

## Performance

## Unit Tag: DOAS1

## Summary

## Unit Details

|                |                           |                                   |                                     |
|----------------|---------------------------|-----------------------------------|-------------------------------------|
| Unit Tag:      | DOAS1                     | Orientation:                      | Horizontal                          |
| Model:         | C24IN - (2000 - 2700 CFM) | ESP SA / RA (inH <sub>2</sub> O): | 1 / 1                               |
| Qty:           | 2                         | Filters OA / RA:                  | 2" 85% MERV-13 / 2" 30% MERV-8      |
| Location:      | Indoor                    | Controls Preference:              | Constant Volume                     |
| Altitude (ft): | 164                       | Dampers & Actuator:               | In Casing - Field Mounted and Wired |
| Bypass:        | No                        |                                   |                                     |

## Electrical Requirements

Total Number of Connections Required: 2

| Unit                   | Preheat Electric Heater |
|------------------------|-------------------------|
| Voltage: 208V/3ph/60Hz | Std. Coil: 1            |
| Range: 200 - 240V      | Controls: SCR           |
| FLA: 17.53             | Voltage: 460V/3ph/60Hz  |
| MCA: 19.68             | Range: 414.0 - 483.0V   |
| RFS: 25A               | FLA: 15.6               |
|                        | MCA: 20.475             |
|                        | RFS: 25A                |
|                        | Max KW: 13              |

## Preheat Electric Heater

| Actual  |                                     |
|---|-------------------------------------|
| Outdoor Air (CFM):                                  | 2600                                |
| Voltage:  | 460V/3ph/60Hz                       |
| kW:   | 10.9                                |
| Ent. Air DB/WB (F):                                 | -4.4 / -4.5                         |
| Lvg Air DB/WB (F):                                  | 7.6 / 5.5                           |
| Installation:                                       | In Casing – Field Mounted and Wired |
| *Separate electrical connection required for heater |                                     |

## Heat Exchanger

| Design Conditions                | Outdoor Air        | Return Air     |
|----------------------------------|--------------------|----------------|
| SCFM:                            | 2600               | 2600           |
| Summer DB (F) / WB (F) / RH (%): | 84.2 / 68.2 / 44.4 | 75 / 63 / 51.2 |
| Winter DB (F) / WB (F) / RH (%): | 7.6 / 5.5 / 51.4   | 70 / 54.3 / 35 |

| Performance Leaving Air          | Supply Air         | Exhaust Air        |
|----------------------------------|--------------------|--------------------|
| SCFM:                            | 2600               | 2600               |
| Summer DB (F) / WB (F) / RH (%): | 78.3 / 65.4 / 50.5 | 80.9 / 66 / 45.5   |
| Winter DB (F) / WB (F) / RH (%): | 47.9 / 38.3 / 39   | 29.7 / 29.5 / 97.4 |

| Performance                | Summer | Winter |
|----------------------------|--------|--------|
| Supply Air PD (inH2O):     | 0.96   | 0.96   |
| Exhaust Air PD (inH2O):    | 1.79   | 1.79   |
| Sensible Effectiveness %:  | 64.5   | 64.5   |
| Latent Effectiveness %:    | 43.8   | 43.9   |
| Total Effectiveness %:     | 55.6   | 59.3   |
| EATR %:                    | 0.5    | 0.5    |
| OACF:                      | 1.00   | 1.00   |
| Net Supply Airflow (SCFM): | 2600   | 2600   |
| Energy Recover Ratio %:    | 55.62  | 59.16  |
| BTU/H Saved                | 25804  | 139717 |



Summer performance: Certified in accordance with the AHRI ERV Certification Program, which is based on AHRI Standard 1060. Certified units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org).

Winter performance: Application rating is outside the scope of the AHRI ERV Certification Program but is rated in accordance with AHRI Standard 1060.

