

AprilAire®

Humidifier



SPECIFICATION SHEET

Model 63/5558

Automatic Digital Modulating Humidifier Control



MODEL 63 PACKAGE

Includes Modulating Humidistat, Duct Sensor, Blower Activation Relay and Outdoor Temperature Sensor

The Model 63 Automatic Digital Modulating Control (ADMC) package is the recommended humidistat for the AprilAire modulating steam humidifier, Model 801.

WALL MOUNTED CONTROL FEATURES

- Microcomputer based design with proportional algorithm – providing exceptional accuracy
- Digital display – large LCD with backlight with humidification and dehumidification indicators
- Outputs – controls humidification and dehumidification equipment
- Output signals – on/off and/or proportional outputs provides greater flexibility
- Modulating output signal – provides a 0 to 10VDC or 2-10VDC proportional control signal to the humidifier.
- Integrated sensor or remote duct sensing for better application flexibility
- Programable proportional band to increase or decrease the sensitivity of the humidifier control
- Humidity set point – adjustable from 0 to 100% relative humidity
- Humidity setpoint reset based on outdoor temp. Prevents window condensation in colder climates
- On-off signal – 24VAC dry contact capable to handle up to 1 amp
- Proportional high limit override – prevents over-humidification within the duct and costly water damage
- Multi-level lockable access menu and lockable set point – prevent accidental changes
- Indicator when outdoor temperature setback is used for winter compensation
- Selectable Celsius or Fahrenheit scale

MODEL 5558 PACKAGE

Includes Modulating Humidistat and Outdoor Temperature Sensor

The Model 5558 Automatic Digital Modulating Control package is the recommended humidistat for the AprilAire modulating steam fan pack ductless humidifier, Model 866.

OUTDOOR TEMPERATURE SENSOR

When used with the wall mounted humidistat the humidity set point is automatically readjusted based on the difference between the room temperature and the outside temperature to prevent window condensation.

INCLUDED IN MODEL 63 PACKAGE ONLY

DUCT HUMIDITY SENSOR FEATURES

- Proportional Duct Sensor can be used as the primary measurement of the relative humidity in the duct instead of the room and responds to the needs of wall mounted humidistat
- When not used as the controlling sensor, the Duct Sensor can be use as a proportional high limit override – provides a feedback to the wall mounted humidistat to prevent condensation in the duct.

BLOWER ACTIVATION RELAY

Allows the humidistat to turn the HVAC blower when there is a call for humidity, even when the HVAC system is idle to add humidity to the premisses.

PRODUCT SPECIFICATIONS

Modulating Humidistat

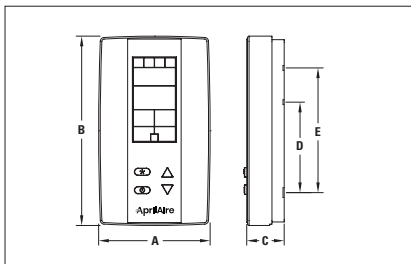
Outputs	Actual humidity (0-100% RH), 0-10 VDC / 2-10 VDC Humidity set point (0-100% RH) 0-10 VDC / 2-10 VDC Humidification proportional control signal, 0-10 VDC / 2-10 VDC Dehumidification proportional control signal, 0-10 VDC / 2-10 VDC Humidification dry contracts 24 VAC, 1 A max, 3 in-rush Dehumidification dry contracts 24 VAC, 1 A max, 3 in-rush
Inputs	Window temperature sensor or outside temperature sensor (10kΩ) External set point from AprilAire humidifier, external humidity sensor (0-10 VDC / 2-10 VDC) or high limit (0-10 VDC / 2-10 VDC) 1 alarm status digital input (24 VAC or dry contact)
Power supply	22 to 26 VAC 50/60 Hz or 28 to 32 VDC
Power consumption	1 VA
Set point range	10 - 90% RH (in 1% increments)
Sensor precision	± 3% or better at 40% RH and 73°F (23°C)
Proportional band	2% to 10% for control signal
Electrical connection	18 AWG (0.8 mm ²) minimum
Operating condition	32°F to 104°F (0°C to 40°C), 0-95% RH
Storage condition	14°F to 122°F (-10°C to 50°C), 0-95% RH
Temperature compensation reset feature	Automatic readjustment of set point from and Outdoor Temperature Sensor (included)
Weight	0.35 lb (160 g)

PRODUCT SPECIFICATIONS

Duct Sensor

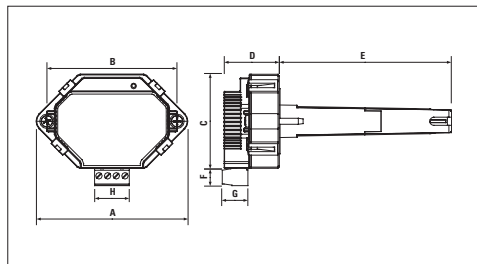
Power supply	22 ± 10% VAC or VDC
Power consumption	1 VA
Electrical connection	18 AWG minimum
Set point range	10 - 90% RH (in 1% increments)
Output	0-10 VDC, Humidity set point (0-100% RH)
Sensor precision	± 3% at 40% RH and 73°F (23°C)
Relative Humidity Range	0-100% RH
Operating temperature	-40°F to 176°F (-40°C to 80°C)
Storage condition	14°F to 122°F (-10°C to 50°C), 0-95% RH
Weight	0.30 lb (130 g)

AUTOMATIC DIGITAL MODULATING CONTROL DRAWING



Dimension	Inches (in)	Metric (mm)
A	2.85	73
B	4.85	123
C	1.00	24
D	2.36	60
E	3.27	83

DUCT SENSOR DIMENSIONAL DRAWING



Dimension	Inches (in)	Metric (mm)
A	3.50	89
B	3.00	76
C	2.16	55
D	1.30	33
E	3.95	100
F	0.37	9.5
G	0.60	15
H	0.80	20