

RECIRCULATING LOOP CHILLER



TYPICAL CHILLER

APPLICATIONS

Jacket Cooling	Computers
Lasers	Power Supplies
Induction Heaters	Vacuum Ovens
Machine Tools	Injection Molding
Welders	Plasma Spraying
MRI Equipment	Linear Accelerators
CAT Scans	Electron Microscopes

FEATURES

OPTIONAL STAINLESS STEEL EXTERIOR

ENERGY SAVING DESIGN; Unlike most process chillers, compressor runs only as needed. Storage design provides close temperature control and safety from freeze-up without constant operation.

COMPLETE TEMPERATURE CONTROL : Temperature adjustable within a range of 40°F to 90°F (4.4°C to 32°C) and will hold temperature within ±1.5°F (0.8°C) of setting. (± 0.5°F/0.3°C optional)

WELDED STAINLESS STEEL COOLING TANK: Recirculates clean coolant sealed from the atmosphere, eliminates bacterial build-up and internal corrosion.

USES REFRIGERANT R-134a: Eliminates use of ozone-depleting refrigerant as per Montreal Protocol.

UNLIMITED OPTIONS: Design the perfect cooling system for any application. Over 50 options to meet almost any special need. See bulletin O&A.

LIFETIME **LTW** WARRANTY

FILTRINE IS ISO 9001-2008 REGISTERED
PRODUCT LINE  APPROVED  MARK AVAILABLE

MODEL PCP or POC-50-5

DESCRIPTION

Recirculating chillers recirculate a clean coolant at constant temperature and pressure to increase the stability and consistency of water cooled machines and instruments. Air cooled chillers eliminate the use of tap water and prevent clogging and corrosion of small diameter heat exchangers due to rust and scale build-up.

PCP - CLOSED LOOP CHILLERS

Use a storage type cooling tank, with immersion coil evaporator, to provide close temperature control of recirculating coolants. The tank is sealed to prevent coolant evaporation and fouling, and supplied with a liquid level gauge, fill port and clean out. The pump recirculates coolant at constant pressure and flow.

POC - OPEN LOOP CHILLERS

Pump liquid from an open tank or sump, through the chiller and back to the sump. An adjustable thermostat senses the make up liquid temperature, cycling the chiller to insure constant temperature in the sump.

SPECIFICATIONS

COOLING CAPACITY:

Btu/Hr	5,000
Watts	1,465
Rating Conditions	
Coolant Discharge Temperature	68°F (20°C)
Ambient Temperature	90°F (32°C)

COMPRESSOR HP

1/2
Lifetime lubricated, welded hermetic type supplied with condenser as specified (see below), charging port, expansion valve and dehydrator.

STANDARD CONDENSERS (Designated by suffix)

- A Fan cooled condenser inside chiller housing.
- W Water cooled condenser for hookup to city or tower water
- A-WP Self-contained air cooled condenser; complete unit made weather-resistant for outdoor installation.

COOLING TANK & EVAPORATOR CAPACITY 5 gal. (19 liters)

Welded all stainless steel shell and immersion coil evaporator. Tank tested for 125# working pressure. Insulated with closed cell thermoelastomer with an R factor of 3.7 and enclosed in a rust-proofed steel jacket.

PUMP MOTOR HP

1/8
Capacity 6 GPM @ 8 PSI (23 LPM @ 0.3 bar)
Plastic, seal-less magnetic drive, centrifugal pump mounted on rubber pads over a stainless steel condensation tray. All piping and fittings plastic, copper, or brass and insulated with closed cell thermo-elastomer with an R factor of 3.7. Supplied with manual on/off switch.

THERMOSTAT ADJUSTABLE RANGE 40° to 90°F (5° to 32°C)

Temperature Stability ±1.5°F (0.8°C)

CABINET: Enameled aluminum panels with stainless steel corner legs and top. Panels removable for access to all components.

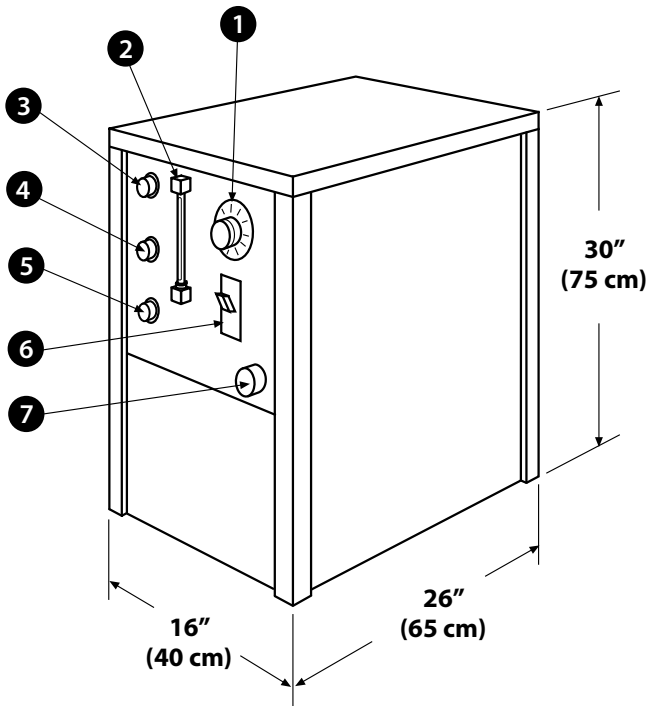
SUPPLY POWER 115 or 230/60/1

FLA AMPS MAXIMUM 14 or 7

PLUMBING CONNECTIONS IN & OUT 1/2" FPT (13 mm)

SHIPPING WEIGHT 180 Lbs (81 Kg)

STANDARD MODELS— Suffix A & W



LEGEND

- 1. Temperature Control
- 2. Level Gauge
- 3. Fill Port
- 4. Coolant Return
- 5. Coolant Discharge
- 6. On/Off Switch
- 7. Electrical Connection

Chiller dimensions and shipping wts. may vary depending on options. All information given on this bulletin is for general use only. Confirm specifications with factory for your specific requirement.

EXPLANATORY NOTES

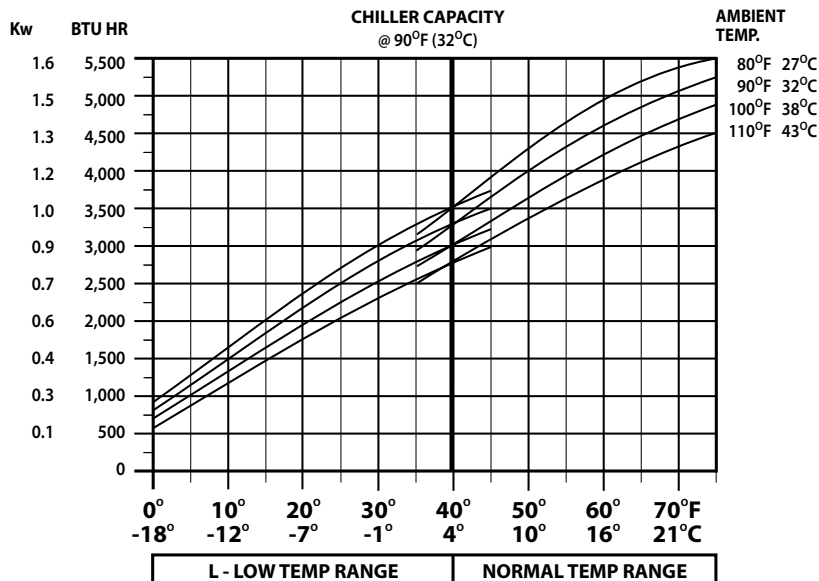
VENTILATION PANELS: Standard models — air intake at right end and air discharge at rear on A & WP models. Allow 12" (30 cm) clearance at these ends.

REMOVABLE SERVICE PANELS: Front & rear on all models.

SERVICE ROOM: Allow 16" (40 cm) at left end and 22" (55 cm) at front for service.

INSTALLATION & SERVICE: Arranging for installation, start-up and service is the responsibility of the purchaser.

WARRANTY: All parts are covered F.O.B. factory for 15 months from date of shipment.



PUMP CAPACITY					
MODEL*	GPM @ PRESSURE SHOWN				
	psi	3	5	8	10
	ft	7	12	18	24
STD-1/8C		13	10	6	3

* Standard pump is 1/8 HP, centrifugal. Optional pumps (OP) are available.