



# VAL-CO Controls Automate Ventilation.

## Ovation Series

### Display and Set-up Panel:

- 5 character LED display screen shows longer descriptions
- Indicator lights for output status - show ventilation system at a glance
- Defective probe pilot light
- Independent temperature probe inputs – individual readouts
- 16 or more parameters accessed by dial – protection with lock out mode switch preventing accidental or unauthorized changes

### Control Features:

- Displays absolute temperatures for all stages
- Inside and outside High/Low temperatures for room average recordings
- Optional humidity probe with RH compensation
- Compatible with potentiometer feedback air inlet control
- Minimum Vent Timer selects desired time on and off – no limitations
- On/Off stages have selectable 2° F offset
- Sequential power-on with 5 second delay between stages
- Full-speed fan start-up for 2 seconds on variable output
- Motor curves for variable speed fans
- Ramping functions – 10 different set points – adjustments for current day
- Adjustable heater offset & differential
- 2 heating stages possible for controls w/2 or more thermo stages
- Dual zone heat mode allows 2 heaters on a single stage w/individual sensors
- Easy access to internal adjustments – snap on latch
- PC compatible

### Alarm Features:

- Test mode – runs through sequence to test settings and equipment
- Alarms for High/Low and critical temperatures plus power failure
- Offset alarm for mist, heat and stage 2
- Includes standard alarm output

### Curtain Setup:

- Simplified curtain/winch set-up using targeted temperature (absolute values)
- Curtain/winch can be set up to operate anywhere within ventilation control sequence
- Manual overrides for curtains
- Outdoor temperature influence on high alarm offset and curtain logic
- Normal and progressive timing option for curtains
- Built-in adjustable timer on natural ventilation stages



## The VAL-CO Family

- Watering Systems
- Feed Bins, Fill Systems
  - Feeders
- Ventilation Fans
  - Inlets
  - Lighting
  - Heaters
- Evaporative Cooling
- Whole House Controllers™
  - Incinerators
- Crates, Stalls, Penning
  - Flooring
- Electronic Weighing/Sorting Systems





**Ovation 113**

- 5 – Stage Control for Power/Natural Applications
- 1 Variable Speed Stage
- 1 Curtain Winch Stage
- 1 On/Off Ventilation Stage
- 1 Mister Cycle Stage
- 1 Heater Stage



**Ovation 214**

- 7- Stage Control for Power/Natural Applications
- 2 Variable Speed Stages
- 1 Curtain Winch Stage
- 2 On/Off Ventilation Stages
- 1 Mister Cycle Stage
- 1 Heater Stage



**Ovation 224**

- 8 – Stage Control for Power/Natural Applications
- 2 Variable Speed Stages
- 2 Curtain Winch Stages
- 2 On/Off Ventilation Stages
- 1 Mister Cycle Stage
- 1 Heater Stage

**Specifications**

**TEMPERATURE RANGE**

- Operation:**..... From 32° F to 122° F (0° C to 50° C)
- Storage:**..... From -4° F to 131°F (-20° C to 55° C)
- Readout:**..... From -40° F to 120° F (-40° C to 48.9° C)
- Adjustable set point:**..... From -40° F to 120° F (-40° C to 48.9° C)

**POWER SUPPLY**

- Voltage:**..... 115 or 230 VAC (selection switch)
- Frequency:**..... 50 or 60 Hz (auto-adjustment)
- Fuse:**..... 250 mA, general purpose
- Circuit protection:**..... Feed overload and over-voltage protection (outputs)

**OUTPUTS**

- |                              |     |  |
|------------------------------|-----|--|
| <b>No. of outputs:</b> ..... | 22  | 2 variable and 2 on/off                            |
|                              | 24  | 2 variable and 4 on/off                            |
|                              | 113 | 1 variable and 5 on/off (including curtain relays) |
|                              | 214 | 2 variable and 6 on/off (including curtain relays) |
|                              | 224 | 2 variable and 8 on/off (including curtain relays) |

- Fan motor curves:**..... Choice of 10 motor curves for variable speed fans
- Alarm relay:**..... 30 V, 1 A, NO & NC, 1 A fuse (general purpose)
- On/Off relays:**..... 1 HP @ 250 VAC; 0.5 HP @ 125 VAC  
10 A @ 125/250 V (RES.)
- Expansion capabilities:**..... Yes

**TEMPERATURE PROBES**

- |   |         |   |
|---|---------|---|
| <b>No. of temperature probes:</b> ..... | 22 & 24 | Standard: 1 indoor, Optional: 3 additional indoor                     |
|   | 113/224 | Standard: 1 indoor/1 outdoor<br>Optional: 3 additional indoor sensors |
|   | 224     | Standard: 2 indoor/1 outdoor<br>Optional: 2 additional indoor sensors |
- Model:**..... ZC1353
  - No. of wires:**..... 2
  - Temperature range:**..... -40° F to 168.8° F (-40° C to 76° C)
  - Resistance:**..... 1kΩ, at 77° F [25° C +/-1.8° F (1° C)]
  - Extension:**..... Can be extended up to 700 ft. (213.36 m)

**RELATIVE HUMIDITY PROBE**

- No. of relative humidity probes:** ... 1
- Model:**..... RH VAL-CO
- No. of wires:**..... 3
- Relative humidity range:**..... 10% to 90%
- Extension:**..... Can be extended up to 700 ft (213.36 m)

**HOUSING**

- |                          |                   |   |                   |   |                  |
|--------------------------|-------------------|---|-------------------|---|------------------|
|                          | <b>Height</b>     | x | <b>Width</b>      | x | <b>Depth</b>     |
| <b>Dimensions:</b> ..... | 10 in. (25.40 cm) |   | 12 in. (30.48 cm) |   | 6 in. (15.24 cm) |
| <b>Weight:</b> .....     | 6 lbs. (96 gm)    |   |                   |   |                  |
| <b>Material:</b> .....   | PVC               |   |                   |   |                  |
| <b>Norms:</b> .....      | NEMA              |   |                   |   |                  |

**\*Water and dust-tight; protected both indoors and outdoors against splashing water, seepage and falling water or hose-directed water and severe external condensation.**

**Call your local VAL-CO representative or distributor for more information on these and our other fine products.**

**North America:**

**Phone:** 800.99VALCO (800.998.2526)

**Fax:** 419.678.2200

**E-mail:** sales@valcompanies.com

**International:**

**Phone:** 717.392.3978

**Fax:** 717.735.1800

**E-mail:** intl.sales@valcompanies.com

