

GeneralAire®

Elite Steam Humidifier

Models RS15P/25/25LC

Spec Sheet

Specifications

- **Model:** RS15P, 25 & 25LC Elit Steam Humidifiers (GFI #5548, 5547 & 5543)
- **Type:** Self contained immersed electrode; drain pump design; integral room steam blower
- **GPD:** RS15P: 15.8 RS25, 25LC: 25-35
- **Capacity / VAC / kW:** RS15P: 5.5 Lbs/Hr (2.5kg/h) / 110VAC 1-phase 50-60Hz / 1.86 kW
RS25, 25LC: 12 Lbs/Hr (5.4kg/h) / 230VAC 1-phase 50-60Hz / 4.05 kW
- **Power:** RS15P: 120V RS25, 25LC: 230V
- **Electrode Power Cables:** 12 AWG
- **Power Relays:** 2 - 30 Amp On Board
- **Ground Connection:** Screw
- **Warranty:** 2-Years (Parts Only)
- **Unit Size:** 23.75" H x 13 1/8" W x 8.25" D
- **Weight:** 22 LBS
- **Pallet Size:** 16
- **LC=Low Conductivity Model** (Test water for conductivity prior to selection)
- **Controls:** GFX3 - Included (Option: GFX50)
- **Conductivity Range:** 125 to 1250 µs/cm
- **Replacement Steam Cylinder:** RS15P = 15-14 (GFI #7523); RS25 = 35-14 (GFI #7524), 25LC = 35-15 (GFI #7543)
- **Features:** Constant control and monitoring diagnostics
- **Water Fill Connection:** 1/4" O.D. Compression; Adapter to 3/4" FPS
- **Water Fill - Instant Flow:** 0.09 - 0.16 gpm (0.35 - 0.60 l/min)
- **Input Water Type:** Potable water (no demin. or softened water)
- **Drain Connection:** .75" to air break into 1.25" O.D. (32 mm)
- **Drain Water Temperature:** < 140° (< 60° C)
- **Drain Flow:** Initial Max Drain Rate = 7 gpm (26.2 l/min) (with full cylinder for the first 10-15 seconds of drain cycle).
Average Drain Rate = 3.1 gpm (11.7 l/min) (measured over a 1-minute period starting with full cylinder)
- **Embedded Fan Flow:** 71 cfm (120 m³/hr)
- **Serial Communication:** RS485
- **In The Box:** Steam Humidifier, GFX3, Warranty Card, Installation Manual, Drilling Template, Installation/Mounting Screws. Power Wire Clamps

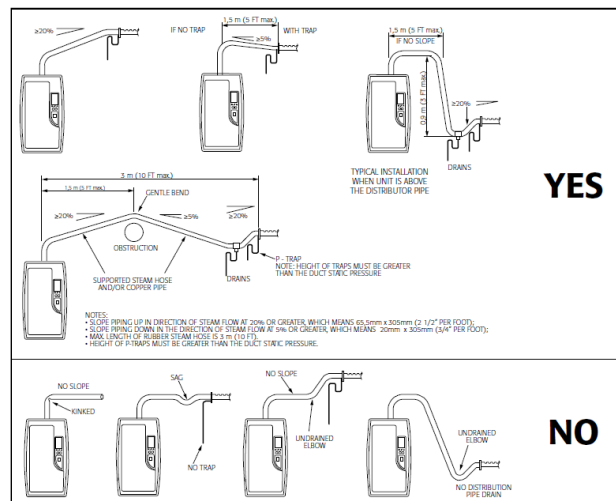


23.75" H



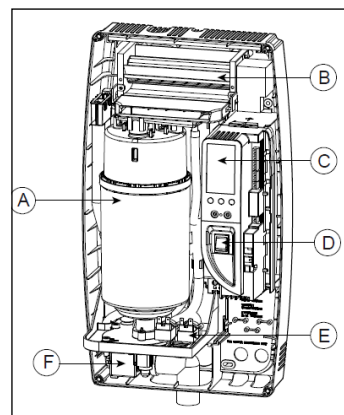
GFX3
GFI #7050

90% of All Operational Problems are Due to Improper Steam Piping

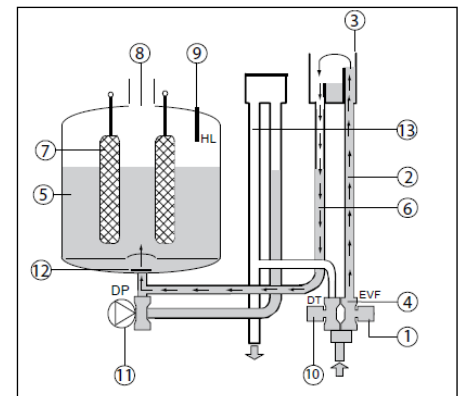


- Avoid kinks, sharp elbows or low spots that could collect or restrict the flow of steam to the distributor pipe; or the flow of condensate back to the humidifier.
- Support the hose adequately to avoid sags.

Internal Views



A	Steam Generator Cylinder
B	Room Blower/Manifold (Optional)
C	User Interface
D	ON / OFF Buttons
E	Fill & Tempering Valves
F	Drain Pump



1	Water Fill Valve	7	Electrode
2	Water Tube	8	Steam Output
3	Fill Cup Dam	9	Water Level Probe
4	Flow Restrictor	10	Tempering Valve
5	Water Reservoir	11	Drain Pump
6	Water Tube	12	Strainer

GeneralAire®

Elite Steam Humidifier

Models RS15P/25/25LC

Spec Sheet

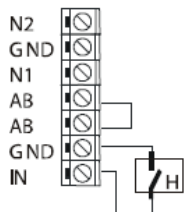
Model Options

Model No.	Power Supply (Single Phase)	Steam Output (lb/hr)	Steam Output (kg/h)	Power (kW)	Current (A)	External Power Wires	External Fuse (A) or Breaker
RS15P	110Vac 50/60Hz	5.5	2.5	1.80	16.40	AWG10	25
RS25	230Vac 50/60Hz	9-12	5.4	3.89	16.95	AWG10	25
RS25LC	230Vac 50/60Hz	9-12	5.4	3.89	16.95	AWG10	25
DS15P	110Vac 50/60Hz	5.5	2.5	1.80	16.40	AWG10	25
DS25	230Vac 50/60Hz	9-12	5.4	3.89	16.95	AWG10	25
DS25LC	230Vac 50/60Hz	9-12	5.4	3.89	16.95	AWG10	25
DS50	230Vac 50/60Hz	20-58	9	6.9	30	AWG8	40 A / Fast Blow
DS50LC	230Vac 50/60Hz	20-58	9	6.9	30	AWG8	40 A / Fast Blow

Recommended Settings:

At Outside Temperature		Recommended Setting
-20°F	-29°C	15%
-10°F	-23°C	20%
0°F	-18°C	25%
10°F	-12°C	30%
20°F	-7°C	35%
30°F	-1°C	40%

Control Wiring



3.t Operation controlled by an external mechanical humidistat

Fig. 3.t

Calculating Humidity Load

Step 1: Calculate the Total Cubic Feet of Home
Total Home Square Footage X Average Ceiling Height (Include the basement)

Step 2: Calculate the Load (lbs/hr)
Total Cubic Feet X Desired Condition Factor (Table Below) X 1.05 / Ea. Fireplace

Step 3: Calculate Gallons Per Day (GPD)
Gallons Per Day = Load (lbs/hr) X 2.88

Wiring Connections

Terminals	Functions	Electrical Specifications
L1-L2 GROUND	Power supply and ground connections	Power supply 110 VAC 1-phase 50-60 Hz 1.8 kW or 230 VAC 1-phase 50-60 Hz 4.05kW
KEY	Programming Port	Connecting to programming port or supervisor
AB-AB	Remote enabling input	Imposes an external NO contact; Rmax = 300 Ohm; Vmax=33 Vdc; Imax = 6mAdc; humidifier enabled = contact closed
IN-GND	Control signal input	If programmed 0...10V; Input impedance 10 KOhm If programmed On-Off: Vmax 33Vdc; Imax = 5mA; Rmax = 300 Ohm
NC-C-NO	NC alarm contact; Common alarm contact; NO alarm contact	250V; 8Amp max with resistive load; 4Amp max with inductive load
NO-C	External fan relay	250V; 8Amp max with resistive load; 4Amp max with inductive load
24GND	Power for external humidistat	Power supply for external humidistat 24 Vac; 2 Watt

Table 1.2 Pounds of Moisture / Hour / Cubic Foot*

Indoor Air Temp	Indoor RH %			
	35%	40%	45%	50%
68°F	0.00015	0.00018	0.00021	0.00024
70°F	0.00017	0.00020	0.00023	0.00026
72°F	0.00019	0.00022	0.00025	0.00028

Based on .5 Air Changes Per Hour (ACH)

Go to: www.generalaire.com/support-center/humidification-calculator for assistance in selecting a humidifier for a home.

Water Requirements

- Pressure: Between 20psi and 110 psi or 0.1 and 0.8 MPa (1 & 8 Bar)
- Temperature: Between 33°F and 104°F (1°C and 40°C)
- Flow Rate: minimum 0.45 L/min or 0.21 gpm
- Hardness: No greater than 40°FH (equal to 400 ppm³ of CaCO)
- Absence of organic compounds
- Conductivity: Between 125 to 1250 µs/cm



Water Conductivity Meter (GFI#7065)

Unacceptable Water Types

- Softened water
- Water containing disinfectants or corrosion inhibitors
- Industrial water, boiler water or water from cooling circuits
- Any potentially chemically or bacteriologically contaminated water
- Heated water