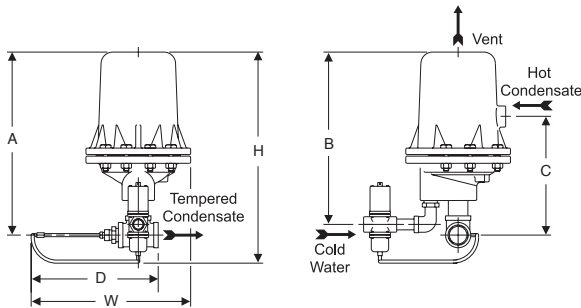


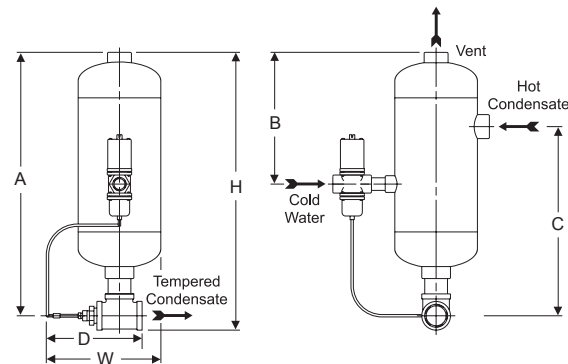


CC Series Condensate Coolers

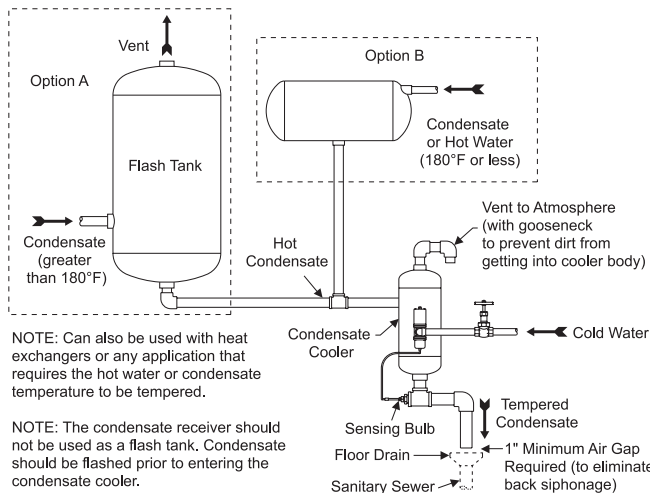
Drain Tempering Service



Model CC-5 and CC-12



Model CC-25 and CC-40



NOTE: Can also be used with heat exchangers or any application that requires the hot water or condensate temperature to be tempered.

NOTE: The condensate receiver should not be used as a flash tank. Condensate should be flashed prior to entering the condensate cooler.

Typical Installation

Description

Armstrong's Condensate Cooler is a device that mixes hot condensate or hot water with a cold water supply to reduce the temperature to acceptable discharge drain temperatures as required by city and state codes. It is a pre-assembled package that is suitable for any plumbing system. When hot condensate or hot water is drained into the condensate cooler body, the tempering valve opens and allows cold water to enter the chamber and mix with hotter liquid, cooling it to a preset temperature level of 135°F (57°C) or to a desired field set temperature.

Capacities (Total of condensate and cooling water combined)

CC-5	5 gpm (19 lpm)
CC-12	12 gpm (45 lpm)
CC-25	25 gpm (95 lpm)
CC-40	40 gpm (151 lpm)

To determine condensate load, use the following formula:

$$\frac{(B - C)}{(H - C)} \times \text{Model} = \text{gallons of hot liquid or condensate}$$

Where: B = Set point of tempering valve (preset to 135°F)
C = Cold water temperature
H = Hot water temperature or condensate temperature

Example:
 $\frac{(135 - 50)}{(180 - 50)} \times 5 \text{ (CC-5)} = 3.25^*$

$3.25 \text{ gal} \times 8.33 \text{ lbs per gallon} \times 60 = 1,624 \text{ lbs per hour}$

* In the example, Model CC-5 (5 gpm) can handle 3.25 gpm of 180°F liquid. If cold water temperature or discharge temperature changes, the capacity will change.

Tempered Condensate Range

Factory preset 135°F (57°C)
Field adjustable range 115 to 180°F (46 to 82°C)
Maximum cold water pressure 150 psig (10 bar)

Materials

Body:	CC-5 and CC-12	ASTM A48 cast iron
	CC-25 and CC-40	Carbon steel
Pipe and Fittings:		Malleable iron
Body (Controller):		Brass
Sensing Bulb:		Bronze

For a fully detailed certified drawing, refer to:
CC-5 CDY #1000
CC-12 CDY #1073
CC-25 CDY #1091
CC-40 CDY #10923

Physical Data									
Model	CC-5		CC-12		CC-25		CC-40		
Pipe Connection	in	mm	in	mm	in	mm	in	mm	
Vent	3/4	20	1-1/2	40	1-1/2	40	2	50	
Hot Condensate Inlet	3/4	20	1-1/2	40	1-1/2	40	2	50	
Tempered Condensate Outlet	1-1/4	32	1-1/2	40	2	50	2-1/2	65	
Cold Water Inlet	3/8	10	3/4	20	1	25	1	25	
"H"	13	330	23	584	29	737	32-13/16	833	
"W"	12-1/2	318	14-3/16	361	13	330	14-1/2	368	
"A"	10-13/16	275	20-5/16	516	27-1/2	698	31	787	
"B"	9-1/2	241	19-3/16	487	13-13/16	351	15-5/16	389	
"C"	6-1/2	165	11-7/8	302	19-13/16	503	21-9/16	548	
"D"	11	279	11	279	11	279	12	305	
Weight, lb (kg)	15 (6.8)		77 (35)		81 (37)		93 (42)		

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.