



AFP

Analog to Floating Point



The AFP allows an analog (voltage or current) 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). Upon power-up, the decrease relay will drive 100% of the chosen timing range to ensure that the output is at its minimum position. 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 (thirteen ranges, in six versions) is DIP switch selectable. In **Version 2**, upon power-up, the decrease

relay will drive 200% of the chosen timing range to ensure that the output is at its minimum position. At 2 to 5% or below and 95 to 98% or higher of the input signal, the up or down contact will drive for an additional 100% of the chosen timing range. This assures that the control signal and actuator are in synchronization. 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. There is no overshoot on maximum or minimum input voltage.

Applications: Electric Actuator Control

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 website, www.workaci.com.

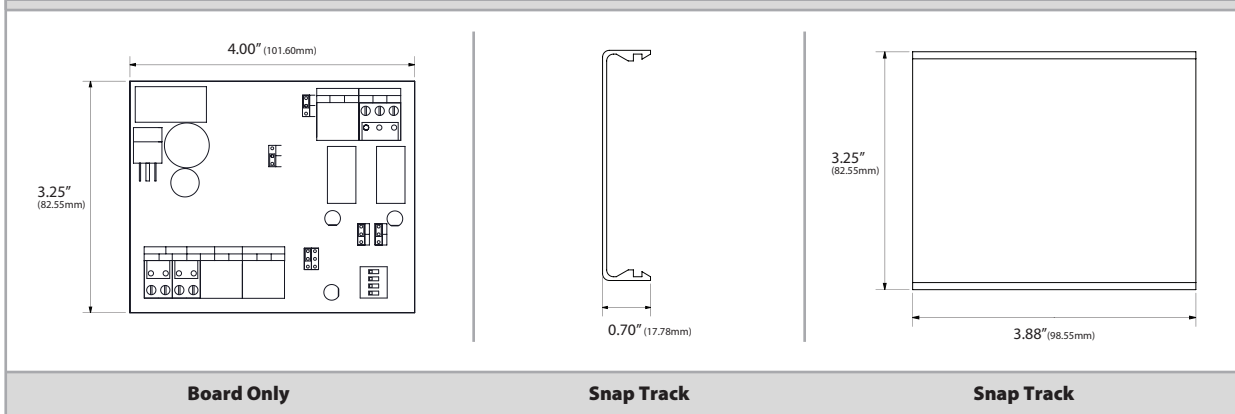
PRODUCT SPECIFICATIONS

Supply Voltage:	24 VAC or 24 VDC, (+/- 10%), 50/60 Hz
Supply Current:	105 mA maximum without 24 VDC auxiliary output 190 mA maximum with 24 VDC auxiliary output
Input Voltage Signal Range:	0-5 VDC, 0-10 VDC, 0-15 VDC
Input Current Signal Range:	0-20 mA
Analog Voltage Signal Input Range with Offset Jumper:	1-5 VDC, 2-10 VDC, 3-15 VDC
Analog Current Signal Input Range with Offset Jumper:	4-20 mA
Input Impedances (Nominal):	Voltage @ 10,000Ω Nominal / Current @ 250Ω nominal
Output (Floating Point):	Two relay contact outputs (Increase / Decrease)
Relay Contact Rating:	Form C, 2A maximum @ 24 VDC
Relay Electrical Life:	100,000 operations minimum
Relay Mechanical Life:	1,000,000 operation
Connections:	90° Pluggable Screw Terminal Blocks
Wire Size:	16 (1.31 mm ²) to 26 AWG (0.129 mm ²)
Terminal Block Torque Rating:	0.5 Nm (Minimum); 0.6 Nm (Maximum)
Operating Temperature Range:	35 to 120°F (1.7 to 48.9°C)
Operating Humidity Range:	10 to 95% non-condensing
Storage Temperature:	-20 to 150°F (-28.9 to 65.5°C)
Snaptrack Material:	Polyvinyl Chloride (PVC)
Snaptrack Flammability Rating:	UL94 V-0
Product Dimensions:	(L) 4.00" (W) 3.25" (H) 1.15" (101.6 x 82.55 x 29.21 mm)
Product Weight:	0.325 lbs. (0.147 Kg)
Agency Approvals:	RoHS2, WEEE





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: **AFP** -OR- **106317**

Model #	Item #	Firmware Version #	Rate of Change*	Additional Information
AFP	106317	0433Y0B.HEX	30, 60, 90s	----
AFP VERSION #2	105626	0437Y0C.HEX	120, 150, or 180s	Drives actuator 200% of range (power reapplied) At 2-5% or below & 95-98% or higher (input signal), the up or down contact will drive an additional 100% of chosen timing range
AFP VERSION #3	129865	0593Y0B.HEX	14, 16.5, or 19s	----
AFP VERSION #4	112382	0687Y0A.HEX	30, 60 or 90s	Relay stays on at Min. & Max. voltage
AFP VERSION #5	128283	0785Y0A.HEX	90, 135 or 180s	Relay stays on with 5% of Max. or Min. input voltage. No overshoot on Max. or Min. input voltage
AFP VERSION #6	130469	0593Y0A.HEX	18, 75 or 360s	----

Note*: Rates of Change unit of measurement = seconds

ACCESSORIES

A/DO008 -OR- 142583

Model #	Item #	Description
A/DO008	142583	Transient Voltage Suppressor, Bi-directional, 56 VAC/DC, 1500W
A/DRC 3.88 X 3.25	142621	DIN Rail Adapter Kit

