

MASTERMIND MONITORING OPTION

FOR SELECT™, TRANSGUARD™ AND EGPE2™ PRODUCTS



Features and benefits

- Provides real-time system data
- Operates via convenient, touch-pad controls
- MasterMIND™ can be remote-mounted

The Current Technology® MasterMIND Monitoring System is an optional, multifunction power monitor for SElect™, TransGuard™ and EGPE2™ suppression filter systems. A robust, full-featured system, MasterMIND provides real-time data on product performance and distribution system power quality. A touchpad-operated data display with multicolor LED indicators and audible alarm communicates information to the operator. MasterMIND helps validate product performance, electrical system reliability and power quality through these comprehensive capabilities:

% Protection Available Sensing: MasterMIND senses and displays the available surge protection for each phase. With microprocessor-based circuitry, MasterMIND senses each hybrid element fuse, calculates the amount of protection still active in the circuit and displays this value as a percentage of total protection. This capability assures the operator that critical loads are fully and safely protected with a failure-free device.

Unlike passive monitoring systems that provide “all or nothing” post-event data, MasterMIND provides real-time analysis of the percent of protection remaining so the true status of the suppression filter system is known. This feature monitors the status of the MOVs, filter capacitors and selenium cells (SElect products only).

Display Event Counter: The counter measures and displays the cumulative number of transients detected in all 10 modes of the surge suppression device (SPD) device. These measurements confirm the value of SPD protection and allow the operator to evaluate the frequency of power disturbances experienced within a facility. In addition, with multiple installations of MasterMIND-equipped devices, the operator can troubleshoot a distribution system to locate sources of internally-generated transients.

Battery-Powered Audible Alarm: An alarm notifies the operator of single- or multiple-phase failures of the suppression filter system, regardless of AC power availability and independent of all other monitoring functions. A standard, field-replaceable 9-volt alkaline battery powers the audible alarm to sound in the event of a total power failure. The alarm has a silence switch and a test switch. Separate LEDs illuminate when the alarm is disabled and when the battery requires replacement.

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Detection Capabilities: MasterMIND detects, displays and records these power events within a facility:

Voltage Sag Detection:

Counts and displays all voltage sags < 90% of nominal.

Voltage Swell Detection:

Counts and displays all voltage swells > 110% of nominal.

Voltage Surge Detection:

Counts and displays all voltage surges > 130% of peak voltage.

Power Dropout Detection:

Counts and displays all power dropouts < 1 cycle.

Power Outage Detection:

Counts and displays all power outages > 1 cycle.

True RMS Voltage Monitoring: This unique feature monitors the true Root Mean Square (RMS) voltage for all phases to assure the operator that the facility's system voltage is within specifications—for the sake of the connected loads and the TVSS device itself.

Neutral-to-Ground Voltage and Current Sensing: The RMS voltage measured across the neutral and ground alerts the

operator of a possible neutral-to-ground bonding problem or asymmetrical load within the distribution system. Current detected on the ground conductor could indicate excessive leakage through the SPD's neutral-to-ground path – a truer indication of neutral-to-ground MOV degradation.

MasterMIND's neutral-to-ground voltage and ground current-sensing features are invaluable tools for monitoring the overall well being of a distribution system.

Enhanced Status Indicators: Operators can easily and quickly check the status indicators to review the operational integrity of the hybrid elements in each phase including MOVs, capacitors and selenium (SElect only).

Dual Form "C" Dry Contacts: Equipped with two sets of form "C" contacts, MasterMIND provides building managers and maintenance personnel the means to remotely monitor phase failures of SPD devices within their own facility management system. Additionally, the entire MasterMIND device with all its advanced functions, is available in a remote-mount configuration upon request.



MasterMIND is a full-featured monitoring option for Current Technology TransGUARD™, EGPE2™ and SElect™ (shown here) products.

Current Technology

THE #1 NAME IN SURGE SUPPRESSION™

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