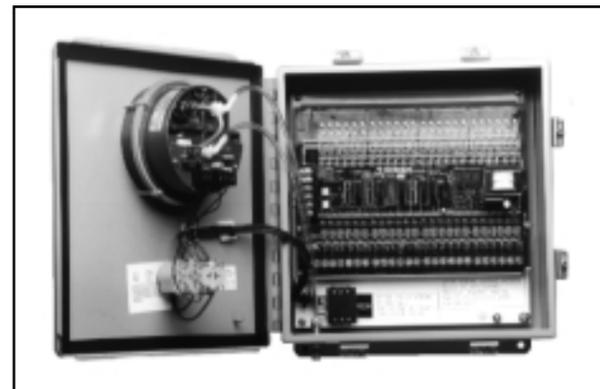


GOYEN ALSO OFFERS THE FOLLOWING DEMAND CLEANING MODELS

GC3002

Offers all of the features of the GC3001.

Available in 16, 24, 32, 40 and 48 station models.



GC3002

GC8000

Offers all of the features of the GC3000.

Provides monitoring and alarm of valve operation, header recovery, time between cleaning cycles and number of pulses per cleaning cycle. (GC8000 available spring 1995)

GC3000

Automatically isolates the photohelic gauge and purges the pressure tap tubes before each cleaning cycle.

Offers all of the features of the GC3001.

Available in 4, 10, 16, 24, 32 and 48 station models.



GC3000

SEQUENTIAL TIMERS

Digital timer boards incorporating pressure switch control and automatic blowdown are available for mounting in enclosures or installed in NEMA 4 enclosures.

PULSE JET DUST COLLECTOR DEMAND CLEANING CONTROLLER
DIFFERENTIAL PRESSURE INITIATED SEQUENCE TIMER
MODEL GC3001 WITH, 4, 6, 8 OR 10 STATION OUTPUTS

INSTALLATION AND OPERATING INSTRUCTIONS

The GOYEN CONTROLLER provides the timed, sequential energization of pulse valves used on reverse jet dust collectors. The cleaning cycle of the filter is initiated when the selected high differential pressure across the collector is reached and ends when a selected minimum differential is reached.

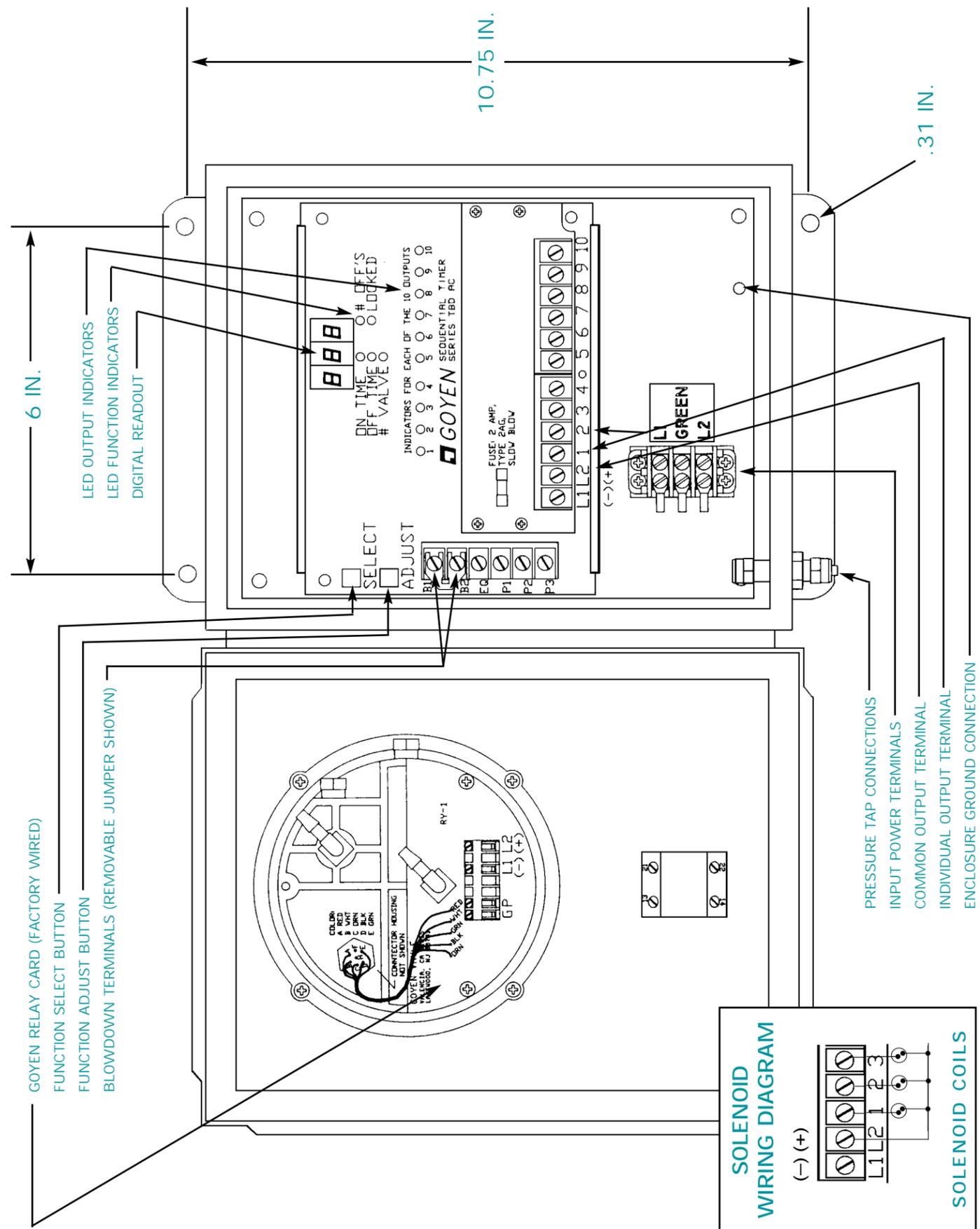
FEATURES INCLUDE:

- Three position switch enables the operator to select continuous cleaning or differential pressure initiated mode.
- Internal digital controls allow adjustment of the solenoid on-time, the time between solenoid energization, number of valves to be controlled and number of blowdown cycles.
- Timing accuracy to 0.5% of set point.
- Programmed settings will be retained indefinitely if input power is interrupted. No battery backup is required.
- Internal three digit LED readout indicates settings of the various functions.
- Photohelic gauge with continuous pressure drop display and adjustments for high and low pressure drop levels.
- Goyen's exclusive low-profile Solid State Latching Relay card mounted to the back of the gauge.
- Electrical surge suppression on power input and solenoid load output for voltage spike protection.
- Automatic blowdown feature enables the timer to be programmed to operate the cleaning cycle from 0 to 25 times after the collector fan has been shutdown. Timer automatically restarts when fan is started. **Caution:** Do not over-clean the filters.



SPECIFICATIONS:

MODEL NUMBER	GC3001	GC3001
	-4AC, -6AC, -8AC & -10AC	-4DC, -6DC, -8DC & -10DC
Number of Outputs	4, 6, 8 or 10	4, 6, 8 or 10
Line voltage	100 to 260 VAC 50/60 Hz	12 to 24 VDC
Load Output Rating	2 AMPS	
Circuit Protection	2 AMP Fuse 2 AG Slow Blow	
Temperature Range	-40° to +140° F	
On-Timing Range	30 to 350 milliseconds in 5 milliseconds steps	
Off-Timing Range	1 to 180 seconds in 1 second steps	
Timing accuracy	+/-0.5% of Set Point	
Differential Pressure Range	0 to 10 inches w.g.	
Enclosure Rating	NEMA 4	
Enclosure Dimensions	10"h x 8"w x 6"d	



INSTALLATION

- ✦ Connect Line Input Power, AC voltage to terminals marked L1 & L2, DC voltage to Negative (-) & Positive (+) terminals.
- ✦ Connect output terminals to pilot valve solenoid coils. Connect common side of coil, AC voltage to terminal L2, DC voltage to Positive (+) terminal. Note: Line voltage must match coil voltage.
- ✦ Blowdown: If blowdown feature is used, disconnect jumper between terminals B1 & B2 and connect to the auxiliary contacts on the fan motor starter. Contacts are to open when fan is stopped.
- ✦ Ground: Connect circuit ground to GREEN terminal. Ground the control enclosure separately using the grounding stud within the box.
- ✦ Connect the high and low pressure taps on the bottom of the control housing to the collector pressure taps using 1/4" diameter metal or other tubing (not provided). The "high" tap connects to the "dirty" side of the tube sheet and the "low" to the "clean" side.
- ✦ Set the high and low pressure drop settings using the right and left hand knobs, respectively, on the face of the gauge. The timer will initiate energization of the pulse valve solenoids when the collector pressure drop rises to the "high" set point and continue until the collector pressure drop is lowered to the "low" set point.
- ✦ Zero photohelic gauge using the adjustment screw on the face of the gauge.
- ✦ Separate box penetrations are recommended for the line power and output lines.
NOTE: **Metal shavings from the penetrations should be cleaned from the face of the timer board.**
- ✦ Establish power to board and adjust "ON" time, "OFF" time, number of outputs used and number of blowdown cycles required. See programming instructions for details.

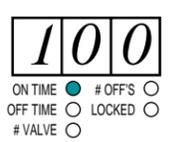
PROGRAMMING INSTRUCTIONS

Press the "Select" button to illuminate the LED indicator adjacent to the function required, then press the "Adjust" button to the required setting which will be displayed on the Digital Readout. After all functions have been set, push the "Select" button to the Locked LED indicator. In the locked position, the Digital Readout will display the last setting, which is the number of blowdown cycles programmed.

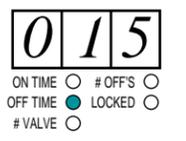
To check a specific function setting, push the "Select" button to illuminate the desired function LED, the setting is then shown on the Digital Readout.

PROGRAMMING EXAMPLE

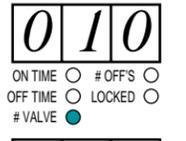
STEP #1 - ON TIME - Press the "Select" button until the "ON TIME" LED indicator is illuminated, then press the "Adjust" button until the required ON TIME in milliseconds is shown on the Digital Readout. (100 milliseconds illustrated).



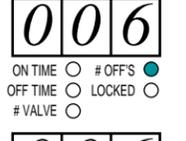
STEP #2 - OFF TIME - Press the "Select" button until the "OFF TIME" LED indicator is illuminated, then press the "Adjust" button until the required OFF TIME in seconds is shown on the Digital Readout. (15 seconds illustrated).



STEP #3 - NUMBER OF VALVES CONNECTED - Press the "Select" button until the "# VALVE" LED indicator is illuminated, then press the "Adjust" button until the required NUMBER OF VALVES CONNECTED is shown on the Digital Readout. (10 valves illustrated).



STEP #4 - BLOWDOWN CYCLES - Press the "Select" button until the "# OFF'S" LED indicator is illuminated, then press the "Adjust" button until the required number of BLOWDOWN CYCLES is shown on the Digital Readout. (6 cycles illustrated). **Note:** Blowdown will not occur if collector is operating at below the high pressure drop setting unless controller is in the continuous cleaning mode.



STEP #5 - SETTINGS LOCKED - Press the "Select" button until the "LOCKED" LED indicator is illuminated. All settings are now locked in and the Digital Readout will display the last setting, which is the number of blowdown cycles programmed (6 cycles illustrated).

