# FEATURES

- Two isolated AC inputs
- Converts two inputs to stepped 0-10VDC signal
- First stage output adjustable between 3 & 6VDC
- Second stage output full 10VDC
- 2 3/16" SnapTrack mounting

## APPLICATIONS

- Honeywell two stage stat conversion to 0-10VDC for hot water valve control
- Honeywell two stage stat conversion to 0-10VDC for chilled water valve control

## **DESCRIPTION & OPERATION**

The TSCM is a two stage to 0-10VDC signal module, that was designed for Honeywell's<sup>®</sup> two stage heating/ cooling thermostat and 0-10VDC MVN valves.

The TSCM provides LED's to indicate which inputs are active and output status, a first stage output adjustment potentiometer: adjustable between 3 & 6VDC.

The TSCM uses an industry standard half wave rectifier power supply in which one leg of the AC supply is common. When the thermostat calls for first stage heating or cooling it applies 24VAC to terminals 6 & 7, the TSCM outputs an adjustable 3-6VDC signal to drive the water valve open. When the thermostat calls for second stage heating or cooling the output of the TSCM goes to 10VDC opening the valve to 100%. When the thermostat is satisfied both first and second stage output are turned off, the TSCM's output goes to zero.

## WIRING CONFIGURATION





#### SPECIFICATIONS

SIZE:	2.190"L x 2.190"W x 1.0"H
MOUNTING:	2.187" SnapTrack (supplied)
POWER:	24VAC, ± 15%, 50/60Hz, .5VA 24VDC @ 20mA
INPUT SIGNALS:	24vac, 10 KΩ Imp.
OUTPUT SIGNALS:	0-5, 0-10VDC, KΩ min load
AUX VOLTAGE REF:	15VDC @ 100mA maximum
OUTPUT:	0 to 10VDC (Minimum 1K $\Omega$ load impedance)
AMBIENT TEMP:	0-50°C



#### TWO STAGE HOT WATER CONTROL



The TSCM is powered by separate 24VAC transformer sized to handle the loads of the TSCM board(s) & the MS7505 or MVN valve(s). The thermostats W, W2, OR Y, Y2 and C are wired to terminals 6, 7, & 8, the MS7505 valve is wired to terminals 3, 4, & 5.

#### TWO STAGE HOT WATER CONTROL



The TSCM is powered by separate 24VAC transformer sized to handle the loads of the TSCM board(s) & the ML7984A valve(s). The thermostats W, W2, OR Y, Y2 and C are wired to terminals 6, 7, & 8 on the AEI-TSCM. The valve terminals T6, T5, & R are wired to terminals 3, 4, & 5 on the TSCM.

