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## **TMEiC Releases 10kV-class High-Capacity Multiple Power Compensator for the Chinese Market**

**– Capable of Compensating for Voltage Drops in Large-scale Facilities by Connecting Directly to a 10kV-class System, Realizing High-Efficiency and Reliability –**

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Toshiba Mitsubishi-Electric Industrial Systems Corporation (hereinafter, "TMEiC"; President & CEO Masahiko Yamawaki) will commence sales of a Multiple Power Compensator (MPC) targeting the Chinese market in March 2019.

MPCs are predominantly installed in factories requiring stable, continuous operation that produce such items as semiconductors, liquid crystal products and films. In the event of a power outage or momentary voltage dip<sup>\*1</sup>, the factory is disconnected from its power system in an instant and power is supplied from a storage battery to the facilities inside the premises, thereby protecting the entire factory from the voltage drop.

Although TMEiC has a proven track record in delivery of MPCs in excess of 600,000kVA mainly for the Japanese market<sup>\*2</sup>, the importance of countering momentary power drops in factory operations has been increasing in the Chinese market as well. In order to meet these recent needs, TMEiC developed an MPC with maximum capacity of 16,000kVA that can be connected directly to 10kV systems, China's distribution voltage.

The device employs an MPC system<sup>\*2</sup> based around parallel connection to a full voltage compensation type converter that utilizes a low-loss high speed switch (HSS) on the direct supply circuit used in times of standard power supply. When the power dips, the equipment impacted is disconnected from the failed system in an instant (within 0.001 seconds) by way of the HSS, making it possible to prevent equipment stoppage since power is supplied from the converter. The MPC realizes high efficiency of 99% relative to standard operating times.

"TMEiC's MPC is being used widely at our customers' factories in Japan making semiconductors, automobiles and other items," comments Vice President Akira Kawaguchi of the Power Electronics Systems Division. "We have high hopes that our MPC for the Chinese market will prove popular among Chinese customers and lead to extensive application. TMEiC aims to further contribute to customers, not only in Japan but also from around the world with products incorporating cutting-edge power electronics technology."



Notes:

1. A momentary voltage dip occurs when voltage drops mainly at the point of an accident caused for example by a lightning strike on power lines.
2. As of March, 2019
3. MPC: Multiple Power Compensator



**Media inquiries:**

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In order to respond to the needs of manufacturing sites that serve as a foundation for supporting society, TMEiC always sets its eyes on the future of industry, society and the environment as an industrial systems integrator striking a balance between the development of society and a beautiful global environment. TMEiC will contribute to manufacturing and environmental management through leading-edge technologies based on its core technologies of rotating machinery, power electronics and engineering.

**[Multiple Power Compensator Technical Overview]**

	Specifications
Rated capacity	3000~16000[kVA]
Number of phases/wires	3-Phase, 3-Wire
Rated voltage	10kV±10%
Rated frequency	50Hz±5%
Rated load power factor	0.8 (0.9, 1.0 as options)
Transfer time	1msec
Voltage drop compensation time	10sec (over 10sec as option)
Cooling method	Forced air
Operating temperature	0~40°C
Relative humidity	30~90%
Altitude	1000m or less (2000m or less as an option)
Location	Indoor