

Analog Input to Pulse Output

FEATURES

- Voltage or current input
- User selectable pulse timing range outputs
- Triac output available
- LED to monitor operation
- Mounts in snap track or ACT's ENC1 Enclosure

APPLICATIONS

- Analog Interface to York™ Chiller Control Package (1-11 sec. and 1-21 sec. pulse range)
- Analog Control of Solid State Relays for Electric Heat, no pulse output below 10% signal input span
- Analog to pulse width output
- Analog to (AC) triac output



Optional
ENC1 Enclosure

PRODUCT DESCRIPTION

ATP Version 1 converts an analog signal into a digital pulse output signal. The user can select eight standard analog input ranges to the ATP by changing jumper shunt positions. To select the output pulse range, the ATP has an eight position DIP switch. The output pulse is continuous with a one second off between pulses.

ATP Version 2 operates the same except when the analog input falls at or below 10% of the input signal range, no pulse output occurs. This allows for a true "OFF" setting for solid state relays controlling electric heat.

The ATP has two timing ranges, standard and custom selectable. **The standard mode**, selected by DIP switch 1 "ON" and proper setting of switches 2 and 3, allows four different timing ranges. Switches 4 through 8 are not active when switch 1 is on.

Standard Mode:

Solidyne™	.023 to 6 seconds
Andover™	.1 to 25.5 seconds
Johnson™	.02 to 5 seconds
Novar™	.59 to 2.93 seconds

The Custom Mode allows for 128 pulse timing ranges. With dip switch 1 "OFF", switches 2 through 8 select the timing values. One or more switches can be selected. Refer to the chart on the Installation Instructions. For example, if switch 2 and 3 were "ON" (50 milliseconds + 100 milliseconds), each A/D step would equal 150 milliseconds (ms). Let us assume an analog input signal of 0-10V. With switches 2 and 3 "ON" the total of 150ms would equal 0 VDC. We can see on the chart that at 10 VDC, the values for switches 2 and 3 "ON" are 12.8 seconds and 25.6 seconds respectively, totaling 38.4 seconds. Thus the pulse width output range is 150ms to 38.4 seconds. All switches off equal 25ms per step.

ORDERING INFORMATION

Specify: ATP _____ Version 1 _____ or Version 2 _____ with _____ ENC1 Enclosure?

- R Form C Relay Output (24 VAC or VDC)
- T Triac Output (24 VAC only). *Call for technical assistance in ordering*
- Y Form C Relay Output (24 VAC or VDC). York™ 1-11 or 1-21 second pulse range (use Version 1). Specify which range.
- MVA4 Triac pulse output (24 VAC only) to Controlli MVA4 valve actuator

SPECIFICATIONS

Electrical Requirements

Power Supply

Supply Voltage	24 VAC or 24 VDC +/-10%, measured at ATP terminals
Supply Current	50mA

Analog Input:

Voltage/Impedance, Version 1 and 2:	0-5 VDC 0-10 VDC 0-15 VDC 1-5 VDC 2-10 VDC 3-15 VDC all at 1,000,000 ohms (all jumper selectable)
Current/Impedance, Version 1 and 2:	0-20mA 4-20mA all at 250 ohms (all jumper selectable)

Mechanical Requirements

Digital Output - Relay

Form "C" Relay	2 amp @ 24 VAC or 24 VDC
Electrical Life	100,000 @ 2 amp
Mechanical Life	10 million operations

Digital Output - Triac

Triac	3 amp @ 24 VAC only (22-28 volts)
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Connections

Wire Size	Up to one 14 gauge maximum
Terminal Type	Captive screw, moving clamp design in nickel plated copper alloy

Dimensions

Weight	2 oz.
Mounting	Furnished 2.75"L X 2.25"W snap track (ENC1 enclosure optional)

Environmental Requirements

Operating Temperature	-20 to 150 deg F
Operating Humidity	10 to 95% non-condensing

Specifications may change without notice to improve product performance.