

### **SDR Terminals are Designed for Quiet, Precise Zone Control**

Model SDR terminals provide variable air volume (VAV) control beyond the typical single duct box. They are specifically designed for precise air delivery throughout the entire operating range, regardless of the installed inlet conditions. They also offer improved space comfort and flexibility for a wide variety of HVAC applications.

SDR terminals take advantage of typical benefits provided by single duct units, while performing at extremely low sound levels. This is critical in today's buildings, where occupants are placing more emphasis on indoor acoustics.

### **The Ability to Provide Comfort**

to the occupant is the measurement of quality for any VAV terminal. Comfort is achieved through quiet and precise control of airflow to the occupied space.

The SDR terminal provides the ultimate in airflow control with the patented FlowStar™ airflow sensor. No other sensor in the industry can match the FlowStar's ability to quietly and precisely measure airflow. Accurate airflow measurement is the basis for airflow control. Refer to page 7 for a complete description of the FlowStar™ sensor.

### **For the Building Designer:**

**FLEXIBILITY** Selection and Layout. The SDR provides flexibility in system design. The compact cabinet design and quiet operation give the system designer the versatility to place units directly above occupied spaces. It is not necessary to locate the unit in the crowded space above a hall or corridor. This will reduce lengthy and expensive discharge duct runs. The FlowStar™ sensor ensures accurate control, even when space constraints do not permit long straight inlet duct runs to the terminal.

**Sizes.** Model SDR terminals are available in ten unit sizes to handle airflow capacities between 45 and 8000 CFM.

An ENVIRO-TEC® Windows® based Computer Selection Program is available on CD-ROM to facilitate the selection process. Contact your ENVIRO-TEC® representative to obtain a copy of this powerful and time-saving program.

### **For the Contractor:**

**CONVENIENCE** Quality. All SDR terminals are thoroughly inspected during each step of the manufacturing process, including a comprehensive "pre-ship" inspection, to assure the highest quality product available. All SDR ter-

minals are packaged to minimize damage during shipment.

**Quick Installation.** A standard single point electrical main power connection is provided with all electronic controls and electrical components located on the same side of the casing, for quick access, adjustment, and troubleshooting. Installation time is minimized with the availability of factory calibrated ENVIRO-TEC® controls and a low profile compact design.

The FlowStar™ sensor ensures accurate airflow measurement, regardless of the field installation conditions. A calibration label and wiring diagram is located on the terminal for quick reference during start-up.

The terminal is constructed to allow installation with standard metal hanging straps. Optional hanger brackets for use with all-thread support rods or wire hangers are also available.

### **For the Owner:**

### **VALUE AND SECURITY**

Quality. All metal components are fabricated from premium grade G60 galvanized, chromate finished steel. Unlike most manufacturers' terminals, the SDR is capable of withstanding a 125 hour salt spray test without showing any evidence of red rust.

**Energy Efficiency.** In addition to quiet and accurate temperature control, the building owner will benefit from lower operating costs. The highly amplified velocity pressure signal from the FlowStar™ inlet sensor allows precise airflow control at low air velocities.

The FlowStar™ sensor's airfoil shape provides minimal pressure drop across the terminal. This allows the central fan to run at a lower pressure and with less brake horsepower.

**Agency Certification.** Model SDR terminals with electronic controls and/or electric heat are listed with ETL as an assembly, and bear the ETL label.

SDR terminals and accessories are wired in compliance with all applicable NEC requirements and tested in accordance with ARI Standard 880.

**Maintenance and Service.** SDR terminals require no periodic maintenance, and are designed to provide trouble-free operation. All controls are located on the outside of the unit casing for easy access by maintenance personnel.

## CONTROLS

Model SDR terminals are available with INTELLIZONE™ DDC electronic, analog electronic, and pneumatic controls. ENVIRO-TEC® manufactures a complete line of analog and DDC electronic controls specifically designed for use with SDR terminals. These controls are designed to accommodate a multitude of various control schemes.

From the most basic to a sophisticated sequence of operation, the controls are designed by experts in VAV single duct terminal operation. Refer to the Electronic Controls Selection Guide, and the Pneumatic Controls Selection Guide for a complete description of the sequences and schematic drawings that are available.

Available Control Types:

- INTELLIZONE™ DDC Electronic (shown)
- Analog Electronic
- Pneumatic

Standard Features of ENVIRO-TEC® Electronic Controls Include:

- The Patented FlowStar™ Airflow Sensor
- ETL Listing
- NEMA 1 Enclosure
- 24 Volt Control Transformer
- Floating Modulating Actuator
- Brass Balancing Tees and Plenum Rated Tubing

