Safe, efficient busway maintenance and troubleshooting

Preventive maintenance of busway assemblies is vital for ensuring uptime and reliability in datacenter, healthcare, industrial and commercial market segments. During normal service, busway joints are subject to thermal expansion and contraction, potentially resulting in loosened connections, excessive heat and arc-flash hazard.

Infrared (IR) inspection is a proven maintenance method used to identify problems with electrical connections. Eaton’s new infrared window solution for the Pow-R-Way III busway system allows personnel to safely scan bus joints without de-energizing the busway. The integrated IR window provides additional value by supporting increased inspection accuracy compared to an indirect inspection of the connection, which is extremely inaccurate. This helps to identify thermal changes over time and can prevent the potential of arc flash incidents to significantly enhance safety and maintenance productivity.

**Features and benefits**

**Accurate and efficient maintenance**
- Accurate thermal imaging can be performed on energized busway to enhance productivity.
- IR windows integrated into Pow-R-Way III busway joint covers allow personnel to easily pin-point issues to reduce troubleshooting time.

**Reliable troubleshooting**
- Images from an IR thermal camera can be quickly exported and analyzed to effectively survey energized systems to identify potential problems.
- Using the integrated IR window, personnel can utilize real-time data to isolate potential problems and remedy issues before a hot spot results in equipment failure.

**Uptime for critical applications**
- With the ability to quickly identify the temperature and overall condition of individual phases, personnel can accurately estimate the future impacts of thermal expansion to prevent unexpected failures and resulting downtime.

**Configurations and accessories**

Flexibility in power connections is key to rapidly changing power distribution environments. Eaton offers new and retrofit IR window solutions for current indoor UL® 857/CSA® C22.2 No. 27 Pow-R-Way III busway configurations, including:
- 225–4000 A aluminum
- 225–5000 A copper
- Three-phase, 240 V to 600 V
- 100% and 200% neutral
- 50% housing ground
- 50% internal ground
- 50% isolated ground
- 100% ground options

To learn more about Eaton’s infrared window solutions for Pow-R-Way III busway, contact your local sales representative or visit Eaton.com/busway.