

MITSUBISHI ELECTRIC POWER PRODUCTS, INC.

DIAMOND SYNCTM

MEPPI'S SYNCHRONOUS SWITCHING CONTROLLER



Upgrade to a Lifetime of Operational Data for Harsh Applications with DiamondSync™ SSC

Legacy controllers may be reaching their rated lifetime, which eventually degrades their adaptive switching performance. DiamondSync SSC is designed, built, and tested in the USA, specifically to provide a seamless upgrade solution. It is capable of capturing waveforms and parameters for over 20,000 operations – a lifetime of operational data.

Where can DiamondSync be applied?

DiamondSync SSC is purpose-built for capacitor bank and shunt reactor switching applications. It is a direct functional replacement for legacy O2B and SP1 controllers.

What mechanical changes are involved?

To simplify migration, DiamondSync SSC maintains the same footprint and mounting holes as our legacy controllers.

DIAMONDSYNCTM ADVANTAGES:

- **Improve Power Quality:** Reduce system disturbances caused by inrush currents and over-voltage.
- **Lower O&M Costs:** Reduce wear on circuit breaker contacts and peripheral equipment for improved total cost of ownership.
- **Seamless Integration:** Easy to adopt for new circuit breakers or to migrate legacy controllers.
- **Lifetime of Operational Data:** Waveforms and parameters for over 20,000 operations are stored for analysis.

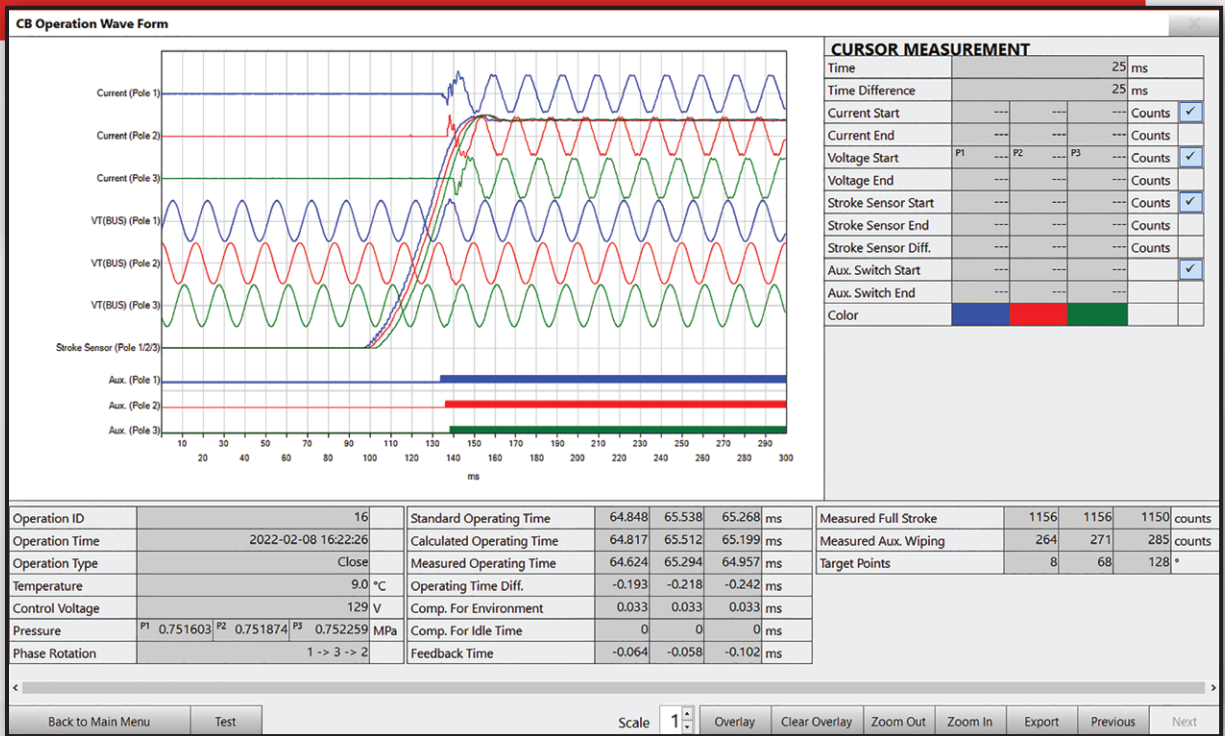
For power transformer switching applications, please inquire about SSC-TR1.

Contact us at HVSDCRTService@meppi.com or by calling Customer Service at 800-624-7425 to learn more about DiamondSync SSC upgrade options.

DiamondSync's software interface provides access to relevant system events and conditions.

The upgraded memory stores a lifetime of operational data for analysis, including waveforms and parameters for over 20,000 operations.

This data can also be collected via a flash drive without special software or even a laptop.



What electrical changes are involved?

DiamondSync SSC retains the same connections for the phases, power supply, and alarm outputs. Upgraded features include:

- New temperature sensor (J10) for improved noise resistance.
- New HMI interface (J12) – USB Type B connector replaces DB9 serial port.
- USB Type A (J14) added to enable updating settings or downloading operational data via flash drive – no laptop required.

Does DiamondSync SSC perform the same as our existing controller?

DiamondSync SSC retains the same switching logic behavior as our legacy controllers.

- Automatic phase detection mitigates human error during setup.
- Restrike/reignition detection identifies precursors to end-of-life for contacts and nozzles.
- Customized alarm handling allows you to set thresholds and actions (log, notify, or act).

WHAT IS INVOLVED WITH AN UPGRADE TO DIAMONDSYNC SSC?

STEP 1: PREPARE	STEP 2: PERFORM	STEP 3: POST-UPGRADE
<p>Configuration: Factory pre-programming of the new DiamondSync controller</p> <p>Coordination: Schedule installation, commissioning, and training by calling our Customer Response Team</p>	<p>Disconnect utility power lines</p> <p>Remove existing controller</p> <p>Install DiamondSync and temperature sensor</p> <p>Calibration operations</p> <p>Reconnect utility power lines</p> <p>Validate open/close operation</p>	<p>Conduct on-site training</p> <p>Review steps for annual operational data health report</p>



Corporate Headquarters
Thorn Hill Industrial Park
530 Keystone Drive, Warrendale, PA 15086
800.624.7425 • www.meppi.com