and associated images from https://product.tdk.com/en/search/power/switching-power/pwr-acc/catalog#group2_130107_1000000158743

Further information on the products can be found under www.jp.lambda.tdk.com/en/about/press/20220127_01.html

Contact for the media

Contact	Phone¥	Email Address
Mr. Yoichi OSUGA TDK Corporation Tokyo, Japan	+81 3 6778-1055	pr@jp.tdk.com