

POWERSWITCH

1000 VDC TRACTION POWER
CONTROL COMPONENTS

1000 VDC VOLTAGE SENSING RELAY

COPPER RIDGE SYSTEMS - 940150 SERIES

COPPER RIDGE 940150 VOLTAGE SENSING RELAYS WERE DEVELOPED BY A POWERSWITCH AFFILIATE TO MONITOR THE VOLTAGE ON 1000VDC NOLOAD BREAK TRACTION POWER DISCONNECTS. OPTICALLY ISOLATED VOLTAGES OF SPECIFIED VALUES APPLIED TO THE SENSE TERMINALS ENERGIZE AN INTERNAL RELAY TO CLOSE TWO SETS OF NORMALLY OPEN RELAY CONTACTS. THESE ISOLATED CONTACTS CAN BE CONNECTED TO TURN ON LOCAL OR REMOTE SIGNAL LIGHTS OR SCADA RELAYS TO INDICATE WHEN THE OCS OR THIRD RAIL VOLTAGE IS MORE THAN THE SET VALUE. THIS SET VALUE IS AS SPECIFIED USUALLY 50 VOLTS OR MORE. ALTERNATE ASSEMBLY NUMBER **940170** CLOSSES THE N.O. RELAY CONTACTS ONLY IF CONTROL POWER IS ON, THE UNIT IS FUNCTIONAL, AND THE SENSE VOLTAGE IS LESS THAN THE SPECIFIED AMOUNT.

FEATURES

DUAL OPTO-COUPLED AND ELECTRO-MAGNETIC ISOLATION BETWEEN HV AND INDEPENDENT OUTPUT CONTACTS.

HIGH SENSE VOLTAGE INPUT IMPEDANCE, NO FUSES NEEDED.

STANDARD RELAY IS SET TO CLOSE WHEN SENSE VOLTAGE IS BETWEEN 50 AND 1000VDC.

OPERATES WITH EITHER AC OR DC CONTROL POWER.

SPECIFICATIONS

INSULATION: HV TO OUTPUT, and HV TO INPUT

5KV DC for 1 Minute with No Leakage

SENSING INPUT CHARACTERISTICS:

Maximum Forward Voltage: +1000 VDC.

Maximum Reverse Voltage: -1000 VDC.

Minimum Input Impedance: 400,000 ohms.

Maximum Current Draw: 2 mA @ 1000 VDC.

OUTPUT RELAY:

Two Isolated Normally Open Contacts

Inductive Load Rating:

5 amps at 250 VAC

5 amps at 30 VDC

POWER INPUT:

120 Volts AC/DC, 10 Watts Maximum.

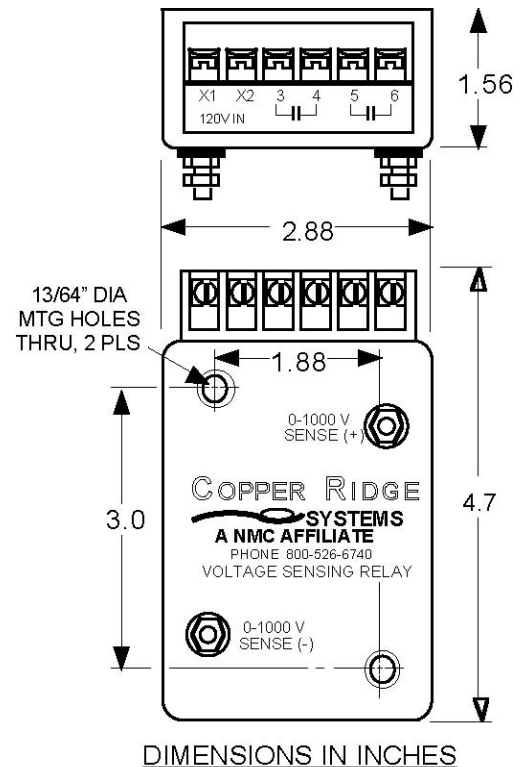
TERMINALS:

HV - #8-32 Brass Studs.

LV - #6 Screws with Wire Clamps.

MOUNTING:

(2) #10 x 2 inch long machine screws.



POWERSWITCH, Inc.

815 E. CHERRY ST. <> TROY, MO 63379 <> 1-800-526-6740 www.normandymachine.com