

MAXITROL

Selectra® SC30 Series Signal Conditioners

For Indirect Fire Gas Applications Using 2-speed Inducers and 2-stage Gas Valves

DESCRIPTION

The track mounted SC30 Series controls three functions:

- 1) Converts a controller's DC output signal of 0-10 volts to a 0-20 VDC signal to provide compatibility with Maxitrol's M/MR Series gas valves.
- 2) Controls the normally open relay used to switch inducer speed and gas valve stage. Closes or opens the relay based on controller's DC output to the SC30.
 - Relay closes at approximately 5.3 VDC input
 - Relay opens at approximately 4.7 VDC input
- 3) Provides an adjustable timer SC30 (0-30 sec) or fixed time, SC30-XXX: specified in 15 second increments (beginning with 45 seconds - 045) and adjustable VDC (5-15 VDC) output to the modulating gas valve on startup (powering of SC30). The feature eliminates problems associated with lighting the burner at its lowest gas input.

Adjustment potentiometers:
R18 0-30 second timer (SC30 only)
R22 5-15 VDC output voltage (All)

Additional relays and timers external to SC30 can be replaced with TR1 - Timer Relay Control. See TR1_MI_EN_12.2006.

Modulator and modulator-regulator valves are available up to 5 psi (350 mbar) inlet pressure, 30,000 CFH (850 m3/h) maximum, and pipe sizes from 3/8" to 4". (For additional valve information see Bulletin MT2035, or consult your Maxitrol sales representative.)



DIMENSIONS: 4.75" W x 3.38" H x 2.09" D

SIGNAL CONDITIONER:

Ambient Limits -40° to 150°F (-40° to 66°C)

SIGNAL CONDITIONER POWER REQUIREMENTS:

24 VAC transformer, 20 VA capacity (50/60 Hz).
 (No grounded secondary.)

CAUTION

READ PRIOR TO INSTALLATION: To Avoid Internal Damage to SC30 Series Signal Conditioners Follow These Guidelines.

1. Transformer secondary must **not** be grounded in any portion of the circuit external to the SC30 Series signal conditioners. A separate, independent transformer is recommended.
2. Multiple SC30 Series signal conditioners controlled by a signal source with common outputs (terminals 7 & 8) require separate transformers for each SC30 Series signal conditioner.
3. Multiple SC30 Series signal conditioners powered by a single transformer require independent signal inputs (terminals 7 & 8) to each SC30 Series signal conditioner.

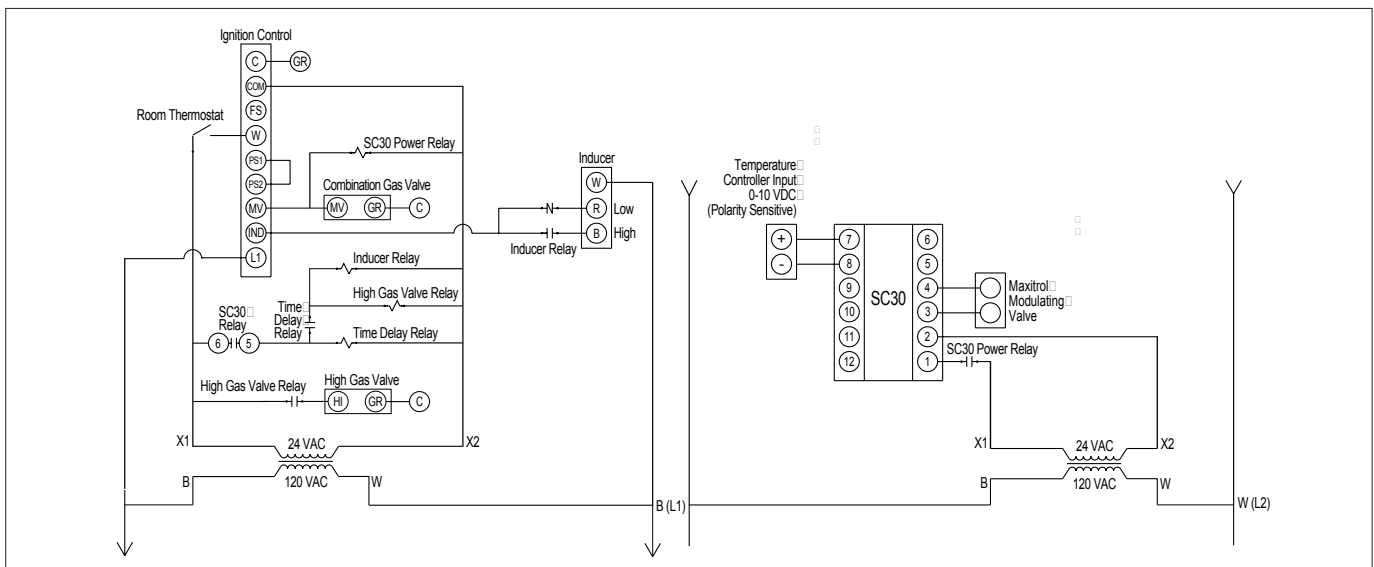


Figure 1: Wiring Diagram

MAXITROL