TripSafe™

Enhanced Surge Protection and Monitoring for Networks

The TripSafe™ Monitoring and Protection Module for the MPCV relay adds enhanced surge protection to your network protectors that are subjected to unusually extreme transient activity.

TripSafe™ is designed to work with any MPCV Relay controlled network protector regardless of model or vintage. TripSafe™ provides enhanced transformer and network bus surge protection in addition to its ability to detect an unpowered MPCV relay.

TripSafe™ has an output TRIP contact that can be paralleled with the Network breaker trip contact to provide a backup trip mechanism for when bus voltages are sensed to be present and the MPCV is unpowered. It is engineered with appropriate algorithms to insure that noise or other disturbances will not cause nuisance tripping.

The TripSafe™ device has 4 dry contact outputs as described below:

TRIP: Can be wired in parallel with the Network Breaker contact to trip the Network Protector in the event that the MPCV Relay is unpowered.

CLOSE: For GE-type protectors. This contact provision should be wired in series with the GE close circuit to prohibit dead-network re-closure if TripSafe™ initiates a protector trip.

STATUS: Monitors the status of the TripSafe™ and can be wired to a local indicator and/or a communications system as an alarm for when a trip is initiated.

PROTECT: The TripSafe™ is designed to issue a contact closure if any of the surge protection circuitry is jeopardized, this contact can be used to signal a remote alarm via communications for maximum obsevability and reliability of your network.

For more information visit:
www.eaton.com/nwp

EATON
Powering Business Worldwide

MPCV Network Protector Communicating Relay

Increase the capabilities of your Network Protectors

The MPCV Network Relay brings the proven performance of a sequence based microprocessor design in order to give your NWPS in service the most intelligent relay available in the market.

The advantages of the MPCV are:

Gull Wing Trip Curve- Built in 5 degree shift in trip curve for high X/R transformers

- Anti-Pump Protection Algorithum- Reduces pumping on Network Protectors per your setpoints
- Sensitive and Non-Sensitive trip setpoints
- Built-in time delay function
- Circular Close option permits close at lower loads whle assuring the watt flow is into the network

Remote operation & control

- Remote Open Block Open Command- Trips and blocks Network Protector Open under wired or wireless communications
- Protective Remote Closing Command- Advanced Safety Algorithum insures a positive close without sacrificing safety
- Advanced safety algorithums insure that the MPCV always call for a trip under adverse system conditions

Access and display information from the MPCV such as:

- Voltages
- Currents
- Power Factor
- Status
- Temperature
- Phasing voltage
- Pos. sequence phase voltage (complex form)

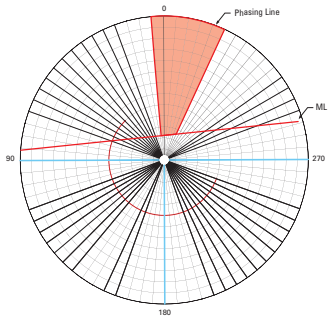
Designed for safety, communications, and ease of use

Each MPCV relay is enclosed in a solid brass casted .25" submersible enclosure. LEDs on the front of the relay alert the user if the relay senses adversed or problematic conditions.

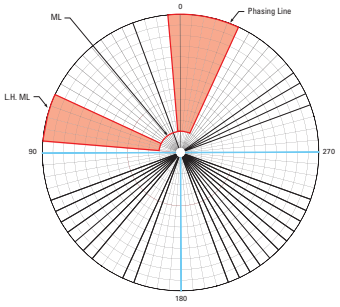
Your operator can use the programmer to:

- Utilize the new capability of choosing from two selectable closing curves

Traditional Straight Line Master Close Curve



Modified Circular Closed Curve

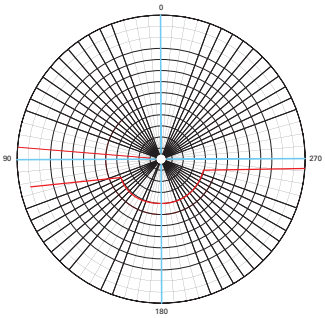


The circular close permits the network protector to close at lower loads while assuring the watt flow is into the network.

The Benefits of a Microprocessor Design

Our enhanced sequence filtering algorithm provides exceptional performance and stability over a wide range of temperatures and voltages in comparison with a power-based algorithm.

Selectivity of the Extreme Nonsensitive Trip Region



Communications Capability

The MPCV Relay has the capability of communicating via DNP 3.0, Ethernet TCP/IP, and 802.11 b/g protocols using VaultGard TM communication platform. The MPCV data can be transferred directly into the customer SCADA system.

MPCV RELAY GUIDE

Catalog #	Description	Typical Product Applications	CT Configuration
6417C82G01	MPCV-D	CMD & CM52	GRD-Y
6417C83G01	MPCV-22	CM52, CM-22, CMR-8	Energized*
6417C83G03	MPCV-2X	CM52, CM-22, CMR-8	GRD-Y
6417C84G01	MPCV-GE	MG8-9 & MG-14	Closed loop
NAS0129G01	MPCV-P	MV Substation Breaker	Customer Specific

*** Note: CT's in network protector can be converted to GRD-Y configuration in order to accept MPCV-2X .**

Powering Business Worldwide

Printed in USA
Publication Number PA02400006E / 3PC
August 2009

For more information visit:
www.eaton.com/nwp