

# SUBMITTAL DATA

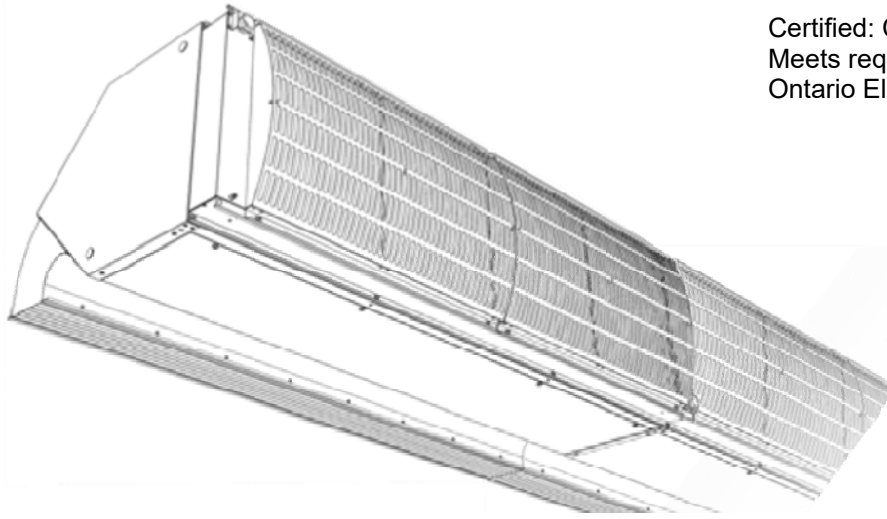


## 3500 Series Air Curtain

Modular Industrial Air Curtains for Indoor Use

Horizontal & Vertical Mount Models

Opening height: 10' to 19'- 8" [3 to 6 m]; width up to 16' [5m]



Certified: CSA SPE-1000  
Meets requirements Rule 2-024 –  
Ontario Electrical Safety Code

|                            |                 |                 |                 |
|----------------------------|-----------------|-----------------|-----------------|
| <b>PROJECT:</b>            |                 |                 |                 |
| <b>ENGINEER:</b>           |                 |                 |                 |
| <b>CONTRACTOR:</b>         |                 |                 |                 |
| <b>DISTRIBUTOR:</b>        |                 |                 |                 |
| <b>SchwankAir MODEL #:</b> | <b>3559</b>     | <b>3579</b>     | <b>3599</b>     |
| <b>Electric Heat</b>       | <b>3559WH</b>   | <b>3579WH</b>   | <b>3599WH</b>   |
| <b>Hot Water Heat</b>      | <b>3559WH-2</b> | <b>3579WH-2</b> | <b>3599WH-2</b> |
| <b>APPROVED BY:</b>        |                 |                 |                 |
| <b>DATE:</b>               |                 |                 |                 |
| <b>APPROVAL #:</b>         |                 |                 |                 |

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**Notice:**

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**SchwankAir 3500 Series****Application:**

The SchwankAir 3500 Series air curtain is intended for indoor horizontal or vertical mounting above/ beside building doorway openings: from heights 10' to 19'- 8" [3 to 6 m]; and widths up to 16' [5m] .

The 3500 Series air curtain is designed to provide quiet operation and energy savings by effectively separating indoor and outdoor environments, restricting entry of unconditioned air, dust, fumes, and insects. The 3500 Series air curtain can also be used at interior openings /doorways to isolate coolers, clean room environments, and other unconditioned areas.

**Features / Components Summary:**

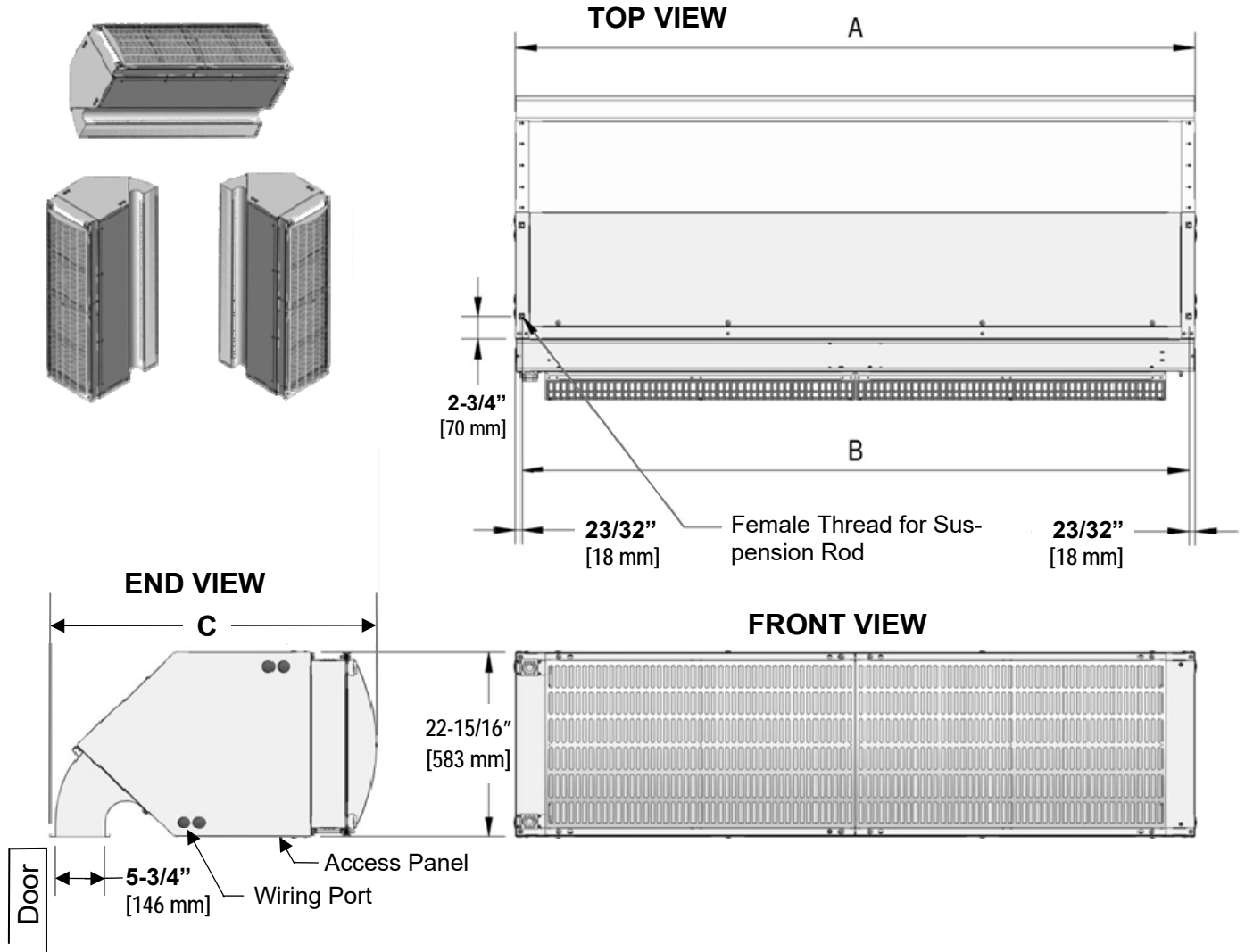
- Available unit widths (nominal): 59, 79, or 99 inches [1500, 2000, 2500 mm]
  - Multiple units are ganged together to suit opening width or height
- Galvanized sheet steel construction with durable gray finish
- Units suspend from structure with field supplied hardware
- b-Control (wired remote control) included
  - On/Off control
  - Continuously variable fan speed control
- 230 Vac / single phase / 60 hZ

Certified: CSA SPE-1000  
Meets requirements Rule 2-024 –  
Ontario Electrical Safety Code

# PROJECT QUANTITIES & UNIT DIMENSIONS

## Horizontal, and Left or Right Vertical Orientation

| Base Unit    |             |          | No Heat |           | Hot Water |         | With Filter Module |          |   |           |
|--------------|-------------|----------|---------|-----------|-----------|---------|--------------------|----------|---|-----------|
|              | A           | B        | C       | QTY       | C         | QTY     | C                  | QTY      | C | QTY       |
|              | <b>3559</b> | 59-1/16" | 57-5/8" | 33-19/32" |           | 37-5/8" |                    | 38-7/16" |   | 42-15/16" |
| <b>3579</b>  | 78-3/4"     | 77-5/16" |         |           |           |         |                    |          |   |           |
| <b>3599</b>  | 98-7/16"    | 97"      |         |           |           |         |                    |          |   |           |
| Metric Units | <b>3559</b> | 1500 mm  | 1464 mm | 853 mm    | 956 mm    | 976 mm  | 1079 mm            |          |   |           |
|              | <b>3579</b> | 2000 mm  | 1964 mm |           |           |         |                    |          |   |           |
|              | <b>3599</b> | 2500 mm  | 2464 mm |           |           |         |                    |          |   |           |



# Technical & Performance Specifications

## 3500 Series: Ambient Air Recirculation Models – No Heating Coil

### 3559 Quantity on Project:

Specifications for:

- 3500WH & 3500WH-2: next pages

|                               |                         |                    |             |             |             |             |
|-------------------------------|-------------------------|--------------------|-------------|-------------|-------------|-------------|
| unit length                   | ft [m]                  | 4.9 [1.5]          |             |             |             |             |
| door width / height           | ft [m]                  | 9.8 - 19.7 [3 - 6] |             |             |             |             |
| electrical supply             | V/ph/Hz                 | 230/1/60           |             |             |             |             |
| max. input current            | A                       | 3                  |             |             |             |             |
| max. input power              | HP [kW]                 | 0.7 [0.52]         |             |             |             |             |
| weight                        | lb [kg]                 | 171 [78]           |             |             |             |             |
| <b>speed</b>                  |                         | <b>2V</b>          | <b>4V</b>   | <b>6V</b>   | <b>8V</b>   | <b>10V</b>  |
| air volume                    | cfm [m <sup>3</sup> /h] | 887 [1506]         | 1915 [3253] | 2906 [4937] | 3597 [6111] | 3966 [6738] |
| power consumption             | kW                      | 0.02               | 0.07        | 0.17        | 0.33        | 0.52        |
| sound pressure level at 16 ft | dB(A)                   | 24                 | 40          | 50          | 57          | 60          |

### 3579 Quantity on Project:

|                               |                         |                    |             |             |             |             |
|-------------------------------|-------------------------|--------------------|-------------|-------------|-------------|-------------|
| unit length                   | ft [m]                  | 6.6 [2]            |             |             |             |             |
| door width / height           | ft [m]                  | 9.8 - 19.7 [3 - 6] |             |             |             |             |
| electrical supply             | V/ph/Hz                 | 230/1/60           |             |             |             |             |
| max. input current            | A                       | 4                  |             |             |             |             |
| max. input power              | HP [kW]                 | 0.93 [0.69]        |             |             |             |             |
| weight                        | lb [kg]                 | 221 [100]          |             |             |             |             |
| <b>speed</b>                  |                         | <b>2V</b>          | <b>4V</b>   | <b>6V</b>   | <b>8V</b>   | <b>10V</b>  |
| air volume                    | cfm [m <sup>3</sup> /h] | 1182 [2008]        | 2553 [4337] | 3874 [6582] | 4796 [8148] | 5288 [8984] |
| power consumption             | kW                      | 0.03               | 0.1         | 0.23        | 0.44        | 0.69        |
| sound pressure level at 16 ft | dB(A)                   | 25                 | 41          | 51          | 58          | 61          |

### 3599 Quantity on Project:

|                               |                         |                    |             |             |              |              |
|-------------------------------|-------------------------|--------------------|-------------|-------------|--------------|--------------|
| unit length                   | ft [m]                  | 8.2 [2.5]          |             |             |              |              |
| door width / height           | ft [m]                  | 9.8 - 19.7 [3 - 6] |             |             |              |              |
| electrical supply             | V/ph/Hz                 | 230/1/60           |             |             |              |              |
| max. input current            | A                       | 5                  |             |             |              |              |
| max. input power              | HP [kW]                 | 1.17 [0.87]        |             |             |              |              |
| weight                        | lb [kg]                 | 272 [124]          |             |             |              |              |
| <b>speed</b>                  |                         | <b>2V</b>          | <b>4V</b>   | <b>6V</b>   | <b>8V</b>    | <b>10V</b>   |
| air volume                    | cfm [m <sup>3</sup> /h] | 1477 [2510]        | 3191 [5421] | 4843 [8227] | 5995 [10185] | 6610 [11230] |
| power consumption             | kW                      | 0.04               | 0.12        | 0.29        | 0.55         | 0.87         |
| sound pressure level at 16 ft | dB(A)                   | 26                 | 42          | 52          | 59           | 62           |

# 3500WH Series: Hot Water Heating Coil; High Temperature Water; 1 Row Element

## 3559WH Quantity on Project:

Specifications for:

- 3500 No Heat: previous page
- 3500WH-2 next page

|   |                         |                    |             |             |             |              |
|---|-------------------------|--------------------|-------------|-------------|-------------|--------------|
| unit length                               | ft [m]                  | 4.9 [1.5]          |             |             |             |              |
| door width / height                       | ft [m]                  | 9.8 - 19.7 [3 - 6] |             |             |             |              |
| electrical supply                         | V/ph/Hz                 | 230/1/60           |             |             |             |              |
| max. input current                        | A                       | 3                  |             |             |             |              |
| max. input power                          | kW                      | 0.52               |             |             |             |              |
| weight                                    | lb [kg]                 | 202 [92]           |             |             |             |              |
| water range                               | °F [°C]                 | 176/140 [80/60]    |             |             |             |              |
| <b>speed</b>                              |                         | <b>2V</b>          | <b>4V</b>   | <b>6V</b>   | <b>8V</b>   | <b>10V</b>   |
| air volume                                | cfm [m <sup>3</sup> /h] | 887 [1506]         | 1915 [3253] | 2906 [4937] | 3597 [6111] | 3966 [6738]  |
| power consumption                         | kW                      | 0.02               | 0.07        | 0.17        | 0.33        | 0.52         |
| <b>air inlet</b>                          |                         | <b>59°F [15°C]</b> |             |             |             |              |
| heating capacity                          | kBTU/h [kW]             | 45.4 [13.3]        | 71.6 [21]   | 89.5 [26.2] | 99.6 [29.2] | 104.5 [30.6] |
| discharge air temperature                 | °F [°C]                 | 105.4 [40.8]       | 92.9 [33.8] | 86.9 [30.5] | 84.1 [28.9] | 89.4 [31.9]  |
| water flow rate                           | USGPH [l/h]             | 154 [583]          | 243 [920]   | 304 [1150]  | 338 [1280]  | 312 [1181]   |
| water pressure drop                       | psi [kPa]               | 0.1 [0.4]          | 0.1 [1]     | 0.2 [1.5]   | 0.3 [1.8]   | 0.3 [2]      |
| water pressure drop with 2 & 3-port valve | psi [kPa]               | 0.1 [0.8]          | 0.3 [1.8]   | 0.4 [2.8]   | 0.5 [3.4]   | 0.5 [3.8]    |
| sound pressure level at 16 ft             | dB(A)                   | 24                 | 40          | 50          | 57          | 60           |

## 3579WH Quantity on Project:

|   |                         |                    |              |              |              |              |
|---|-------------------------|--------------------|--------------|--------------|--------------|--------------|
| unit length                               | ft [m]                  | 6.6 [2]            |              |              |              |              |
| door width / height                       | ft [m]                  | 9.8 - 19.7 [3 - 6] |              |              |              |              |
| electrical supply                         | V/ph/Hz                 | 230/1/60           |              |              |              |              |
| max. input current                        | A                       | 4                  |              |              |              |              |
| max. input power                          | kW                      | 0.69               |              |              |              |              |
| weight                                    | lb [kg]                 | 260 [118]          |              |              |              |              |
| water range                               | °F [°C]                 | 176/140 [80/60]    |              |              |              |              |
| <b>speed</b>                              |                         | <b>2V</b>          | <b>4V</b>    | <b>6V</b>    | <b>8V</b>    | <b>10V</b>   |
| air volume                                | cfm [m <sup>3</sup> /h] | 1182 [2008]        | 2553 [4337]  | 3874 [6582]  | 4796 [8148]  | 5288 [8984]  |
| power consumption                         | kW                      | 0.03               | 0.1          | 0.23         | 0.44         | 0.69         |
| <b>air inlet</b>                          |                         | <b>59°F [15°C]</b> |              |              |              |              |
| heating capacity                          | kBTU/h [kW]             | 64.6 [18.9]        | 102.9 [30.1] | 129.2 [37.9] | 144.2 [42.3] | 151.4 [44.4] |
| discharge air temperature                 | °F [°C]                 | 108.5 [42.5]       | 95.5 [35.3]  | 89.2 [31.8]  | 86.2 [30.1]  | 91.4 [33]    |
| water flow rate                           | USGPH [l/h]             | 219 [829]          | 349 [1321]   | 439 [1660]   | 490 [1853]   | 455 [1722]   |
| water pressure drop                       | psi [kPa]               | 0.1 [0.9]          | 0.3 [2.2]    | 0.5 [3.4]    | 0.6 [4.2]    | 0.7 [4.5]    |
| water pressure drop with 2 & 3-port valve | psi [kPa]               | 0.2 [1.6]          | 0.6 [4]      | 0.9 [6.1]    | 1.1 [7.6]    | 1.2 [8.3]    |
| sound pressure level at 16 ft             | dB(A)                   | 25                 | 41           | 51           | 58           | 61           |

## 3599WH Quantity on Project:

|   |                         |                    |              |              |              |              |
|---|-------------------------|--------------------|--------------|--------------|--------------|--------------|
| unit length                               | ft [m]                  | 8.2 [2.5]          |              |              |              |              |
| door width / height                       | ft [m]                  | 9.8 - 19.7 [3 - 6] |              |              |              |              |
| electrical supply                         | V/ph/Hz                 | 230/1/60           |              |              |              |              |
| max. input current                        | A                       | 5                  |              |              |              |              |
| max. input power                          | kW                      | 0.87               |              |              |              |              |
| weight                                    | lb [kg]                 | 318 [144]          |              |              |              |              |
| water range                               | °F [°C]                 | 176/140 [80/60]    |              |              |              |              |
| <b>speed</b>                              |                         | <b>2V</b>          | <b>4V</b>    | <b>6V</b>    | <b>8V</b>    | <b>10V</b>   |
| air volume                                | cfm [m <sup>3</sup> /h] | 1477 [2510]        | 3191 [5421]  | 4843 [8227]  | 5995 [10185] | 6610 [11230] |
| power consumption                         | kW                      | 0.04               | 0.12         | 0.29         | 0.55         | 0.87         |
| <b>air inlet temperature</b>              |                         | <b>59°F [15°C]</b> |              |              |              |              |
| heating capacity                          | kBTU/h [kW]             | 83.8 [24.5]        | 134.2 [39.3] | 169.1 [49.6] | 189.1 [55.4] | 198.6 [58.2] |
| discharge air temperature                 | °F [°C]                 | 110.4 [43.5]       | 97.1 [36.2]  | 90.6 [32.6]  | 87.6 [30.9]  | 92.6 [33.7]  |
| water flow rate                           | USGPH [l/h]             | 284 [1076]         | 456 [1724]   | 574 [2172]   | 642 [2429]   | 599 [2266]   |
| water pressure drop                       | psi [kPa]               | 0.2 [1.7]          | 0.6 [4.1]    | 0.9 [6.3]    | 1.1 [7.8]    | 1.2 [8.5]    |
| water pressure drop with 2 & 3-port valve | psi [kPa]               | 0.4 [2.9]          | 1 [7.1]      | 1.6 [11]     | 2 [13.7]     | 2.2 [15]     |
| sound pressure level at 16 ft             | dB(A)                   | 26                 | 42           | 52           | 59           | 62           |

# 3500WH-2 Series: Hot Water Heating Coil; Low Temperature Water; 2 Rows Element

## 3559WH-2 Quantity on Project:

Specifications for:

- 3500 No Heat: page 5
- 3500WH: previous page

|   |                         |                    |             |              |              |             |
|---|-------------------------|--------------------|-------------|--------------|--------------|-------------|
| unit length                               | ft [m]                  | 4.9 [1.5]          |             |              |              |             |
| door width / height                       | ft [m]                  | 9.8 - 19.7 [3 - 6] |             |              |              |             |
| electrical supply                         | V/ph/Hz                 | 230/1/60           |             |              |              |             |
| max. input current                        | A                       | 3                  |             |              |              |             |
| max. input power                          | kW                      | 0.52               |             |              |              |             |
| weight                                    | lb [kg]                 | 210 [95]           |             |              |              |             |
| water range                               | °F [°C]                 | 140/104 [60/40]    |             |              |              |             |
| <b>speed</b>                              |                         | <b>2V</b>          | <b>4V</b>   | <b>6V</b>    | <b>8V</b>    | <b>10V</b>  |
| air volume                                | cfm [m <sup>3</sup> /h] | 887 [1506]         | 1915 [3253] | 2906 [4937]  | 3597 [6111]  | 3966 [6738] |
| power consumption                         | kW                      | 0.02               | 0.07        | 0.17         | 0.33         | 0.52        |
| <b>air inlet</b>                          |                         | <b>59°F [15°C]</b> |             |              |              |             |
| heating capacity                          | kBTU/h [kW]             | 47.9 [14]          | 78.8 [23.1] | 100.1 [29.3] | 112.2 [32.9] | 118 [34.6]  |
| discharge air temperature                 | °F [°C]                 | 107.9 [42.2]       | 96.3 [35.7] | 90.2 [32.3]  | 87.3 [30.7]  | 90.1 [32.3] |
| water flow rate                           | USGPH [l/h]             | 161 [609]          | 265 [1003]  | 336 [1273]   | 377 [1427]   | 320 [1212]  |
| water pressure drop                       | psi [kPa]               | 0.1 [0.5]          | 0.2 [1.2]   | 0.3 [1.8]    | 0.3 [2.3]    | 0.4 [2.5]   |
| water pressure drop with 2 & 3-port valve | psi [kPa]               | 0.1 [0.8]          | 0.3 [2.2]   | 0.5 [3.4]    | 0.6 [4.3]    | 0.7 [4.7]   |
| sound pressure level at 16 ft             | dB(A)                   | 24                 | 40          | 50           | 57           | 60          |

## 3579WH-2 Quantity on Project:

|   |                         |                    |              |              |              |              |
|---|-------------------------|--------------------|--------------|--------------|--------------|--------------|
| unit length                               | ft [m]                  | 6.6 [2]            |              |              |              |              |
| door width / height                       | ft [m]                  | 9.8 - 19.7 [3 - 6] |              |              |              |              |
| electrical supply                         | V/ph/Hz                 | 230/1/60           |              |              |              |              |
| max. input current                        | A                       | 4                  |              |              |              |              |
| max. input power                          | kW                      | 0.69               |              |              |              |              |
| weight                                    | lb [kg]                 | 271 [123]          |              |              |              |              |
| water range                               | °F [°C]                 | 140/104 [60/40]    |              |              |              |              |
| <b>speed</b>                              |                         | <b>2V</b>          | <b>4V</b>    | <b>6V</b>    | <b>8V</b>    | <b>10V</b>   |
| air volume                                | cfm [m <sup>3</sup> /h] | 1182 [2008]        | 2553 [4337]  | 3874 [6582]  | 4796 [8148]  | 5288 [8984]  |
| power consumption                         | kW                      | 0.03               | 0.1          | 0.23         | 0.44         | 0.69         |
| <b>air inlet</b>                          |                         | <b>59°F [15°C]</b> |              |              |              |              |
| heating capacity                          | kBTU/h [kW]             | 68.5 [20.1]        | 114.4 [33.5] | 146.4 [42.9] | 164.7 [48.3] | 173.5 [50.8] |
| discharge air temperature                 | °F [°C]                 | 111.5 [44.2]       | 99.6 [37.6]  | 93.2 [34]    | 90.1 [32.3]  | 92.8 [33.8]  |
| water flow rate                           | USGPH [l/h]             | 230 [871]          | 384 [1455]   | 492 [1862]   | 553 [2094]   | 477 [1806]   |
| water pressure drop                       | psi [kPa]               | 0.1 [1]            | 0.4 [2.7]    | 0.6 [4.2]    | 0.8 [5.3]    | 0.8 [5.8]    |
| water pressure drop with 2 & 3-port valve | psi [kPa]               | 0.3 [1.8]          | 0.7 [4.8]    | 1.1 [7.7]    | 1.4 [9.7]    | 1.6 [10.7]   |
| sound pressure level at 16 ft             | dB(A)                   | 25                 | 41           | 51           | 58           | 61           |

## 3599WH-2 Quantity on Project:

|   |                         |                    |              |             |              |              |
|---|-------------------------|--------------------|--------------|-------------|--------------|--------------|
| unit length                               | ft [m]                  | 8.2 [2.5]          |              |             |              |              |
| door width / height                       | ft [m]                  | 9.8 - 19.7 [3 - 6] |              |             |              |              |
| electrical supply                         | V/ph/Hz                 | 230/1/60           |              |             |              |              |
| max. input current                        | A                       | 5                  |              |             |              |              |
| max. input power                          | kW                      | 0.87               |              |             |              |              |
| weight                                    | lb [kg]                 | 331 [150]          |              |             |              |              |
| water range                               | °F [°C]                 | 140/104 [60/40]    |              |             |              |              |
| <b>speed</b>                              |                         | <b>2V</b>          | <b>4V</b>    | <b>6V</b>   | <b>8V</b>    | <b>10V</b>   |
| air volume                                | cfm [m <sup>3</sup> /h] | 1477 [2510]        | 3191 [5421]  | 4843 [8227] | 5995 [10185] | 6610 [11230] |
| power consumption                         | kW                      | 0.04               | 0.12         | 0.29        | 0.55         | 0.87         |
| <b>air inlet temperature</b>              |                         | <b>59°F [15°C]</b> |              |             |              |              |
| heating capacity                          | kBTU/h [kW]             | 89.1 [26.1]        | 150.1 [44]   | 193 [56.6]  | 217.5 [63.7] | 229.3 [67.2] |
| discharge air temperature                 | °F [°C]                 | 113.6 [45.3]       | 101.6 [38.7] | 95.1 [35.1] | 91.9 [33.3]  | 94.4 [34.6]  |
| water flow rate                           | USGPH [l/h]             | 299 [1132]         | 504 [1909]   | 648 [2453]  | 731 [2765]   | 636 [2405]   |
| water pressure drop                       | psi [kPa]               | 0.3 [1.9]          | 0.7 [5]      | 1.2 [8]     | 1.4 [10]     | 1.6 [11]     |
| water pressure drop with 2 & 3-port valve | psi [kPa]               | 0.5 [3.2]          | 1.3 [8.7]    | 2 [14]      | 2.6 [17.6]   | 2.8 [19.5]   |
| sound pressure level at 16 ft             | dB(A)                   | 26                 | 42           | 52          | 59           | 62           |

**Optional Accessories - Project Quantities:**

| Project Qty | Accessory                           | Description / Feature      |
|-------------|-------------------------------------|----------------------------|
|             | Door switch                         | Regulate operation         |
|             | Outdoor thermostat (field supplied) | Basic weather compensation |
|             | Modbus / BACNet module              | BMS control & monitoring   |
|             |                                     |                            |
|             |                                     |                            |