

## Recommended Airflow Ranges For Model 3230 and 3240. Dual Duct VAV Terminal Units (Model 3210, see page B7).

The recommended airflow ranges below are for dual duct terminal units with pressure independent controls and are based upon controller sensitivity limits as shown for each control type. For a given unit size, the minimum and the maximum flow settings for the hot and cold decks respectively must be within the range limits to ensure pressure independent operation, accuracy and repeatability. The high end of the tabulated Total Airflow Range represents the Diamond Flow Sensor's differential pressure reading at 1" w.g. (250 Pa). This is a common high limit for many VAV controllers, whether pneumatic or analog/DDC transducers. For these reasons, factory settings will not be made outside these ranges. A minimum setting of zero (shut-off) is also available.

Pneumatic control sequences utilize the 3000 Controller for its superior control characteristics. The constant reset span feature of this controller ensures that both the hot and cold decks track each other and respond over the same thermostat signal range regardless of the individual



minimum and maximum settings which may be different. Control accuracy is therefore ensured.

ARI Standard 880 "Air Terminal Units" is the method of test for the certification program. The "standard rating condition" (certification rating point) airflow volumes for each terminal unit size are tabulated below. These air volumes equate to an approximate inlet velocity of 2000 fpm (10.2 m/s).

When digital or other controls are mounted by **Nailor**, but supplied by others, these values are guidelines only, based upon experience with the majority of controls currently available. Controls supplied by others for factory mounting are configured and calibrated in the field.

### Imperial Units, Cubic Feet per Minute

Unit Size	Total Airflow Range cfm	Airflow at 2000 fpm Inlet Velocity (nom.) cfm	Range of Minimum and Maximum Settings, cfm		
			Pneumatic 3000 Controller	Analog Electronic Controls	Digital Controls
			Min. – Max.	Min. – Max.	Min. – Max.
4	0 – 215	150	30 – 215	25 – 215	25 – 215
5	0 – 310	250	55 – 310	45 – 310	45 – 310
6	0 – 500	400	85 – 500	70 – 500	70 – 500
7	0 – 710	550	125 – 710	100 – 710	100 – 710
8	0 – 1000	700	180 – 1000	150 – 1000	150 – 1000
9	0 – 1300	900	210 – 1300	170 – 1300	170 – 1300
10	0 – 1435	1100	250 – 1435	205 – 1435	205 – 1435
12	0 – 2150	1600	395 – 2150	325 – 2150	325 – 2150
14	0 – 3060	2100	495 – 3060	400 – 3060	400 – 3060
16	0 – 4050	2800	760 – 4050	625 – 4050	625 – 4050

### Metric Units, Liters per Second

Unit Size	Total Airflow Range l/s	Airflow at 10.2 m/s Inlet Velocity (nom.) l/s	Range of Minimum and Maximum Settings, l/s		
			Pneumatic 3000 Controller	Analog Electronic Controls	Digital Controls
			Min. – Max.	Min. – Max.	Min. – Max.
4	0 – 101	71	14 – 101	12 – 101	12 – 101
5	0 – 146	118	26 – 146	21 – 146	21 – 146
6	0 – 236	189	40 – 236	33 – 236	33 – 236
7	0 – 335	260	59 – 333	47 – 335	47 – 355
8	0 – 472	330	85 – 472	71 – 472	71 – 472
9	0 – 614	425	99 – 614	80 – 614	80 – 614
10	0 – 677	519	118 – 677	97 – 677	97 – 677
12	0 – 1015	755	186 – 1015	153 – 1015	153 – 1015
14	0 – 1444	991	234 – 1444	189 – 1444	189 – 1444
16	0 – 1912	1322	359 – 1912	295 – 1912	295 – 1912