Worked Example: Chamber Conditions Cluster

A controlled environmental chamber is being used to test the performance of inkjet print heads under various conditions of temperature, humidity, and pressure. The following sensors are used to monitor these conditions, with the given *transfer functions* to convert the measured sensor output voltages (V) to physical values:

Temperature: Analog Devices AD22100A,
$T\ (^oC) = 44.44V - 61.11$

Humidity: NRG Systems RH-5 relative humidity sensor
$\%RH = 20V$

Pressure: Setra 278 pressure sensor (from Campbell Scientific)
$P\ (mbar) = 200V + 600$

Assume that actual chamber conditions are measured and supplied by the VI *Chamber Sensors.vi*. Use the cluster functionalities to modify the incoming voltages for display in a single cluster as shown below.