

## DESCRIPTION

The DVTH is an isolated high-voltage dc transducer with a proportional Zero to Full-Scale (F.S.) output. Packaging is a compact, easy-to-install, DIN rail-mount enclosure.

## FEATURES

- High-Voltage dc measurement
- Variety of output types
- Input, output and instrument power are electrically isolated
- Wide ac/dc instrument power range
- DIN rail-mount enclosure

**5 YEAR WARRANTY**



## APPLICATIONS

- Shunt isolation
- Solar (PV) String monitoring
- Data Center UPS Battery monitoring
- Utility Storage Battery monitoring

## MODEL SELECTION

MODEL	OUTPUT	POLARITY
DVTH-1500B	0 to ±1mAdc	Bidirectional
DVTH-1500D	0 to ±10Vdc	Bidirectional
DVTH-1500E	4-20mAdc	Unidirectional
DVTH-1500EM	4/12/20mAdc	Bidirectional
DVTH-1500X5	0 to ±5Vdc	Bidirectional

## SPECIFICATIONS

### INPUT

Voltage ..... (Range) ..... 0-±1500Vdc  
 Over-range (without damage) ..... 0-±1800Vdc  
 Impedance ..... ≥1.5MΩ  
 Frequency ..... dc

### OUTPUT

Scaling ..... 0 to F.S. Input = 0 to F.S. Output.. (See Table)  
 Loading ..... 5V, 10V ..... ≥2KΩ  
                   4-20mA, 4/12/20mA ..... 0-500Ω  
                   1mA ..... 0-10KΩ  
 Response (10% to 90%) ..... 100μs

**INSTRUMENT POWER** ..... 9-28V, dc/50-400Hz, ≤3W

**ACCURACY** (setpoint, linearity, offset) ..... ±0.25% F.S.

### DIELECTRIC TEST

Input to Output/Instrument Power ..... 4000Vdc  
 Instrument Power to Output ..... 500Vdc

### TEMPERATURE & ENVIRONMENTAL

Temperature  
 Operating Range ..... -40°C to +85°C  
 Effect ..... (-30°C to +60°C) ..... ±0.005%/°C  
                   (-40°C to +85°C) ..... ±0.008%/°C  
 Relative Humidity ..... 0-95%, non-condensing

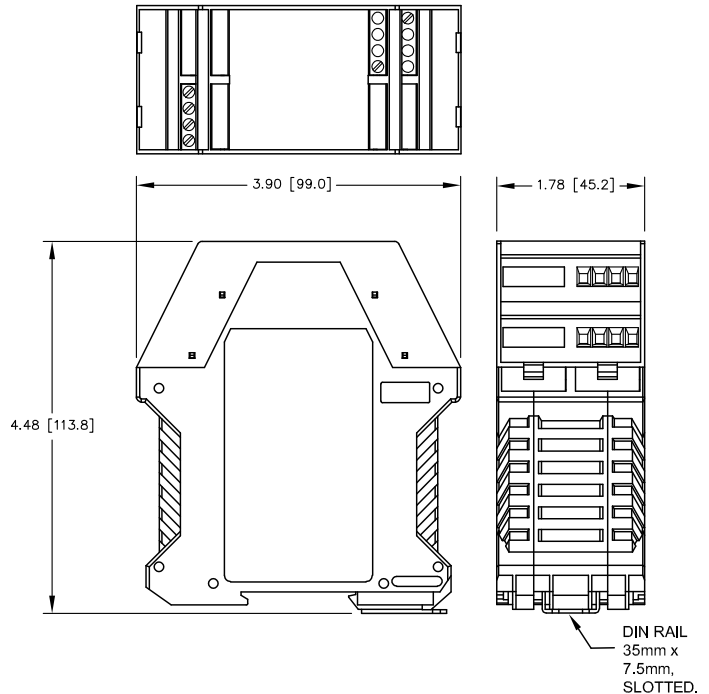
### PHYSICAL

Mounts on standard 35mm "Top Hat" rail, per EN50052/EN60715  
 Termination Wire Size ..... 12-30AWG  
 IP Rating ..... IP20  
 Weight ..... 0.35lbs.

## DIMENSIONS

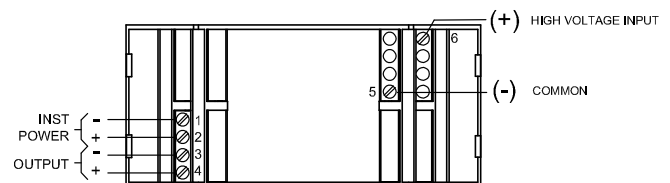
### NOTES:

1. ALL DIMENSIONS ARE IN INCHES (mm)
2. TOLERANCE ±0.03 IN. (0.8mm)



Dwg# 0902-01050-B Rev-C

## CONNECTION DIAGRAM



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## INSTALLATION INSTRUCTIONS

1. Installation should be performed by qualified electricians only!
2. Make sure electrical service is disconnected before making any electrical connections.
3. Branch circuit protection is required to be provided in accordance with the National and Local codes of the inspection authority.
4. Route wires as required and secure to terminals per connection diagram on this sheet and on the unit.
5. Use copper wires per 75°C sizing.

## OPERATING INSTRUCTIONS

1. This unit is intended for indoor use at altitudes up to 2000 meters.
2. Transient overvoltages according to Installation Category II (overvoltage category), pollution Degree 2.
3. The output signal is intended to be "Not accessible to the user." To prevent contact with live circuits, the transducer is required to be mounted in an enclosure that requires the use of a tool for access.
4. If cleaning of the exterior surface is necessary, de-energize all services of supply (both measuring and instrument power circuits) and brush with a soft brush or blow off with low-pressure air. Use appropriate eye protection. Not suitable for hose-down cleaning.
5. Maximum operating temperature range is -40°C to +85°C.

## WARRANTY STATEMENT

Ohio Semitronics Inc. warrants this unit to be free of defects in material and workmanship for a period of five years from date of shipment. This unit must not be used in any manner other than as specified in this document.