Hoffman|Controls

Product Data and
Installation & Operating
Instructions

265-PI Interface Plug-In Module
Figure 1

General

The 265-PI Interface Module is a "plug-in" module used in conjunction with various HCC Controls. The interface adapts the selected Control's normal proportional only (P) operating function to a proportional and integrated (PI) operating function.

Operation in the PI mode enables the Control to be especially effective as part of a "closed loop" or "feedback" control function. Additional functionality resident in the module allows the Control to interpret the input signal not as a "command" signal dictating a fixed output response, but as an "offset from setpoint" signal. This produces a variable output response to drive the input signal back to the desired setpoint. Both the desired "setpoint" and the rate at which the Control responds to "offset" are adjustable via the 265-PI Module.

Controls utilizing the 265-PI Plug-in Interface Module are normally factory assembled, joined and calibrated. Consult factory for further information.

Description

The 265-PI is a accessory printed circuit board designed to "plug-in" to various HCC Controls via mating pins. Operating power and other required circuit connections to/from the 265-PI are made through these pins.

When piggybacked on a Control, the 265-PI input terminals are normally used instead of the regular Control inputs. This is not true for all Controls and configurations. Consult the Installation & Operating Instructions for each applicable Control. Figure 2 is a depiction of the 265-PI Interface Module.
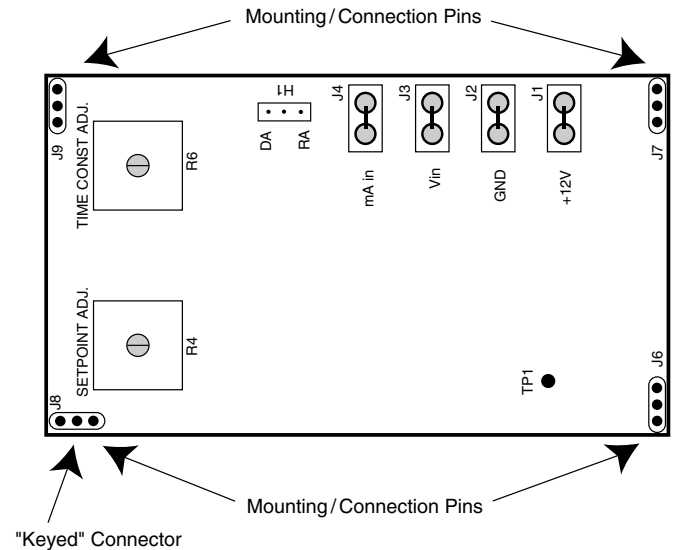
265-PI Wiring Diagram
Figure 2

The four connection terminals available on the 265-PI are:
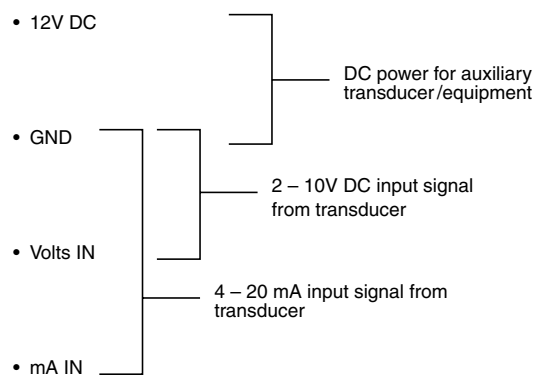
Two Adjustment pots are available on the 265-PI:

- Setpoint Adjustment (R4) (used to set desired operating point).

- Time Constant Adjustment (R6) (adjusts rate of response).

- "DA" or "RA" (Direct Acting and Reverse Acting) is used to determine relative "polarity" of response. Position the jumper tab on H1 as necessary.

Field Installation

1. Remove all power from selected Control.

2. Remove, if applicable, any pre-existing input wiring (sensor) from selected Control; disconnect motor/load from Control.

3. Locate mating pins, 4 sets of 3 each. Note that one set of pins acts as a "key" to ensure correct orientation of 265-PI Module.

4. Install 265-PI Module onto mating pins observing "keying" described earlier. Press 265-PI Module firmly onto pins to ensure secure seating. Be sure all mating pins are properly engaged.

5. Connect auxiliary/transducer equipment to power/signal input terminals of 265-PI as applicable.

6. Restore power to the Control. (Motor/load will be reconnected after adjustment.)

Adjustment

1. Connect DVM (Voltmeter) setup to read volts DC to "GND" (negative lead) & "TP1" (positive lead). Adjust "Set Point Adj." (R4) to achieve voltage related to desired setpoint, as determined by transducer output data.

2. If output response in the "Direct Acting" (output increases as input increases) mode is desired, be sure option jumper H1 is in the "DA" position as shown in Figure 3. If output response in the "Reverse Acting" (output decreases as input increases) mode is desired, be sure option jumper H1 is placed into the "RA" position as depicted in Figure 4.
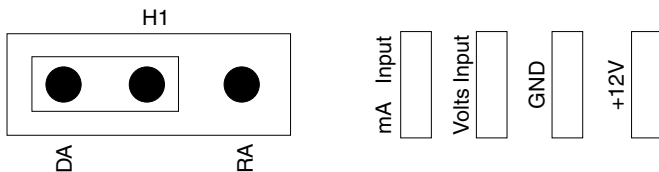
Jumper in DA Position
Figure 3
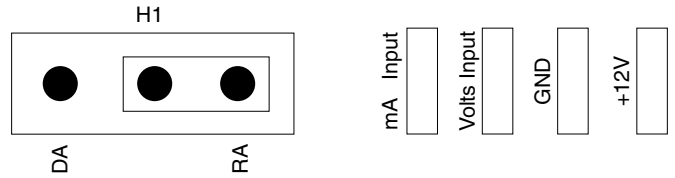
Jumper in RA Position
Figure 4

3. Remove all power from Control. Reconnect motor/load wiring to Control. Restore power to the Control.

4. Closed loop operation is now in effect, if transducer is already installed.

5. Adjust "Time Const Adj." (R6) to achieve the desired response time that ensures smooth control operation.

Specifications

Input power	+12V DC via Control interface pins
Output signaling	via Control interface pins
Output power to auxiliary equip	+12 V DC, 100 mA Max
Input signals	
variable 2 – 10 V DC from auxiliary equip.	
variable 4 – 20 mA from auxiliary equip.	
Interface	4 keyed, 3 pin connectors
Environmental Non-condensing	–30°F – +160°F
Dimensions (L x W x H)	3.5" x 2" x 1.5"