



# AFP

Input

Analog

Output

Floating Point

## Analog to Floating Point Output

The AFP allows an analog input signal to control a floating point actuator. It converts an analog signal into two relay contact outputs (one increase/one decrease). The isolated floating point output can be controlled by any one of nine analog input signal ranges (using an offset jumper). On a loss of power, the output relays will be open and no signal will be generated. The actuator will remain at the last commanded position unless it has "spring return". The AFP output rate of change (nine ranges, in six versions) is DIP switch selectable. In Version 4, the relays stay on at minimum and maximum voltage. In Version 5, The AFP relays stays on with 5% of maximum or minimum input voltage. No overshoot on maximum or minimum input voltage.

The AFP is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, [www.workaci.com](http://www.workaci.com).





**SPECIFICATIONS**

<b>Supply Voltage</b>	24 VDC or 24 VAC, +/- 10%, 50 or 60 Hz	
<b>Supply Current</b>	105 mA maximum w/o 24 VDC auxiliary output	190 mA maximum w/ 24 VDC auxiliary output
<b>Input Ranges (Jumper Selectable)</b>	0-5 VDC, 0-10 VDC, 0-15 VDC, 0-20 mA	
<b>Input Ranges with Offset Jumper</b>	1-5 VDC, 2-10 VDC, 3-15 VDC, 4-20 mA	
<b>Input Impedances (Nominal)</b>	Voltage/10,000Ω nominal	Current/250Ω nominal
<b>Output (Floating Point)</b>	Two relay contact outputs (Increase/Decrease)	
<b>Relay Contact Ratings</b>	Form C, 2A maximum @ 24V	
<b>Output Accuracy</b>	2% Full Scale @ 32 to 120°F	
<b>Operating Temp/RH</b>	32 to 120°F (0 to 48.9°C)/10 to 95% non condensing	
<b>Product Dimensions</b>	(L) 3.45" (W) 4.00" (H) 1.15"	

**ORDERING**

Please select AFP as an Interface Device (A) and one Version (B). **NOTE:** Upon power-up, the decrease relay will drive 100% of the chosen timing range to ensure that the output is at its minimum position. Whenever the input on AFP Version 2 is within 2-5% of extreme up or down, the relay will activate for an additional time that is 100% of the selected timing range. To ensure that the control signal and actuator are in sync, each time the analog input signal reaches either the 2% to 5% level and below or 95% to 98% level and above, the increase or decrease contact will be driven to 100% of the selected full scale timing range.

<b>A</b> Interface Device	<b>B</b> Version
<input type="radio"/> <b>AFP</b> (Analog to Floating Point (Tri-State) Output)	<input type="radio"/> ---- (30, 60 or 90 Second Timing) (Standard)
	<input type="radio"/> <b>VERSION #2</b> (120, 150 or 180 Second Timing)
	<input type="radio"/> <b>VERSION #3</b> (14, 16.5 or 19 Second Timing)
	<input type="radio"/> <b>VERSION #4</b> (30, 60 or 90 Second Timing) (Relay Stay On @ Min/Max)
	<input type="radio"/> <b>VERSION #5</b> (90, 135 or 180 Second Timing) (Relay Stay On @ 5% Min/Max)
	<input type="radio"/> <b>VERSION #6</b> (18, 75 or 360 Second Timing)

**BUILD PART NUMBER**

After completing (A) & (B) from the above table, fill in the Part Number Table below. An example part number is offered.

**AFP**

A	B
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EXAMPLE: AFP VERSION #2

