

Steam Exchange Humidifiers



Humidification and Evaporative Cooling

 **condair**



Humidifiers designed to deliver reliable humidity from facility steam boilers.

People spend 90% of their lives indoors, therefore the importance of correct temperature and humidity levels are critical to personal health and comfort. Too much humidity can be as destructive as too little.

Manufacturing and industrial processes are also directly affected by the indoor environment. Like people, machines work better in favorable surroundings. All equipment and processes respond in various ways to temperature and humidity fluctuations. For maximum performance, reliable temperature and humidity are essential.

In hospitals, universities, museums, galleries, and other facilities, boiler steam humidification is a tried and true way to achieve reliable humidity control.

Condair SE-Series steam to steam heat exchange humidifiers use central facility steam as an energy source to boil potable, reverse osmosis, or deionized water. The result is clean, hygienic humidification steam, completely free of boiler chemicals and amines.

hospitals
educational facilities
government buildings
institutional buildings
printing plants
museums and galleries
commercial offices



SE outdoor model

Condair **SE-Series** steam exchange humidifiers generate, clean, atmospheric steam using facility boiler steam as an energy source. Boiler steam passes through high-quality 316 stainless steel heat exchangers, turning fresh water into steam. This technique prevents chemical boiler treatments from being dispersed into the building air supply.

The SE-Series is a complete packaged humidifier and includes all required components, most of which are contained within the cabinetry. The humidifier is designed for easy installation, reliable operation, and rapid maintenance. Available capacities range from 23 to 475 kg/hr, when supplied with facility steam pressure at a maximum of 1 bar.

- 2 models available: premium SETC and rugged outdoor SETC
- Capacities up to 475 kg/hr
- “Total Controller” with backlit display
- Automatic scale management based on steam production
- All components suitable for RO, DI or potable water
- Built-in drain water cooling
- Fully modulating down to 15% of capacity
- Built-in float & thermostatic steam trap(s) and P-trap
- Fully insulated tank for efficient operation
- Pre-cleaning sequence for easier and faster maintenance
- Includes valve, actuator and strainer
- Building management system compatible

| Features | |
|---|---|
| Complete cabinetry with insulation | ■ |
| Side and top maintenance access (most capacities) | ■ |
| Stainless steel flat-surface heat exchanger | ■ |
| Valve, actuator, wye strainer included | ■ |
| Built-in float & thermostatic steam trap(s) | ■ |
| Built-in drain water cooler | ■ |
| Precise water level indication system | ■ |
| Fully modulating down to 15% of total capacity | ■ |
| Modulating demand signal acceptance | ■ |
| Transducer signal acceptance | ■ |
| Single or dual modulation | ■ |
| LED unit status indicators | ■ |
| Dry contacts for remote fault indication | ■ |
| 3-day drain with no call for humidity | ■ |
| Full tank blow down capability via time of day, timer, or signal from BMS | ■ |
| Automatic blow down cycles based on steam production | ■ |
| Backlit LCD display and keypad | ■ |
| On-screen unit status | ■ |
| Self-diagnostic capabilities | ■ |
| Fault and maintenance history | ■ |
| Onscreen troubleshooting guide | ■ |
| Networking capability up to 10 units | ■ |
| Low and high relative humidity alarms | ■ |
| Time to next maintenance alarm | ■ |
| Keep warm feature | ■ |
| Water saving smart drain water cooling | ■ |
| Pre-cleaning sequence | ■ |
| Freeze protection | ■ |
| Floor stand | ■ |
| e-links | ■ |

■ Standard ■ Optional

| SPECIFICATION | SE 050 | SE 100 | SE 175 | SE 250 | SE 375 | SE 525 | SE 750 | SE 1050 |
|--|--------------------------------------|---------------------------|-----------|---------------------------|--------|----------------------------|------------|----------------------------|
| Pressure range - bar | 0.34-1.03 | | | | | | | |
| Max. capacities (at 1.03 bar steam pressure) - kg/hr | 23 | 45 | 79 | 114 | 170 | 240 | 340 | 476 |
| Physical data - Width x Height x Depth | 65.1cm x 52.4cm x 46.7cm | 117.8cm x 81.4cm x 50.8cm | | 117.8cm x 81.4cm x 67.1cm | | 117.8cm x 81.4cm x 106.7cm | | 117.8cm x 81.4cm x 147.3cm |
| Standard actuator, with failsafe spring return | Electric Modulating 0-10 VDC, 24 VAC | | | | | | | |
| Built-in steam trap | Float & Thermostatic | | | | | | | |
| Insulation & Cabinetry | Standard | | | | | | | |
| Voltage/Phase | 230 / 1 / 50 | | | | | | | |
| Full load amps | 0.65 (SETC), 2.7 - 6.9 (SETC OD) | | | | | | | |
| Power Consumption (kW) | 0.15 (SETC), 0.65 - 1.65 (SETC OD) | | | | | | | |
| Internal Smart Drain Water Cooler | Standard, 60°C | | | | | | | |
| Steam Outlets (s) - OD | 1 x 44 mm | | 1 x 76 mm | | | 1 x 102 mm | 2 x 102 mm | |

Options

| | | |
|-------------------|-----|-----|
| Keep Warm Feature | no | yes |
| Freeze Protection | no | yes |
| Outdoor Model | no | yes |
| Floor Stand | yes | yes |

Options



e-Links



BP-Series
AS-Series
AM-Series
Optisorb

e-Links offers monitoring and control allowing humidifier(s) to communicate to your Building Management System (BMS). The controller is factory installed and is located internally to the humidifier. Simply specify at time of order what operating protocol you are using – BACnet, LonWorks or Johnson N2.

Condair is the world's leading manufacturer of commercial and industrial humidification and evaporative cooling products and systems, setting standards with regard to energy efficiency and hygienic solutions. We export to over 50 countries throughout the world.

Talstrasse 35-37 - CH-8808 Pfäffikon-SZ
Tel +41 55 416 61 11 **Email** info@condair.com
www.condair.ch

