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Metro-North Railroad



DC Overcurrent Relay

The SWARTZ[®] Type 76 DC Overcurrent Relay from SMC is the most widely accepted protective overcurrent device used in the transit industry today, having been successfully used in every major transit system. The overcurrent relay provides maximum protection for trolley wires, third rails, feeder and substations from intermediate or remote overload conditions such as bolted faults, arcing fault and severe overloads. The solid state design and rugged construction ensure dependable low maintenance operation under adverse conditions.

D.C. OVERCURRENT

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FEATURES

Uni-Bi directional: mode indicating, field switchable

- LED Meter Accurate, easy to read
- Draw out construction
- Detector channels include:

-instant overcurrent:range 10-300 mv

-short-term overcurrent: range 10-110 mv

-long-time overcurrent

-rate of rise

Calibration controls: allows preset threshold and time delays on all protective channels

Internal Power Supply operates on and autocompensates for a range of DC imputs

Use with any shunt

For use with positive & negative conductors in DC Networks

Field Calibration





DESCRIPTION

The type 76 Overcurrent Relay is an insulated current monitor and overcurrent relay that may be used for either the positive or negative conductors in DC power distribution networks. The device is designed as a stand-alone relay or may be used in conjunction with a Type 82 automatic recloser relay. In combination with a reclose relay, it will automatically interrupt a fault and then reclose to continue service. SMC's unique rate of rise channel. The Type 76 DC Overcurrent Relay front panel controls and are calibrated in milivolts so that the relay is compatible with any type of shunt. The built-in calibration components allow accurate field calibration field calibration of each channel and feeder current settings.

SPECIFICATION

Input Dowor	Operator on 24 125 VDC
Input Power	Operates on 24-125 VDC
Supply Current	40 mA at 125 VDC
	200 mA at 24 VDC
Ambient Temperature	-20 C to +55 C
Design Test	SWS ANSI/IEEE C37 90
Isolation Dielectric	SWC ANSI/IEEE C37.90
Threshold Setting Error	+/5 mV
Isolation Error	+/- 1 mV
SCR Output	100 mA to 6 A (1 sec.)
	200V
Annunciation	Reed Relay 100 VA, 2A
	500 VDC

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