# A3 VAV DIFFUSERS

DVD | Square Plaque Face, Architectural VAV Diffuser



Excellence in Air Distribution

# **DVD Suggested Specification & Configuration -**

#### 1. SERIES: (XXX)

DVD - Square Plaque VAV Diffuser with Wall Mounted Thermostat

#### 2. CONFIGURATION: (X)

- P Primary VAV Diffuser Plaque Diffuser\*
- S Secondary VAV Plaque Diffuser

# 3. ROUND NECK SIZE: (XX)

06 - 6" Round

**VAV DIFFUSERS** 

- 08 8" Round
- 10 10" Round
- 12 12" Round
- 14 14" Round

#### 4. FRAME: (XXX)

F23 - Lay-in T-Bar F98 - Narrow-T

#### 5. PANEL: (XX)x(XX)

12"x12" 24"x24"

#### 6. TRANSFORMER : (X)

0 - None

- 1 40 VA 120V Primary Voltage Transformer
- 2 75 VA 120V/208V/240V Primary Voltage Transformer
- 3 100VA 120V/240V/277V Primary Voltage Transformer

# 7. THERMOSTAT: (X)

- T Digital Wall Thermostat
- S Smart Stat BACnet Digital Wall Thermostat
- 0 None

# 8. THERMOSTAT ACCESSORY: (X)

- B Thermostat Wall-Mounting Backing Plate
- A Smart Stat Wall-Mounting Backing Plate
- 0 None
- 9. FINISH: (XX)
  - 44 British White
- \* Primary requires a thermostat.

### **DVD: VAV DIFFUSER**

The VAV Plaque diffuser shall be Krueger model DVD. The DVD shall be provided with a wall-mounted thermostat. The diffuser is to be provided with an auto-changeover sensor to allow the unit to provide VAV cooling and VAV heating. The diffuser shall include an integral modulating disk that regulates the volume of supply air in response to the wall-mounted thermostat. The minimum damper position shall be factory set at 10% and be adjustable using the menu option on the thermostat.

On electrically driven units, the electric 24VAC actuators are to be drive-open, drive-closed motors to ensure finite control of the temperature by modulation. Actuators that incorporate an expanding material which drives the unit open when subjected to heat and requiring a spring-return mechanism to drive the diffuser closed shall not be acceptable. Electronic wallmounted thermostatic control shall be 2-10 VDC, and shall be provided with the VAV diffuser. All field wiring, materials and labor shall be supplied and installed by others.

The DVD plaque diffuser shall have a 22-gauge steel face panel measuring no less than 18"x18" for a 24"x24" unit, or 9x9 for a 12"x12" unit. The plaque shall not extend more than 1/4" below the plane of the ceiling. The back-pan shall be constructed from 22-gauge steel and shall be die-stamped in a single piece, to shall include an integrally drawn inlet. The diffuser neck shall have a minimum of 1 1/4" depth available for the duct connection.

The DVD shall have an integral volume damper/actuator assembly attached to the neck of the unit. This assembly shall be mounted with self-tapping screws from the outside of the neck facing inward. The overall height of the neck shall not add more than 6" to the existing diffuser height. The actuator and control assembly shall not extend out past the footprint of the diffuser face.

# PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 -7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or in accordance with ANSI/ ASHRAE Standard 70. .

# FINISH

The paint finish shall be #44 British White and shall be an anodic acrylic paint, baked at 315deg F for 30 minutes. The paint thickness shall be 0.8 - 1.0 mils, gloss at 60deg per ASTM D523-89 of 50 - 85%, pencil hardness per ASSTM D3363-92A of HB – H, crosshatch adhesion per ASTM D3359-83 of 4B – 5 B, impact per ASTM D2794-93 of direct impact > 100 in/lb and reverse impact > 80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of > 500 hours and water soak per ASTM D870-92 of 250 hours.

© KRUEGER

2017

SAMPLE CONFIGURATION: DVD - P - 10 - F23 - 24x24 - 0 - T - B - 44