

SAA2 – A SMALL ACCESSORY WITH SIGNIFICANT IMPACT

The importance of safety products during testing

Safety equipment in high voltage testing is essential to protect people and thus save lives. Our SAA2 safety lamp accessory clearly indicates the testing area by warning you with flashing LEDs and a clear and noticeable tone. We talked with Ash Murphy, Director and Power Systems Specialist at Tech West Power, Australia, about his experience with a small accessory that had a significant impact on him. Thank you for taking the time to be interviewed. Why did you want to deploy another safety tool in your company? Or, more precisely, for high-voltage equipment testing? Ash Murphy: In our industry, we are often tasked with performing complicated and hazardous activities in live substations. Working in this type of environment requires significant attention to detail when it comes to controlling the work boundary or permitted area. The isolation verification, executing comprehensive testing procedures, and most importantly, having a "Safety First"-mentality.

The consequences of an incident and injury to personnel, damage to equipment, or an unwanted substation trip can be severe. As a result, we are always searching for innovations or ideas to improve our safety systems.



An incident occurred in our industry about 18 months ago, and we paid close attention to it, as this could be something that would be relevant to our team. A utility technician was performing tests on a transformer as part of a two-person team. There was a communication breakdown whereby a team member prematurely accessed a test clamp. The neutral bushing with the asset was still under test, which resulted in an arc flash that burned that person. It raised a few questions: What was the communication like? How was the testing team controlling the equipment? Did the technician have any awareness of the test status?

How did you become aware of our safety products, especially the SAA2?

I was browsing the OMICRON website and came across the SAA2. It made me think about the technician who was unaware that the test was being executed in the incident mentioned above. The SAA2 is the perfect device for ensuring that each team member can remain aware of a test's status. They can apply their own emergency button when required and can only release their "safety emergency off" SAA2 in use onsite during transformer testing.

when they are clear of the apparatus. The flashing LED, and audible tone also serve as reminders or warnings that the test is still running and all personnel need to stand clear. We discussed this in the team at Tech West Power and were eager to have this device as part of our test setup. So we ordered a set.

«Working in this type of environment requires significant attention to detail when it comes to controlling the work boundary or permitted area.»

Ash Murphy, Director and Power Systems Specialist, Tech West Power

Which assets and voltage levels is the SAA2 lamp used for in your company?

We use the SAA2 predominantly for running diagnostic tests on current transformers, voltage transformers, and power transformers between 11 kV and 220 kV. We've also used the SAA2 while performing injections on large switchboards located in switchrooms. We found that placing a SAA2 at the end of the switchboard closest to an entry point makes it very clear to anyone who might enter that a test is in progress, and they need to remain clear of the device.

Which features of the SAA2 lamp are indispensable for you and have the most value?

Although we certainly appreciate the flashing LEDs and the clear alert tone, personally, it's the "emergency off" feature that I value most. The commissioning engineer or technician controlling the test is often alternating between their laptop or interface and the test equipment, communicating with the test team and their test plan. The SAA2 allows team members to take control of their safety by using the "emergency off" feature when interacting with the asset instead of relying on communication. In addition, they're able to isolate the current test if they see something that's not right. That's a valuable addition to a test setup and provides a safer working environment.

Which future trends do you see regarding safety in HV testing?

- Future trends include the further integration of test sets and test plans. Reducing the amount of setup time between tests by performing a variety of measurements with the same equipment and set.
- > We would like to see continued discussions with asset manufacturers about providing accessible test points for the connection and disconnection of testing equipment.
- Being able to combine the SAA2 with more products would be fantastic.
- Quite often, multiple connections are required for test leads and clamps that are supplied. Perhaps a package of test leads and clamps could be made available, one that's suitable for high voltage and heavy current testing with the same specs as OMICRON issued leads?
- Longer communication cables (or a variety of cable lengths) between SAA devices.
- I'm also interested in the continued development of Arc Flash protection.

Do you have anything else that you'd like to add?

I feel fortunate to work as a commissioning engineer within an industry that's constantly evolving and growing. It's a privilege to be challenged regularly and stimulated in our technical roles. At the same time, we feel rewarded by our contribution to playing an essential part in supplying power to communities. In saying that, the most important thing is that each commissioning engineer or technician can perform their tasks safely and return to their families and loved ones each day. Safety must always remain the number one priority in our industry.

My colleagues and I are thankful that we have aligned our business with OMICRON. It's clear that OMICRON is a company that shares our safety values and seeks to continuously improve the use of their products. Adopting the SAA2 in our business has already resulted in using testing equipment more safely and has improved testing methodology for our team. As this device is used more widely in our industry, I think it will create a safer environment for everyone.

Thank you, for talking to us.

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