

DIMENSIONS & DATA CERTIFIED FOR:

Representative:

Order:

Customer:

Order:

Project:

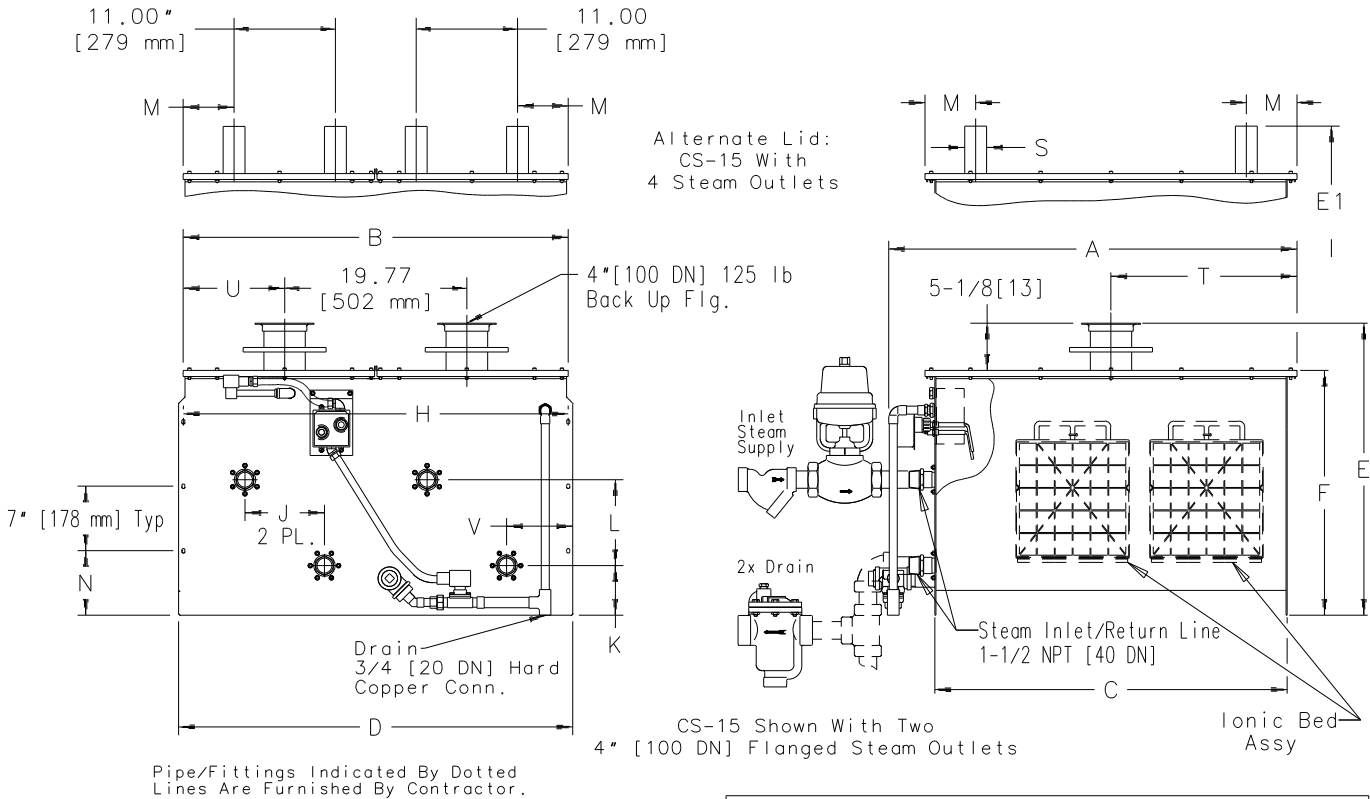
Requirements:

Capacity Required- lb/hr [kg/hr]

Steam Supply Pressure- psi


By:

Date:



DESCRIPTION	MODEL CS-15
A Length, Overall	45-1/2 [1156]
B Width, Tank Lid	41-3/4 [1060]
C Length, Bottom Of Tank	38-1/4 [972]
D Width, Tank	43 [1092]
E Tank Bottom To Steam Outlet	31-3/8 [797]
E1 Tank Bottom To Steam Outlet (2 Or 4 Outlets)	31-11/16 [805]
F Tank Bottom To Top Of Lid	26-9/16 [675]
H Width, C Tank Flange Holes	41-3/4 [1060]
J Width, C Steam Line, Inlet & Return	8-5/8 [219]
K C Return Line To Tank Bottom	5-3/8 [137]
L C Return Line To C Steam Inlet	9-11/32 [237]
M C Steam Outlet To Edge Of Lid	5-1/2 [140]
N Tank Bottom To 1st Flange Hole	7 [178]
R # Of Tank Flange Holes (Both Ends)	12
S Dia. Of Steam Outlet (2 & 4 Outlets)	2-3/8 [60]
T C Steam Outlet To End Of Lid	20-1/8 [511]
U C Steam Outlet To Edge Of Lid	11 [279]
V C Return Line To Tank Flange	7-3/16 [183]
Weight, lbs[kg] Max. (Operating)	1500 [680]
(Less Trap, Strainer & Control Valve) Shipping	780 [354]

MATERIAL LIST		
Part Name	Material	
Tank & Lid	304 Stainless Steel	
Heat Exchangers CS-15C	Electroless Nickel Plated Copper	
CS-15S/DI	304 Stainless Steel	
Cap Screws & Nuts, Tank	18-8 Stainless Steel	
Dispersion Tube	304 Stainless Steel	
Level Control Electrodes	18-8 SS & Teflon	
Hose Cuffs (2 or 4)	EPDM (Multiple Steam Outlets)	
Gasket, Inlet/Outlet	NBR (Buna-N)	
Gasket, Tank	SI (Silicone)	
Ionic Bed Assy	Proprietary	
Control Panel	Enclosure w/PCB (CS-15CB/ CS-15SB Only)	
Control Valve (Type)	To Be Specified	
Steam Trap (1B)	ASTM A48 CL. 30 W/ 18-8 SS Internals	
Strainer, 'Y'	ASTM A48 CL. 30 W/304 SS Screen	



Armstrong International, Inc.
Three Rivers Division
Three Rivers, MI 49093
Armstrong (269) 273-1415 Fax (269) 273-9500
Posted on Armstrong's homepage www.armstrong-intl.com

Product	CD No.	Date
HUMIDIFIER, STEAM TO STEAM CS-15	1118 Sht. 1	12/8/04
		Rev. F

Dimensions in inches [mm] unless otherwise shown.

CS-15 Steam Capacity Ratings		
Steam Pressure psig [bar]	Output lb/hr [kg/hr]	
	CS-15C COPPER COIL	CS-15S SS COIL
5 [0.34]	200 [91]	115 [52]
10 [0.69]	560 [254]	270 [122]
15 [1] Maximum	800 [363]	520 [236]

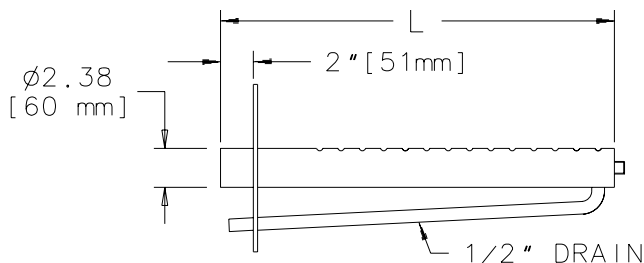
Capacities based on supply pressure before the control valve.
"Hard Water" used for this test.


OPTION LIST		
Humidistat	Control (Room or Duct)	<input type="checkbox"/>
	High Limit	<input type="checkbox"/>
Switch, Air Flow	Pressure	<input type="checkbox"/>
	Sail	<input type="checkbox"/>
Steam Headers, 4" Flg w/ (4)2" Outlet Ports		<input type="checkbox"/>
Dispersion Tubes		<input type="checkbox"/>
Lid	w/(2) 4" Flg Conn. (> 360 lb/hr [163 kg/hr])	<input type="checkbox"/>
	w/(4) 2" Conn. (<= 360 lb/hr [163 kg/hr])	<input type="checkbox"/>
Support Legs		<input type="checkbox"/>
Insulation, Tank		<input type="checkbox"/>

STANDARD OPERATORS		
Type	Model & Manufacturer	Control Signal
Pneumatic	HAM Honeywell MP953F	Adjustable Start Point Standard Range, 5 psi Optional Range, 10 or 3 psi (Has Pilot Positioner)
Electric	HEM Honeywell M9182A	0-135 ohm Standard; 4-20 mA w/A9847 & 2-10 VDC w/ Optional Module A10024
	BLEM Belimo AF24SR	0-10 VDC 4-20 mA

SELECTING PROPER DISPERSION TUBE					
Model CS-11	Length "L" in [mm]	Duct Width		Weight lb [kg]	
		Min.	Max.		
DL-1	12 [305]	11 [279]	16 [406]	2.7 [1.2]	
DL-1.5	18 [457]	17 [432]	22 [559]	3.4 [1.5]	
DL-2	24 [610]	23 [584]	34 [864]	4 [1.8]	
DL-3	36 [915]	35 [889]	46 [1168]	6 [2.7]	
DL-4	48 [1219]	47 [1194]	58 [1473]	8 [3.6]	
DL-5	60 [1524]	59 [1499]	70 [1778]	10 [4.5]	
DL-6	72 [1829]	71 [1803]	82 [2083]	12 [5.5]	
DL-7	84 [2134]	83 [2108]	94 [2388]	14 [6.4]	
DL-8	96 [2438]	95 [2413]	106 [2692]	16 [7.3]	
DL-9	108 [2743]	107 [2718]	118 [2997]	18 [8.2]	
DL-10	120 [3048]	119 [3023]	130 [3302]	20 [9.1]	

DISPERSION TUBE



 Armstrong International, Inc. Three Rivers Division Three Rivers, MI 49093 Armstrong (616) 273-1415 Fax(616) 278-6555 Posted on Armstrong's homepage www.armstrong-intl.com		
Product	CD No.	Date
HUMIDIFIER, STEAM TO STEAM CS-15	1118 Sht. 2	02/11/02
		Rev. E