Littelfuse Startco Protection Relays

Technical Note - Motor Protection



MP-14: USING ONE MPS-OPI OPERATOR INTERFACE TO MONITOR MULTIPLE MOTORS

The MPS-OPI Operator Interface is designed for use with a single MPS-CTU Control Unit. However, because the MPS-OPI is a terminal device and stores no set-point or historical data, it can be used to monitor multiple Control Units without modification. Use a two-pole switch to connect an Operator Interface to a number of Control Units, as shown in Fig. 1. For line lengths exceeding 10 m (33 ft), install terminating resistors as shown in MPS manual Fig. 3.8. The 24-Vdc control voltage can be supplied by any of the Control Units or by an independent source. To avoid initializing the Operator Interface with each selection, the supply should not be switched.

Each Control Unit must be programmed to not trip on an OPI loss (menu selection *Setup / Hardware / OPI Display / Trip Action*), and multiple-OPI applications must not have OPI-address conflicts (MPS manual Section 3.3). Each Control Unit should be programmed with a unique identifier such as "Motor One", "Motor Two", etc. This identifier is displayed in most Operator Interface metering screens. In addition, the selector switch should be labeled as a guick reference.

In motor-control applications, a stop switch connected to a digital input must be used for each motor so that a Stop command can be issued to a motor not presently connected to the Operator Interface. See MPS manual Fig. 6.1. MPS-OPI motor-control keys and indicator LED's will function as per the programming of the connected Control Unit. The STOP key is always enabled and pressing STOP will stop the presently connected motor.



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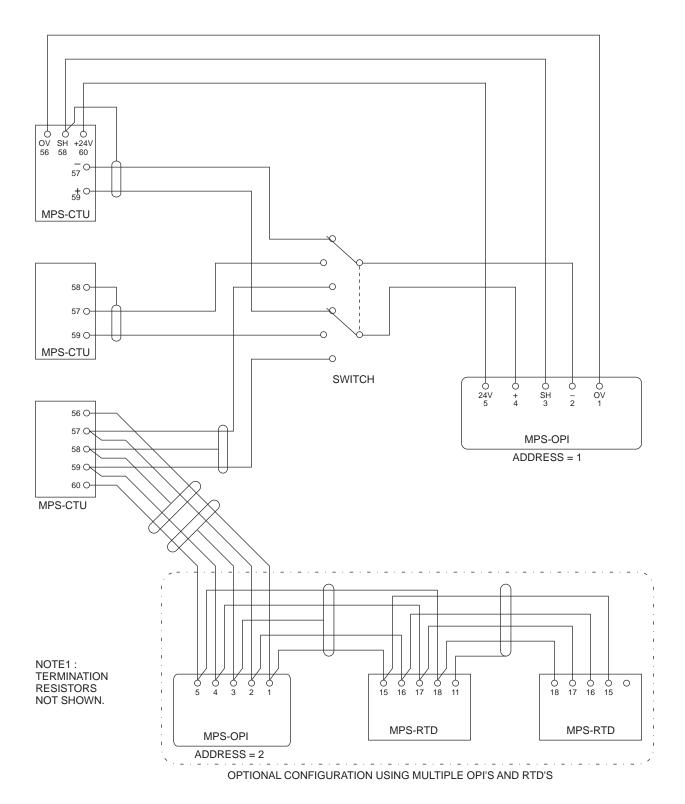


Figure 1: Module Connection Diagram