



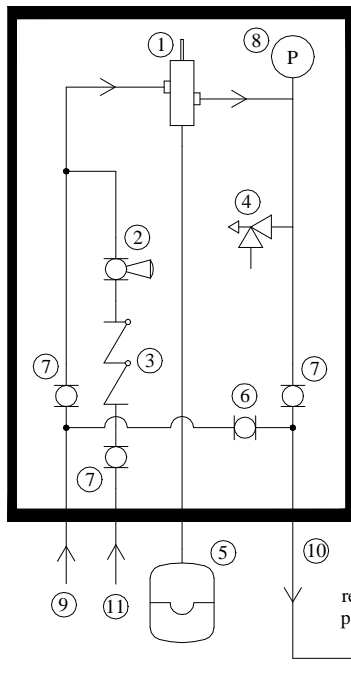
CLP™ (Closed Loop Package) is a self-contained package of the key components required for any closed system. Each package includes a highly effective air purger, relief valve, pressure reducing valve, backflow preventer and connection for an expansion tank. Each system is pre-assembled, leak tested and mounted in an attractive white cabinet. It is constructed from non-ferrous materials, making it suitable for iron free systems as well as systems with iron components.

Select the model that most closely matches heating system capacity or contact us for assistance.

Physical Properties

Model	Capacity (Btu/h)	Flowrate (usgpm)	Cabinet dimensions			Heating System Water Connections*	Shipping Weight
			height	width	depth		
CLP060	60,000	6	24"	14 ¼"	8 1/2"	3/4"	24 lb.
CLP110	110,000	11	24"	14 ¼"	8 1/2"	1"	25 lb.
CLP160	160,000	16	24"	14 ¼"	8 1/2"	1 1/4"	27 lb.
CLP220	220,000	22	24"	14 ¼"	8 1/2"	1 1/2"	30 lb.

- Cold water supply is ½" sweat copper.
- Copper sweat is standard. Any alternate plumbing connection is available by special order: barb, compression, NPT.
- Capacity based on 20°F temperature rise at the boiler. A higher capacity is available with a higher temperature rise.
- Height does not include 1" mounting flange on the top and bottom.



- ① air purger
- ② pressure reducing valve
- ③ backflow preventer
- ④ pressure relief valve
- ⑤ external expansion tank
- ⑥ bypass valve
- ⑦ isolation valves
- ⑧ pressure gauge
- ⑨ hot supply from boiler
- ⑩ to heating system
- ⑪ cold water supply

Note: for recessed installations, all plumbing connections must be completed before the drywall is installed around the cabinet.

Plumbing Connections

All connections to the CLP are sweat copper and may be adapted to crimp PEX, compression PEX or NPT. Note: PEX with an oxygen barrier is required for closed loop (boiler) systems. The oxygen barrier is not required for open (water heater) systems, iron-free boiler systems or boiler systems isolated with a heat exchanger.

Connect the hot supply from the boiler to the CLP inlet (9). Connect the CLP outlet (10) to the heating system (supply). The main circulating pump should be installed at this location. Connect a ½" cold water supply (11). Connect the expansion tank below the cabinet to permit air to escape to the purger (5).

Mounting

The CLP™ may be mounted in a mechanical room or basement wall or in a closet. It may be surface mounted or recessed into the wall. It must be mounted in the orientation with the air purger at the top.

For **surface mounting**, use anchors suitable for the wall surface (concrete, drywall or wood screws). The cabinet should be screwed from inside the cabinet through the left and right channels along rear edges.

For **recessed installations**, the cabinet may be screwed from the inside through the sides of the cabinet into the wall stud. The cabinet is designed to fit between wall studs that are 16 inches on centre. Additional wood blocking may be necessary to support both sides of the cabinet. It is recommended that the CLP™ be recessed at least 3-1/2" in order to hide all plumbing connections.

Start Up

Check expansion tank pressure and charge according to manufacturer instructions.

Open all isolation valves to fill the system with water (7). Once the system is full, the main circulating pump may be started to assist in air removal. The bypass valve (6) is normally left open to optimize air removal and flow noise.

Once all air has been removed, the heating system may be started according to manufacturer's instructions.

Troubleshooting

Relief valve weeps -- check the following:

- Pressure setting on the expansion tank
- Defective relief valve