

Nominee: Socomec

Nomination title: Diris Digiware Power Metering and monitoring system for AC and DC electrical installations

Diris Digiware Power Metering and monitoring system for AC and DC electrical installations : a new product in the Digiware range changes the rules of power monitoring.

The latest developments from Socomec are delivering smarter buildings and facilities – with sustainable and intelligent energy solutions.

Socomec’s product developments are connecting the world of energy with the digital revolution to help reduce installation costs and improve performance levels, securing power and making energy management simple across critical applications.

For smart and connected energy management, it is now possible to more precisely monitor protective devices - remotely and in real time - across the entire electrical installation – without any wiring or additional equipment.

Socomec’s Diris Digiware metering and monitoring solutions guarantee the availability and safety of the electrical installation, whilst also monitoring performance, checking power quality and managing loads.

With the simplest possible integration, the Digiware is easy to fit within new and existing installations. Assisted configuration and error detection cuts the commissioning time by half whilst also guaranteeing the accuracy of the measurements. Furthermore, the connection to the Cloud means that data can be automatically exported for remote processing.

The future of power monitoring has now been reinvented, with three additional new technologies available with both the Diris D40 and Diris Digiware systems for unsurpassed levels of accuracy.

- **PreciSense** guarantees measurement accuracy across the global measurement chain regardless of the load profile. Trust in the measurements allows you to determine relevant corrective actions.
- **VirtualMonitor** provides remote access for the real-time monitoring of protective devices, across the entire installation, without additional hardware or wiring.
- **AutoCorrect** will guarantee that the measurement system is working correctly, with automatic wiring control and error correction, also being available off-load.

Focus on: VirtualMonitor – track the status of protective devices without additional wiring

When a protective device trips it means that a process or a system has been unexpectedly shut down. This can rapidly escalate into a crisis if the load is critical to life safety or economically essential.

Monitoring the status of a protective device is traditionally done using the auxiliary contact of the circuit breaker or a fuse blown indication system. These signals are then wired back to a PLC outstation adding more hardware and manufacturing time.

Status change immediately detected

Today Socomec offers VirtualMonitor technology. Our latest iTR retrofit current sensors and Digiware S Monobloc current module are able to detect that a protective device has been opened and alert the site team over the associated meter's communication bus. The status change is detected immediately and an alarm can be generated and shared.

The system can even differentiate between a trip due to a fault and a manual opening or tripping of the protective device so that the site teams knows if they need to investigate further.

The Digiware S brings this technology down to the final circuit (MCB level) where it was previously impractical to monitor an auxiliary contact.

VirtualMonitor marks a major step forward in metering, removing additional hardware and wiring while retaining or enhancing the client's visibility of their electrical installation.

Why nominee should win

VirtualMonitor

- Allows additional monitoring and reporting of the status of power distribution systems
- Integrates the status monitoring into the metering system reducing the hardware required and therefore the cost
- Distinguishes between 2 different types of event (fault and manual operation) for traceability
- Can be retrofitted to existing power distribution systems allowing older installations to be securely monitored
- Integrates into a wider metering scheme allowing the same communication protocols and devices to be used for all the metering within a data centre

The present to the future

TODAY:

The protective device is monitored by

- Auxiliary contact status

- **Zero current alarm**

TOMORROW:

VirtualMonitor: smart sensors monitor voltage

- **No additional auxiliary contact wiring**
- **Differentiate between load off and trips**
- **Detect if device opened on trip on manual**
- **Voltage detection on conductors, a new and innovative feature**