DWC - Drain Water Cooler

The DWC reduces humidifier drain water temperature from 212°F (100°C) to 140°F (60°C) before the water enters the building plumbing system. This ensures humidifier drain temperatures meet municipal plumbing ordinances. DWC units work in conjunction with any of the following: NORTEC’s LIVESTEAM steam injection humidifiers and the SAM-e short absorption manifold. One DWC per humidifier / distribution system.

PRINCIPLE OF OPERATION
The DWC reservoir receives the hot water through the inlet near the top of the reservoir. A thermostat senses the temperature of the water in the reservoir and opens the cold water supply valve. The blended water is automatically drained to the building plumbing system.

CHARACTERISTICS

**DWC Self-Actuated**
- Part #171-0010
  - Stainless steel cylindrical reservoir (OD = 6.0" and H = 10.0").
  - 1" NPT male-fitting connection inlet for the hot water.
  - 2" NPT male-fitting connection outlet for the blended water.
  - 3/4" Brass ball valve at the bottom (for manual drain).
  - Self-activated hydraulic valve combined with a thermostatic sensor.

**DWC Electric**
- Part #171-0020
  - Stainless steel cylindrical reservoir (OD = 6.0" and H = 10.0").
  - 1" NPT male fitting connection inlet for the hot water.
  - 2" NPT male fitting connection outlet for the blended water.
  - 3/4" Brass ball valve at the bottom (for manual drain).
  - 24 Vac valve combined with a thermostatic sensor.

The DWC will cool 4.5 gallons (U.S.) per minute of hot water from 212°F (100°C) to 140°F (60°C) with cold water at up to 70°F (21°C) when cold water is supplied at a rate of 7.5 gallons (U.S.) per minute at a minimum static line pressure of 60 psig. Performance will degrade if supplied cooling water is at temperature conditions higher than stated above.

The 3/4" Brass ball valve at the bottom of the DWC is provided to facilitate the periodic cleaning. (See Maintenance section).

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**DWC Self-Actuated**
Part #171-0010

**DWC Electric**
Part #171-0020
The DWC accurately reacts to an increase of temperature created by:
- Condensate from the LIVESTEAM Steam Trap(s).
- Condensate from the SAM-e Distributor.

NOTE: The DWC Self Actuated is pre-set at the factory.

**MAINTENANCE**

Once a year, it is recommended to perform the following steps:
1) Shut down the source of hot water.
2) Drain the DWC by opening the ¾” Ball Valve.
3) Disassemble the DWC from the hot water source.
4) Rinse the DWC with water added through the Blended Water Outlet.
5) Clean the Hot Water Inlet Tube with a 3/8" diameter fine brush, at the entry and through the ¾" Ball Valve.
6) Re-assemble the DWC.
7) Re-connect the hot water source.

DWC units are covered under standard NORTEC 2 year limited warranty.