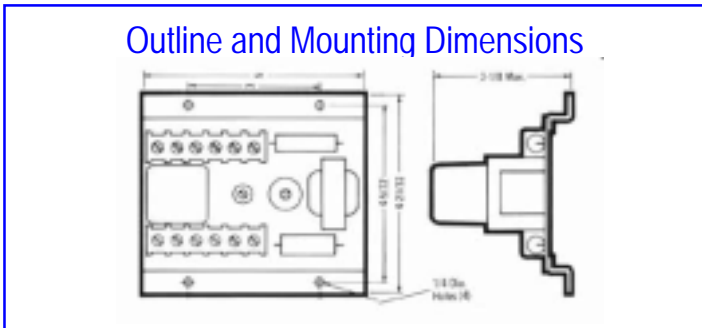


Curtis® resistance sensing amplifier for photoelectric, temperature and process control

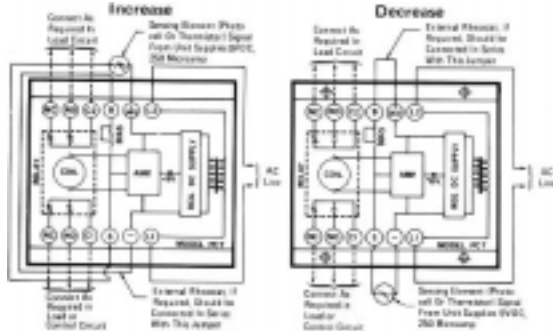
Model PCT

Features

- Zener Diode-Regulated Power Supply Limits Operating Point Variations to Less than 0.5%
- Standard Adjustable Resistance Sensing Range is Sensitive to 100,000 ohms but can be extended to 250,000 ohms
- Has Provision for Remote Potentiometer Adjustment of Operating Setpoint as well as Built-In Time Delay which can be Modified to Meet Individual Customer Specifications
- May be Wired for Light or Dark Energizing Operation
- Circuit Design Limits Short Circuit Transducer Current to a Maximum 4MA/9VDC
- Auxiliary Contactor Available for Loads Exceeding Capacity of Plug-in Relay
- Differential Adjustment Provided
- Auxiliary Contactor Available for Loads Exceeding Capacity of Plug-in Relay



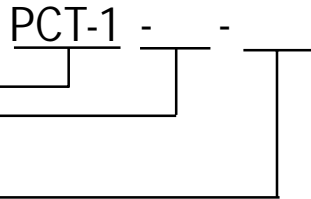
Operation



Ordering Information

Typical Curtis Model Number

Basic Amplifier Type (Also refer to "Specifications" above) _____
 Contactor (if desired add "C") _____
 Enclosure – specify only if necessary
 (N3 – NEMA 3, N3C – NEMA 3/
 Contactor, N4 – NEMA 4 JIC



The composite number above reads as a "PCT amplifier for 120VAC supply without contactor and less enclosure." Contact factory for additional information.

For further information on catalog listed controls contact your area Curtis representative or Curtis distributor. For custom design or modification contact your area Curtis representative or the factory direct.

Specifications



Model	Input Supply
Input Supply: PCT-1	120VAC, 50/60 Hz
PCT-2	240VAC/ 50/60 Hz
PCT-3	24VAC, 50/60 Hz
Maximum Allowable Supply Voltage Variation: ± 10%	
Maximum Power Consumption: 3.5 Watts	
Detectable Range: Up to 100,000 ohms Standard; may be extended to 250,000 ohms	
Adjustable Range: 1,000 to 100,000 ohms Standard; 1,000 to 250,000 ohms for extended sensitivity circuits	
Operating Point Differential: 1% (With Sensing Element Resistance Above 15k ohms) Typical	
Maximum Signal or Probe Voltage (Element Exhibiting Infinite Resistance): 9VDC	
Maximum Signal or Probe Current: 4MA	
Control Relay: DPDT Plug-In Type with Cover	
Load Contacts: 1/6 HP, 10 amp, Non-inductive/120VAC; 1/3 HP at 230VAC	
Ambient Operating Temperature: -25° F to +140° F	
Standard Termination: Barrier-Type Terminal Blocks. Accepting Wire up to No. 12AWG	
Mounting Style: Flange	

Model PCT control may be wired to energize the control relay following either an increase or a decrease in external circuit resistance. Unit provides a .25MA/9VDC signal to a variable resistance sensing element. A control-mounted potentiometer allows adjustment of pull-in or drop-out point. The unit has provision for extension of the operating point as well as remote potentiometer adjustment. A built-in time delay eliminates false rigging due to minor sensing element impulses. Standard response time, typically 100 milliseconds, can be altered by changing the value of capacitor C₂. Provides a response time of 10 to 15 milliseconds.