

# specifications

The Alarm Valve Combo Unit shall be an Amico Alert-2 Series, complete with a five year warranty.

Each AVCU shall consist of the following components: An 18 Gauge steel valve box complete with a baked white enamel finish which can house one to six shut-off ball valves with tube extensions, gas specific sensor (DISS nut and nipple connection), extra port for optional pressure gauge, and a hinged gas specific compact alarm with illuminated LED digital display, with an error message for an incorrect connection, an aluminum frame, and a pull-out removable opaque window.

Affixed to the opposing sides of the box will be two adjustable steel brackets for the purpose of mounting the box to the structural support. The steel brackets shall accommodate various finished wall thicknesses between 3/8" [9.5mm] and 1-3/16" [30mm] and shall be field adjustable. The frame assembly shall be constructed of anodized aluminum and shall be mounted to the back box assembly by standard number 6-3/8" tapping screws as provided.

The digital alarm shall read from 0-250 psi [0-1,724kPa] for pressure and 0-30"Hg [-100-0HgkPa] for vacuum. The digital read-out shall provide a constant indication of each service being measured. It will indicate a green "NORMAL" and a red "HIGH" or "LOW" alarm condition. If an alarm occurs, the "RED" alarm light shall flash and the audible alarm (exceeds 90 decibels) will sound. Pushing the "ALARM MUTE" button will cancel the audible alarm, but the unit will remain in the alarm condition until the problem is rectified. A repeat alarm function shall, when enabled on the compact alarm module, be capable of turning on the buzzer again (after a preset time) if the fault condition has not been rectified.

Each alarm module shall be individually microprocessor based and be field adjustable. The default set point on this alarm shall be +/- 20% variation from normal condition. In the calibration mode the following parameters shall be adjustable: High/Low set-points, Imperial/Metric units, Repeat alarm (adjustable from 1 to 60 minutes) Enable/Disable, and psi, kPa or Bar readout (switch selected). Set points shall be adjustable by two on-board push buttons.

Access to the shut-off valves shall be by merely pulling the ring assembly to remove the window from the frame. The window can be reinstalled without the use of tools only after the valve handles have been returned to the open position. The window shall be marked to prohibit unauthorized persons from tampering with the valves with the following silk-screen caution:

**"Medical Gas Control Valves with Alarms"  
"Close valves only in emergency"**

The valves shall be a 3 piece ball-type design with a bronze body and chrome plated brass ball for sizes 1/2" to 1-1/2". Seats shall be Teflon (TFE) and seals Viton for 1/2" to 1-1/2". A blow-out proof stem shall be used and the valves shall have a maximum pressure rating of 600 psi [4,137 kPa].

Valves shall be operated by a lever-type handle requiring only a quarter turn from a fully open position to a fully closed position. All valves shall be equipped with type "K" washed and degreased copper pipe stub extensions to protrude 6" beyond the sides of the box. Each valve will be identified for gas specification as indicated on the hinged alarm label.

Input power to the Amico Alarm Valve Combo Unit is: 115VAC to 220 VAC, 50 to 60 HZ.

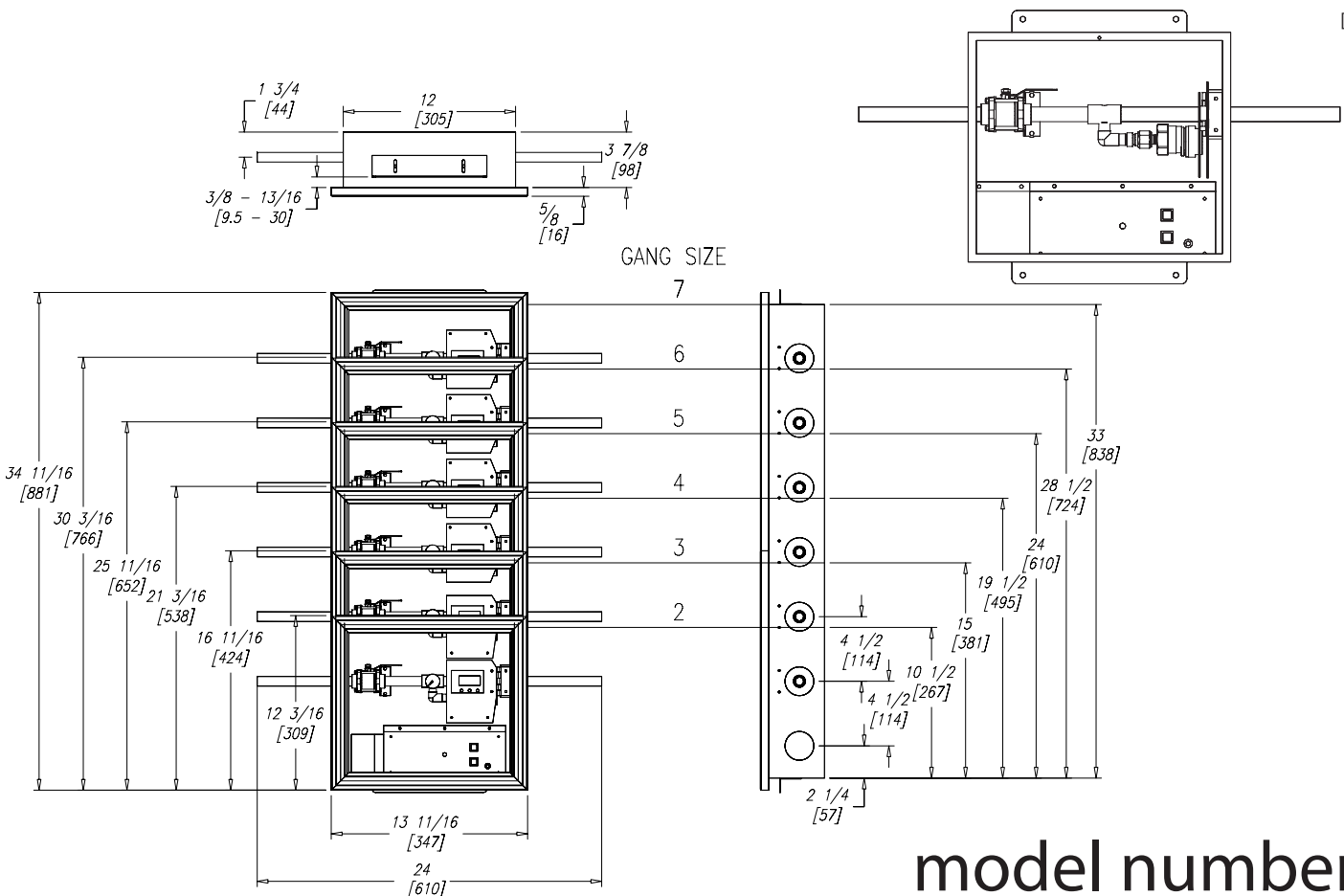
Amico products comply with NFPA-99.



# features

- Ideal 2 in 1 design, combines the Area Alarm and Zone Valve Box, to allow for space restrictions
- True digital, illuminated LED display readable even in poor lighting conditions
- High/low alarm set-points are field adjustable for each gas service
- Repeat alarm, adjustable 1 to 60 minutes or off
- Gas specific sensor with DISS nut and nipple
- Alarm buzzer in excess of 90 decibels
- Each module marked with an approved medical gas identification label
- Pre-mounted pull-out ring allows for ease of maintenance
- Available locking or non-locking valve design
- Individual microprocessor for each display and sensor module; digital sensor is mounted locally
- Dry contacts for remote monitoring of the high and low alarm

**project**



## AVCLN-XXGXXGXXGXXGXXGXXG

The "L" defines the language:

- U = English (NFPA)
- E = English (CSA)

The "N" defines the # of valves:

- 1 = 1 Valve
- 2 = 2 Valves
- 3 = 3 Valves
- 4 = 4 Valves
- 5 = 5 Valves
- 6 = 6 Valves

The "G" defines the gas:

- O = Oxygen
- A = Medical Air
- V = MedVac
- 2 = Nitrous Oxide
- N = Nitrogen
- C = Carbon Dioxide
- W = WAGD/AGSS
- I = Instrument Air

Replace "XX" with the valve size required:

- 1/2" = 05
- 3/4" = 07
- 1" = 10
- 1-1/4" = 12
- 1-1/2" = 15

### Notes:

The power supply requires 1 gang per box.

1-1/2" valves will have an empty space above the valve. For example, a box with a 1/2" Oxygen, 3/4" Medical Air and 1-1/2" MedVac valve will require a 5 gang box.

Example: English, 3 Valve Box, a 1/2" Oxygen, 3/4" Medical Air and 1-1/4" MedVac valve = AVCU3-05O07A12V

represented by: