



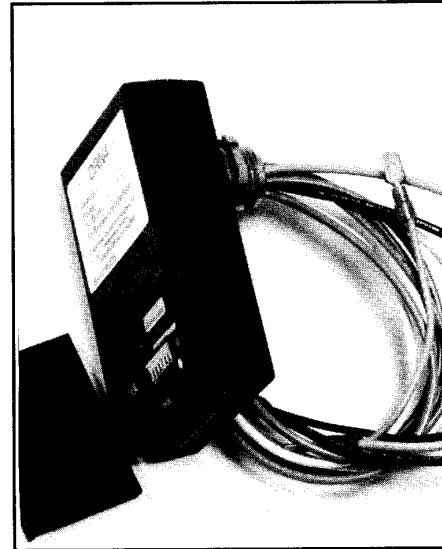
**PULSE /ANALOG /TRI-STATE INPUT TO PROPORTIONAL RESISTANCE OUTPUT
MODEL AR11**

FEATURES:

- * No wrap around
- * Mounts directly to actuator
- * Local override button for easy field testing
- * Available in 135 or 1000 ohm output resistance
- * LED status indicator

APPLICATIONS:

- * Electric Actuator Control
- * Electronic Potentiometer
- * Resistive Sensor Simulation
- * Remote Volume Control
- * Motor Pot Replacement



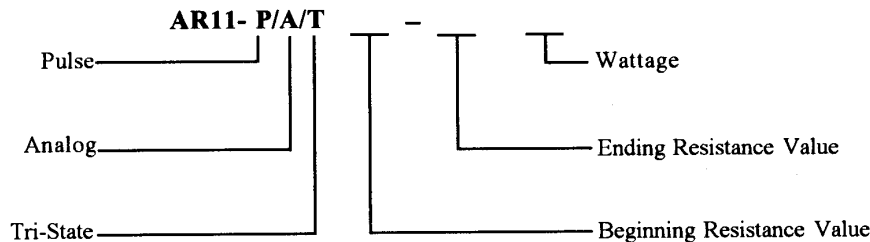
DESCRIPTION:

The AR11 is a resistive output motor actuator interface that accepts several different DDC signal inputs. The AR11 output is available in either 135 or 1000 ohm ranges. The different DDC input signal types are field selectable by an 8 position DIP switch. Signal selections include voltage, current, pulse and tri-state. The voltage ranges are 0-5, 1-5, 0-10, or 2-10. The current ranges are 0-20 or 4-20 milliamps. The pulse input ranges are .59-2.93s, .02-5s, and 1-25.5s. The tri-state input accepts two digital signals, one for increase and the other for decrease. The tri-state rate of change is 55 seconds to full scale. Triac input signals require an accessory (see ordering information). Custom input signal types and ranges are also available. The AR11 is supplied in an enclosure that can be directly mounted to a 1/2 inch knockout on the motor actuator. Color coded flying leads are provided for electrical connections. The AR11 accepts a PULSE, ANALOG, or TRI-STATE input signal and converts it into a proportional resistive output. **PULSE**, The AR11P has two jumper shunts that allow selection of 4 standard input pulse width timing ranges. **ANALOG**, The AR11A accepts an analog input of voltage or current and converts higher signals to a higher output resistance. **TRI-STATE**, The AR11T increases or decreases the resistive output at a rate selectable by two jumper shunts. On these different versions the output resistance does not wrap around if the input signal exceeds the highest or lowest selected value. Custom pulse ranges and rates of change are available upon request.

TRIAC NOTE: Triac input signals can be accepted by the AR11 interface, but need an accessory item. Triac input signals need a triac kit accessory, that can be purchased with BEC EXCEPTION: JOHNSON CONTROLS TRIAC SIGNAL REQUIRES A 1K OHM 1/2 WATT RESISTOR.

ORDERING INFORMATION:

SPECIFY:*



* If you need a resistance range that cannot be met by one of the Resistor Networks at the end of the Specification section, you must also supply wattage and tolerance of the RN. Please specify with 1/4 watt 1% or 1/2 watt 5% resistances if possible. Custom wattages and tolerances may increase cost and lead times.





SPECIFICATIONS:

ELECTRICAL REQUIREMENTS

Power Supply

Supply Voltage: 24 VAC or 24Vdc, +/-10%
Supply Current: 130 mA max

Input

Signal Source: Relay, contact closure, transistor or triac, (triac adapter required)
Signal Trigger Level: 5 to 24 volts AC or DC
Off time between pulses: 80ms
Standard Ranges: .59 - 2.93s
.02 - 5s
.1 - 25.5s
(other custom ranges available)

Input (Tri-State)

Signal Source: Relay, contact closure, transistor or triac, (triac adapter required)
Signal Trigger Level: 5 to 24 volts AC or DC
Rate of Change: 55 seconds over full output span

Input (Analog)

Voltage: 0-5 V, 1-5V, 0-10V, 2-10V
Current: 0-20 mA, 4-20 mA
Impedance: Current/250 ohms
Voltage/100K ohms

Output

Resistive: 135 or 1000 ohm
Resolution: 32 steps

MECHANICAL REQUIREMENTS

Relay Contacts

Electrical Life: 100,000 operations @ 1 Amp
Mechanical Life: 10 million operations

Connections

Dimensions: Approx. 2.25" L x 3.5" W x 1.5" H
Weight: 2 lbs
Mounting: Mounts directly to 1/2" knockout on actuator housing

ENVIRONMENTAL REQUIREMENTS

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

STANDARD RESISTOR NETWORKS

Output Signals (standard)

RN -0/135-3: 0 to 135 ohm +/- 5% 3 watts
RN -0/1000 - 1/4: 0 to 1000 ohm +/- 2% .25 watts

Specifications may change without notice.

Call for Other Calibration Ranges, Versions, and Wattages.

* Triac adapter kit available from BEC, if required.
* 1K ohm 1/2 watt resistor included in shipment.

