



# Selectra®

## SC30 Signal Conditioner

for indirect fired gas applications using  
2-speed inducers and 2-stage gas valves



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

The track mounted SC30 performs 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 (0-30 sec) 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

**R22** 5-15 VDC output voltage

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

**SIGNAL CONDITIONER:**

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

**SIGNAL CONDITIONER POWER REQUIREMENTS:**

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

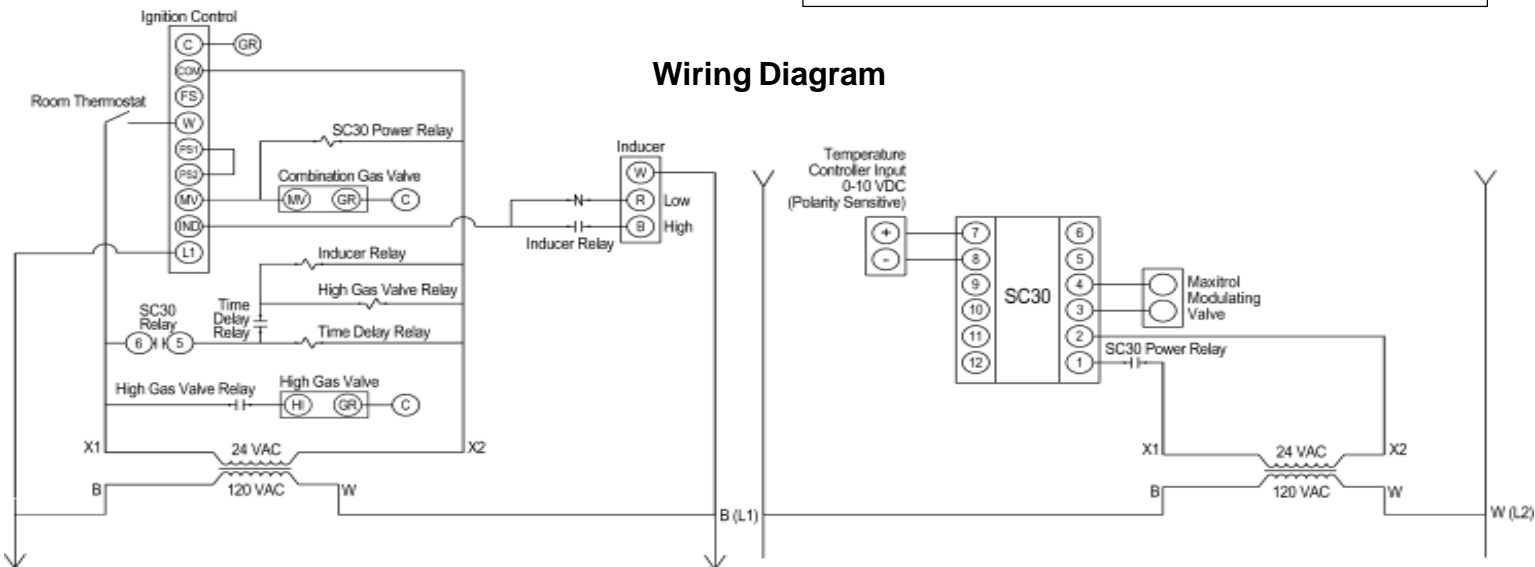


**IMPORTANT - READ PRIOR TO INSTALLATION**

TO AVOID INTERNAL DAMAGE TO THE SC30 SIGNAL CONDITIONER FOLLOW THESE GUIDELINES:

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

### Wiring Diagram



**CAUTION:** Operation of combustion equipment can be hazardous resulting in bodily injury or equipment damage. Each burner should be supervised by a combustion safeguard and only qualified personnel should install, make system adjustments and perform any required service.



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**NOTICE:** Maxitrol practices a policy of continuous improvement in the design of its products. It reserves the right to change the specifications at any time without prior notice.