

SYSTEM 350™ APPLICATION NOTE

A350P Reverse Action Proportional Temperature Control of a Honeywell® Solid State Series 90 Actuator

IMPORTANT: Use this A350P proportional temperature control only as an operating control. Where failure or malfunction of the A350P temperature control could lead to personal injury or property damage to the controlled equipment or other property, additional precautions must be designed into the control system. Incorporate and maintain other devices such as supervisory or alarm systems or safety or limit controls intended to warn of, or protect against, failure or malfunction of the A350P temperature control.

IMPORTANT: To avoid damage to the A350P proportional temperature control, do **not** use this application on a Series 90 motor that uses a balance relay.

Table 1: Honeywell Series 90 Motor Actuators Wired for Reverse Action

Actuator Terminal	A350P Terminal
T2	C (when using a common transformer)
T1	24V
W	Not connected
R	Not connected (when using a common transformer)
B	I

Connect a resistor of the proper value from Table 2 between R and W. Connect a 66.5 ohm resistor between R and B.

Note: Actuator terminal R is internally connected to terminal T2 on the actuator printed circuit board.

IMPORTANT: The number of actuators that can be driven using this application is limited by the power consumption of the actuators and the power output of the Class 2 transformer.

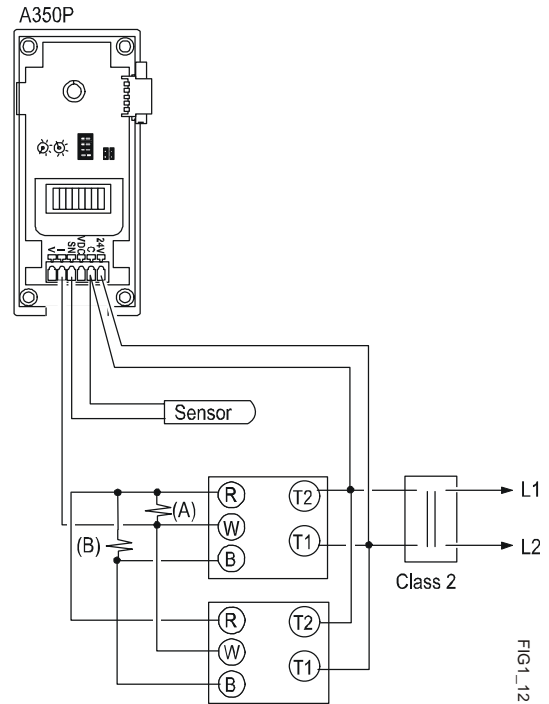


Figure 1: Common Transformer

Table 2: Resistor Ohm Values

	Resistors Required	
	Number of Actuators	Resistor Value (Ohms)
Resistor (A)	1	237
	2	150
	3	124
	4	113
	5	105
	6	97.6
Resistor (B)		66.5

Honeywell Resistor Kit 4074EED contains all resistors to drive up to four Series 90 actuators.