

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

- UL and CUL Listed, 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 transducer.
- Solar (PV) String monitoring
- Data Center UPS Battery monitoring
- Utility Storage Battery monitoring
- Electric Vehicle (EV)

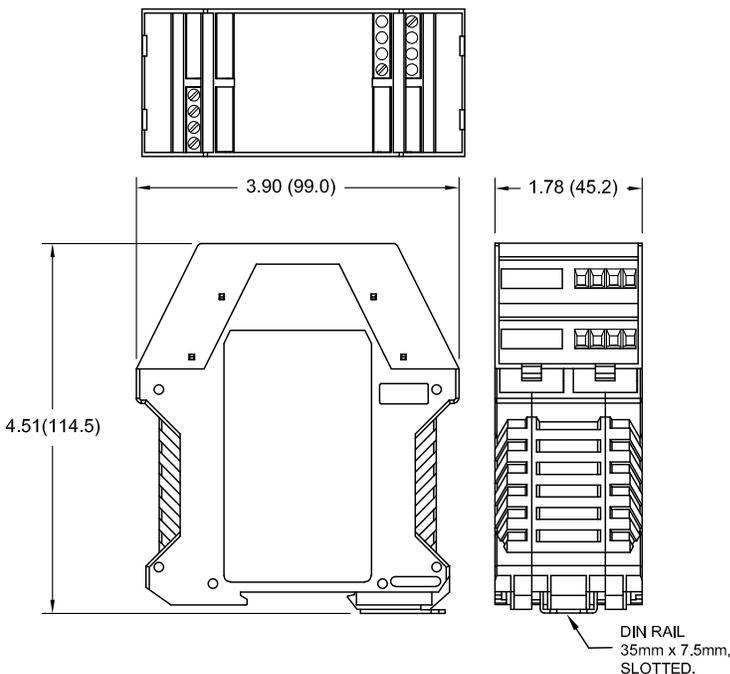
MODEL SELECTION

MODEL	OUTPUT	POLARITY
DVTH-1500B	0 to ±1mA _{dc}	Bidirectional
DVTH-1500D	0 to ±10V _{dc}	Bidirectional
DVTH-1500E	4-20mA _{dc}	Unidirectional
DVTH-1500EM	4/12/20mA _{dc}	Bidirectional
DVTH-1500X5	0 to ±5V _{dc}	Bidirectional

DIMENSIONS

NOTES:

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



SPECIFICATIONS

INPUT

Voltage (Range) 0-±1500V_{dc}
 Over-range (without damage) 0-±1800V_{dc}
 Impedance ≥1.5MΩ
 Frequency dc

OUTPUT

Scaling 0 to F.S. Input = 0 to F.S. Output.. (See Table)
 Loading 0-±5V, 0-±10V ≥2KΩ
 4-20mA, 4/12/20mA 0-500Ω
 0-±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 4000V_{dc}
 Instrument Power to Output 500V_{dc}

TEMPERATURE & ENVIRONMENTAL

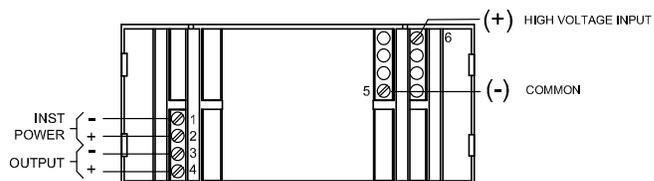
Temperature
 Operating Range -40°C to +85°C
 Effect (-30°C to +60°C) ±0.005%/°C
 (-40°C to +85°C) ±0.008%/°C
 Relative Humidity 0-95%, non-condensing

PHYSICAL

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

Dwg# 0902-01050-B Rev-D

CONNECTION DIAGRAM



Dwg# 0902-01050-B Rev-D

INSTALLATION INSTRUCTIONS

1. Installation should be performed by qualified electricians only!
2. Electrical service must be 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 (Open Type) at altitudes up to 2000 meters.
2. Transient overvoltages according to Installation Category II (Overvoltage Category).
3. For use in Pollution Degree 2 Environment.
4. 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.
5. 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.
6. Maximum operating temperature range is -40°C to +85°C.

SYMBOLS



Caution! General hazard point. Read the product documentation.



Instrument Power Symbol



Output Symbol



Input Symbol



UL approved for USA and Canada



Both Direct (dc) and Alternating (ac) current



Direct Current

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.

OHIO SEMITRONICS, INC.

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