

Condensate Pump/Trap Combination Package (Steam Pressure-Powered)

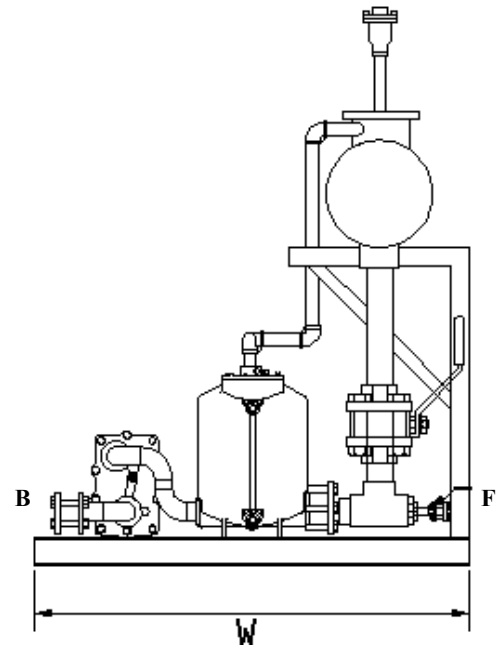
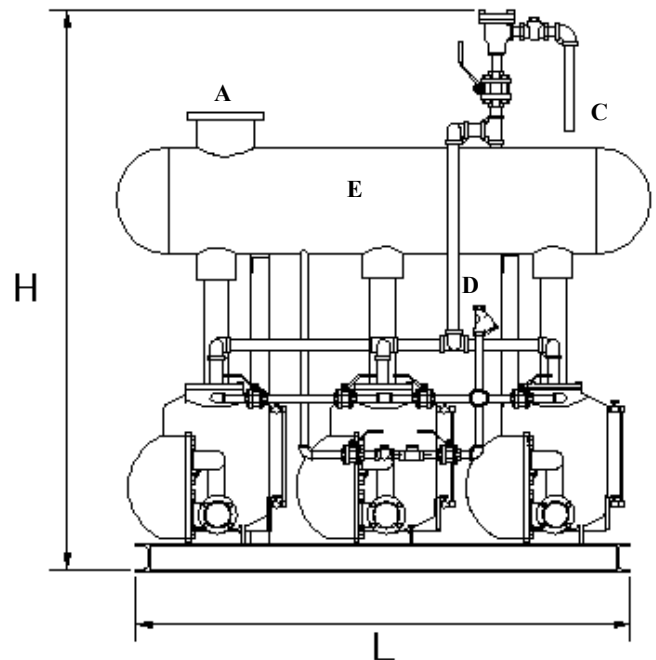
The Model CPT-3T, Condensate Pump/Trap Combination Package, is a manufactured, ready-to-install system designed for installation on single heat transfer sources. The Condensate Pump/Trap Combination Package allows the heat transfer source to operate in a vacuum condition, increasing the heat transfer efficiency. The result is substantial savings in energy costs at attractive pay-back periods. Designed for efficient pumping of condensate, CPT-3T is not vented to atmosphere, therefore there is no additional piping needed for a large vent. The CPT-3T utilizes steam power in lieu of electric motors, eliminating the need for wiring motors, starters, and controls. The steam-powered pump package is capable of operation in flammable environments. Operating by steam pressure versus electric power, reduces pumping costs. The pump employs a float operated snap-acting mechanism with no external seals or packing, which eliminates seal maintenance, which is required on all conventional pumps. All internal pump components and mechanism are constructed of Stainless Steel

MODEL CPT-3T SAVINGS

System Steam Pressure (psig)	Energy Savings (MM Btu/yr.)	Potential Savings (\$ /yr.)
125	53,542.14	267,710.69
100	45,514.73	227,573.64
80	39,810.48	199,052.38
60	32,530.08	162,650.38
40	24,519.29	122,596.44
30	20,369.19	101,845.93
20	14,532.77	72,663.86
15	11,211.65	56,058.24
10	7,655.86	38,279.30
5	2,368.62	11,843.12

NOTES:

- Savings are based on max. potential savings at max. pump capacity on 8400 hr./yr. of continuous operation
- Steam costs at \$5.00/MM Btu
- Savings based on approx. calculations.



Legend:

Approximate Dimensions: 80"H x 68"L x 48"W

- A. Condensate Inlet 6" FLG
- B. Condensate Discharge (3) 2" NPT
- C. Air Outlet
- D. Steam Inlet 1/2" NPT
- E. Receiver Tank 18" x 60"
- F. Drain 1/2" NPT

EnviroSep • Fluid & Heat Recovery Systems

A Division of TMT, Inc.

PO Box 857 • Georgetown, SC 29442

Phone (843) 546-7400 / Fax (843) 546-7407

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CONDITIONS OF OPERATION

Max. Allowable Pressure / Temperature:	125 psig / 450 °F
Discharge rate per cycle:	21.3 gal.
Max. instantaneous discharge rate:	270 gpm
Min. Motive Pressure:	5 psig
Steam Consumption (per pump):	3 lbs. per 1000 lbs. of liquid pumped
Compressed Air Consumption (per pump):	100 SCF per 1000 lbs. of liquid pumped

MODEL CPT-3T CAPACITIES

Steam Pressure (psig)	Discharge Head (psig)	Flow Rate (lbs. / hr.)
125	15	44,400
125	40	36,600
125	60	31,200
125	80	24,000
125	100	18,900
125	115	15,300
100	15	42,000
100	40	32,700
100	60	24,600
100	80	20,100
75	15	41,700
75	40	28,800
75	60	18,600
50	10	38,700
50	25	29,400
50	40	16,500
25	5	38,400
25	10	31,200
25	15	24,000
10	2	32,400
10	5	21,000
5	2	17,100

STANDARD CONSTRUCTION

- Fabricated Angle Iron Frame
- Fabricated Steel Tank
- Bronze Ball or Gate Valves
- Thermodynamic Steam Trap
- Cast Iron Pump with Gauge Glass, and Stainless Steel internal components and Check Valves
- Hydrostatically Tested
- High Temperature Industrial Enamel Paint

PACKAGE OPTIONS

- Additional / Oversized Condensate Inlet connection(s)
- Oversized Condensate Receiver
- Carbon Steel 3- piece Ball Valves (motive steam)
- Forged Steel Gate Valves (motive steam)
- Cast Iron Gate Valves (pump isolation)
- Low-profile design for height restricted applications
- All Welded piping
- Fabricated Square Tubing Frame
- Flash Steam Heat Recovery System only without condensate Inlet for Flash Recovery from existing Atmospheric Tanks.

Regardless of system size, temperature, pressure, fluid medium, or available floor space, **EnviroSep** can service all specialized needs.

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