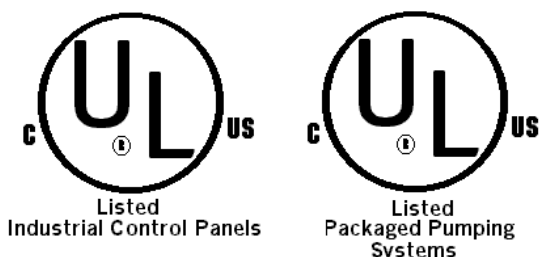


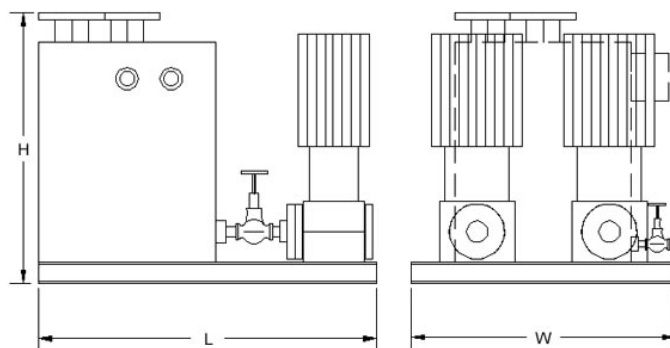
Electric Condensate Duplex Pump Package Model ECP-D

The Model **ECP-D**, Electric Condensate Pump Package is a Duplex condensate pumping unit which is manufactured as a ready-to-install system featuring a Stainless Steel Condensate Receiver and Stainless Steel, Vertical Multi-staged, Centrifugal Pumps. Designed for efficient pumping of condensate, **ECP-D** utilizes the efficient design of Multi-staged Centrifugal Pumps which delivers more discharge head at less horsepower. The **ECP-D** includes pump suction isolation valves for each pump. Stainless Steel construction is utilized to prolong the life of systems subject to corrosive condensate. A mechanical alternator is standard for automatic alternation of the Lead Pump. A NEMA 12, UL-Listed Industrial Control Panel with single-point power connection is furnished pre-wired to all electrical sources. The complete package is UL-Listed.



CONDITIONS OF OPERATION

Max. Allowable Pressure / Temperature:	230 psig / 240 °F
Discharge rate per pump:	3 to 150 gpm - nominal
Motor size per pump:	½ to 50 Hp, 3 ph., 60 Hz



Legend:

- A. Condensate Inlet
- B. Vent
- C. Condensate Discharge (2)
- D. Auxiliary Connection A
- E. Auxiliary Connection B
- F. Receiver Tank
- G. Drain

STANDARD CONSTRUCTION

- Fabricated Structural Channel Frame
- Stainless Steel Condensate Receiver
- Suction Isolation Valves
- Vertical Multi-staged, Centrifugal Pumps
- UL-Listed Industrial Control Panel
- Hydrostatically Tested
- High Temperature Enamel Coating on base

PACKAGE OPTIONS

- Pump Discharge Flow Throttling Valve & Check Valve
- Additional / Oversized Condensate Inlet connection(s)
- Gauge Glass on Receiver
- Oversized Condensate Receiver
- Oversized Atmospheric Vent(s)
- Pump Discharge Pressure Gauges
- Overflow Pipe to 6" height above base
- Forged Steel Gate Valves
- Pump Run-time Meter
- Low-profile design for height restricted applications
- All Welded piping
- Fabricated Square Tubing Frame

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

Model ECP-D
Packaged Pumping System Order Form

Form 00-ECP-D

Specify the following parameters:

- I. System Condensate Load = _____ lb/hr
- II. System Discharge
Pressure Required = _____ psig
- III. Condensate Return Temperature = _____ °F

SYSTEM OPTIONS

Additional / Oversized Condensate Inlet Connections	Remote start connection
Oversized Condensate Receiver	Receiver Drain Valve
Carbon Steel Condensate Receiver	Gauge Glass on Receiver
Horizontally-mounted Receiver	Receiver Thermometer
Oversized Atmospheric Vent	High Level Alarm
Pump Discharge Pressure Gauges	Low Level Alarm
Pump Suction Strainers	Panel-mounted Differential Pressure Gauges
Stand-by Pump	Pump Run-time Hour Meter
Auto standby pump start on lead pump failure	Outdoor-use Rating
Auto Electric Pump Alternation	Condensate Inlet Isolation Valves
Mechanical Alternator	
Float Switch	

Regardless of system size, temperature, pressure, fluid medium, or space requirements, **EnviroSep** can provide solutions to all specialized needs.

EnviroSep • Fluid & Heat Recovery Systems
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PO Box 857 • Georgetown, SC 29442
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Typical Specifications for ECP-D

Furnish and install one **EnviroSep** Model ECP- [A] - [B] - [C] - [D] Electric Condensate Pump Package with the system capacity to pump _____ lb/hr at a discharge pressure of _____ psig from the pump(s).

KEY:

[A] = Model # (Nominal Flow from each pump- GPM)
[B] = # of pumps (1 = S, 2 = D, 3 = T, 4 = Q)
[C] = Parallel (P) or Stand-by (S) pump designation
[D] = Mechanical (M) or Electric (E) alternation for multiple pumps

GENERAL - This package shall be factory assembled with pump(s), condensate receiver, pump suction isolation valves, fabricated steel frame, mechanical alternator (where applicable) interconnection piping (welded per ASME Section IX certified welders), (optional) UL-listed Industrial Control Panel factory wired for single-point field connection per NEC, and the complete package shall be UL-Listed as a Packaged Pumping System.

PUMPS-Pump(s) shall be a Stainless Steel, Vertical Multi-staged, Centrifugal Pump(s) with a capacity of _____ GPM @ _____ psig discharge head. The maximum speed of the pump shall not exceed 1750 RPM. Pump shall be of the vertically split case design with removable bearing housings and shall be furnished with mechanical seals. The suction connection shall be in the top vertical position and the discharge connection shall be in the top horizontal position. The impeller(s) shall be located on a stainless steel shaft between sealed grease lubricated ball bearings. The pump shall be mounted on a rigid, single base plate and by flexible with guard to the motor. Seal shall be rated for continuous duty at 240°F, motor shall be open drip proof, NEMA MG-1 with 1.15 service factor

CONDENSATE RECEIVER – Condensate Receiver shall be constructed of polished, 304L Stainless Steel and shall be GTAW welded per ASME Section IX certified welders. The receiver shall have the capacity of ____ gallons and shall be of the horizontal-mounted design. The mounting height of the receiver shall be of adequate height to permit a minimum of 2 ft. NPSH available to the system pumps when the condensate temperature is 212°F. The receiver shall be supported by rigid structural steel supports to adequately support the receiver when completely full of water. Connections shall be provided for Atmospheric Vent, Condensate Inlet, Pump Suction Connections, Receiver Drain connection, two (2) auxiliary connections, and connection for internally-mounted mechanical alternator.

MECHANICAL ALTERNATOR - System shall include, on the receiver, a combination float switch, mechanical alternator which shall be horizontally mounted in the receiver. The alternator shall be NEMA I, Square D Series 9038, (with) (without) auxiliary standby float switch. The alternator shall automatically alternate the lead pump of the

system and shall automatically start all system pumps as the system demand requires.

CONTROL PANEL - System shall include one (1) UL - Listed, NEMA 12, Industrial Control Panel with single-point power connection, pre-wired to all electrical components. Panel shall have thru-the-door fused disconnect; magnetic circuit breaker supplementary motor protector with fast-closing contacts, non-reversing 3-pole contactor, and variable setting, bi-metallic overload relay for each motor; 30 mm Foundry-duty switches; 30 mm Corrosion Resistant pilot lights; control transformer; Automatic Alternator (if required). Operation of each pump shall be Hand-Off-Auto with external connection to terminal blocks. When standby pump(s) are used, the standby pump(s) shall manually/automatically(customer specified) start on primary pump failure. All internal wiring shall be placed in conduit.

MANUFACTURER - Shall assume system liability, and performance guarantee and warranty all equipment on system for 12 months after initial start-up.

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