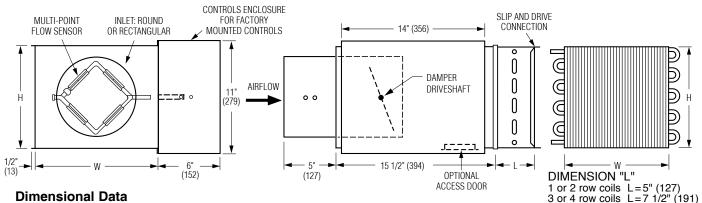


# SINGLE DUCT TERMINAL UNIT WITH **HOT WATER REHEAT**

DIGITAL CONTROLS • PRESSURE INDEPENDENT CONSTANT OR VARIABLE VOLUME

**MODEL: D31RW** 



Unit	Airflow Range* cfm (I/s)	w	Н		Coil Connections			
Size				Inlet Size	1 Row	2 Row	3 Row	4 Row
4	0 - 225 (0 - 106)	12 (305)	8 (203)	3 7/8 (98) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
5	0 - 400 (0 - 189)	12 (305)	8 (203)	4 7/8 (124) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
6	0 - 550 (0 - 260)	12 (305)	8 (203)	5 7/8 (149) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
7	0 - 800 (0 - 378)	12 (305)	10 (254)	6 7/8 (175) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
8	0 - 1100 (0 - 519)	12 (305)	10 (254)	7 7/8 (200) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
9	0 - 1400 (0 - 661)	14 (356)	12 1/2 (318)	8 7/8 (225) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
10	0 - 1840 (0 - 868)	14 (356)	12 1/2 (318)	9 7/8 (251) Round	1/2 (13)	7/8 (22)	7/8 (22)	7/8 (22)
12	0 – 2500 (0 – 1180)	16 (406)	15 (381)	11 7/8 (302) Round	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)
14	0 - 3370 (0 - 1590)	20 (508)	17 1/2 (508)	13 7/8 (352) Round	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)
16	0 - 4525 (0 - 2135)	24 (610)	18 (457)	15 7/8 (403) Round	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)
24 x 16	0 - 8330 (0 - 3931)	38 (965)	18 (457)	23 7/8 x 15 7/8 (606 x 403) Rect.	7/8 (22)	7/8 (22)	1 3/8 (35)	1 3/8 (35)

\* Maximum airflow limit is based upon 1.5" w.g. (373 Pa) max. differential pressure signal from Flow Sensor.

### **Standard Features:**

- 22 ga. (0.86) galvanized steel casing, mechanically sealed. low leakage construction. Leakage is less than 1% of the terminal rated airflow at 1" w.g. (250 Pa).
- 2 x 20 ga. (0.86) round laminated butterfly damper with a polyurethane peripheral gasket. 90° rotation, CW to close. Tight shut-off. Damper leakage is less the 1% of the terminal rated airflow at 3" w.g. (750 pa.) and less than 2% at 6" w.g. (1500 pa.)as tested in accordance with ANSI / ASHRAE Standard 130.
- 1/2" (13) dia. plated steel drive shaft. An indicator mark on the end of the shaft shows damper position.
- Unit sizes 4–16 feature round inlet collars.
- Multi-point averaging Flow Diamond Sensor. Supplied with balancing tees

- (4 and 5 are Annubar).
- Rectangular discharge with slip and drive cleat duct connection.
- Full NEMA 1 type controls enclosure for factory mounted controls
- 3/4" (19), dual density insulation, exposed edges coated to prevent air erosion. Meets the requirements of NFPA 90A and UL 181.
- · Right-hand controls location is standard (shown) when looking in direction of airflow. Optional left hand controls mounting is available.
- · Model D31RW can be installed horizontally, vertical or at any angle. Operation is not affected by position.

#### **Hot Water Coil Section:**

• 1/2" (13) Copper tubes and aluminum ripple fins, 10 per inch. • 1. 2. 3 or 4 row.

- · Left or right hand connection. Determined by looking in direction of airflow (RH illustrated).
- 1/2" (13), 7/8" (22) or 1 3/8" (35) O.D. male solder sweat connections.

#### **Digital Controls:**

- ☐ Factory mounted (supplied by others)
- ☐ Field mounted (supplied by others)
- ☐ Nailor EZvav. See separate submittal.





Intertek



#### Options and Accessories:

- ☐ 20 ga. (1.00) construction ☐ 24 VAC control transformer
- ☐ Toggle disconnect switch
- ☐ Dust tight enclosure seal

#### Liner:

- Steri-liner
- ☐ Steri-liner + Perforated metal
- ☐ Fiber-free
- ☐ Perforated metal
- ☐ Solid metal
- ☐ 1" (25) fiberglass

#### Flow Sensor:

- ☐ Diamond Flow Sensor, removable
- ☐ Cross Flow Sensor
- ☐ Cross Flow Sensor, removable

#### Other:

- us 🖵 Bottom access door.
  - Hanger brackets.
  - Ultra low leakage casing.
  - ☐ Controls enclosure field mounted controls.

#### Seismic Certification:

- ☐ Seismic Source International (Standard)
- ☐ HCAI (formerly OSHPD, California)

☐ Special features:

**SCHEDULE TYPE:** Page 1 of 2. Dimensions are in inches (mm). **PROJECT: B SERIES ENGINEER:** DATE SUPERSEDES DRAWING NO. **CONTRACTOR:** 1 - 10 - 25 3100 2 - 6 - 23 **D31RW** 



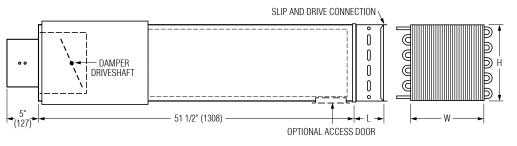
# SINGLE DUCT TERMINAL UNIT WITH HOT WATER REHEAT • ACCESSORIES

DIGITAL CONTROLS • PRESSURE INDEPENDENT

**MODEL: D31RW** 

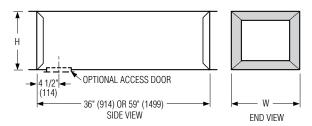
# ☐ AT3I 3' Integral Sound Attenuator plus Hot Water Coil

- Single continuous length terminal construction minimizes casing leakage.
- Continuous internal insulation reduces insulation seams and minimizes airflow disturbance.
- Supplied with same liner as basic unit.



DIMENSION "L" 1 or 2 row coils L=5" (127) 3 or 4 row coils L=7 1/2" (191)

# ☐ AT3S 3' Separate Discharge Sound Attenuator



- 22 ga. (0.86) galvanized steel construction.
- Slip and drive connection.
- Supplied with same liner as basic unit.

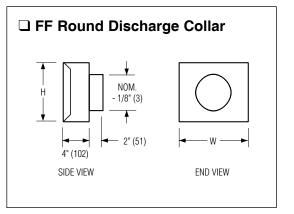
#### **Standalone Models:**

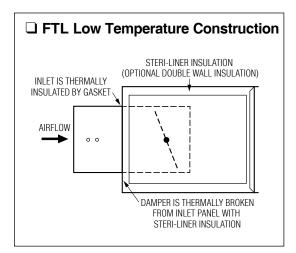
- ☐ **AT303** 3′ (916) Long Standard.
- ☐ **AT305** 5′ (1524) Long Optional.
- ☐ Special Features:

### Spec

## **Dimensional Data**

Unit Size	w	н	Access Door	FF Nominal Outlet Size
4, 5, 6	12 (305)	8 (203)		4, 5, 6 (102, 127, 152)
7, 8	12 (305)	10 (254)	8 x 5 (203 x 127)	7, 8 (178, 203)
9, 10	14 (356)	12 1/2 (318)	Flat Oval	9, 10 (229, 254)
12	16 (406)	15 (381)		12 (305)
14	20 (508)	17 1/2 (445)	12 x 6	14 (356)
16	24 (610)	18 (457)	(305 x 152)	16 (406)
24 x 16	38 (965)	18 (457)	Flat Oval	_





For Factory Mounted Valve/Piping Package Orientation, See drawing D30RWVP-1.

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SCHEDULE TYPE:	Page 2 01 2.  Dimensions are in inches (mm).					
PROJECT:		Dimensions are in inches (min).				
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.		
CONTRACTOR:	1 - 10 - 25	3100	2 - 6 - 23	D31RW		