RECIRCULATING LOOP CHILLERS

SINCE 1901

TYPICAL CHILLER

MODEL ..... PCP or POC-6000-660

FIELD SERVICEABLE HERMETIC MODELS

DESCRIPTION

Filtrine's PCP and POC chillers recirculate a clean coolant at constant temperature and pressure to increase the stability and consistency of water cooled machines and instruments. Choose from different condenser configurations to match your specific site requirements.

- **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, which is adjustable by turning a manual bypass valve.
- **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 ensure constant temperature in the sump.

SPECIFICATIONS

COOLING CAPACITY: BTU/HR 660,00
Watts 193,435
Rating Conditions
Coolant Discharge Temperature ..... 68°F (20°C)
Ambient Temperature ..... 90°F (32°C)
COMPRESSOR: HP ..... DUAL 30
Field serviceable semi-hermetic type supplied with condenser as specified below, high/low pressure stat, freeze control, head and suction gauges, oil pressure switch, pump down solenoid valve, thermostatic expansion valve, refrigerant sight glass, dehydrator and oil separator.
STANDARD CONDENSERS (Designated by suffix)
W Water cooled condenser for hookup to city or tower water
AR Remote air cooled condenser furnished separately for mounting on roof.
AR-WP Remote air cooled condenser; complete unit made weather-resistant for outdoor installation
COOLING TANK & EVAPORATOR: Capacity ..... 500 gal (1,993 l)
Welded stainless steel shell and immersion coil evaporator. Tank tested at 250# for 125# working pressure. Supplied with liquid level gauge and insulated with closed cell thermo-elastomer with an R factor of 3.7.
PUMP: HP 5
Capacity ..... 80 gpm (303 lpm) @ 45 PSI
All bronze centrifugal pump mounted on rubber pads over a stainless steel condensation tray and supplied with unions and service valves and manually adjustable bypass valve. All piping and fittings brass, copper, or bronze and insulated with closed cell thermo-elastomer with an R factor of 3.7.
THERMOSTAT: Adjustable Range ..... 40° to 90°F (5° to 32°C)
Temperature Stability ..... ±2°F (1°C)
CABINET: Enameled aluminum panels with stainless steel corner legs and top on a welded angle iron frame. Panels removable for access to all components.
SUPPLY POWER: ..... 230/60/3 or 460/60/3
FLA Amps Maximum: ..... 250 or 126
NOTE: FLA may vary depending on options. See MCA and MOP ratings on nameplate of as-built unit.
PLUMBING CONNECTIONS IN & OUT ..... 2-1/2" (63mm) MPT
SHIPPING WEIGHT ..... Chart on reverse

APPLICATIONS

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

FEATURES

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° to 90°F (5° to 32°C) and will hold temperature within ±2°F (1°C) of setting. (1°F optional).

Welded Stainless Steel Cooling Tank: Recirculates clean coolant sealed from the atmosphere, eliminates bacterial build-up and internal corrosion.

Uses HFO Refrigerant
Eliminates use of ozone-depleting and high GWP (Global Warming Potential) refrigerant as per Montreal Protocol.

Unlimited Options
Design the perfect cooling system for any application. 60+ options to meet any special need. See *Options & Accessories (www.filtrine.com/chillers/options-and-accessories)* for more information.

ENERGY SAVING OPTIONS AVAILABLE
CONSULT FACTORY

START-UP and FIRST YEAR SERVICE
FILTRINE Mfg. Co. provides start-up and first year service on all parts and labor. Regular maintenance on a yearly contract basis is a wise investment and will prevent costly downtime.

WARRANTY
All parts are covered FOB jobsite for (12) months from the start date or (15) months from date of shipment or whichever comes first.

SERVICE MAKES THE DIFFERENCE
Recognizing that downtime on critical medical equipment is unacceptable, Filtrine has established a national network of qualified service technicians, selected because of their extensive experience working on medical equipment chillers and their location within the "Emergency Response Zone" (approximately 40 miles). This expert and quick service is available on an 8/5 or 24/7 basis for all Filtrine medical chillers and heat exchangers.

Filtrine Mfg. Co. • 15 Kit St. Keene, NH 03431 USA
800-930-3367 • 603-352-5500 • FAX 603-352-0330
WEB www.filtrine.com • EMAIL cool@filtrine.com

MADE IN USA

FILTRINE IS ISO 9001:2015 CERTIFIED
PRODUCT LINE APPROVED MARK AVAILABLE

CHILLER DIMENSIONS and WEIGHTS								
MODEL NUMBER	W		D		H		SHIP WT	
	in	cm	in	cm	in	cm	lb	kg
PCP or POC 6000-660-W	126	320	62	157	84	213	6000	2700
PCP or POC 6000-660-AR								
PCP or POC 6000-660-AR-WP								
Dimensions & weights may vary depending on options installed-*consult factory*.								

STANDARD OPERATING CONDITIONS

OUTDOOR AMBIENT
-20° to 100°F (-29° to 38°C)

OPTIONAL OPERATING CONDITIONS

OUTDOOR AMBIENT
Up to 110°F (43°C)
Up to to 120°F (49°C)
Down to -30°F (-34°C)
NOTE Higher ambient options may affect unit dimensions.

REMOVABLE SERVICE PANELS

Front & rear on all models.

CHANNEL SKIDS

Channel skids project 2" (5 cm) front and rear. Center of 5/8" (16mm) mounting holes located 6" (15cm) from chiller end and 1" (2.5 cm) from chiller edge front and rear. Skids add 2" (5 cm) overall height to chiller.

REMOTE CONDENSER

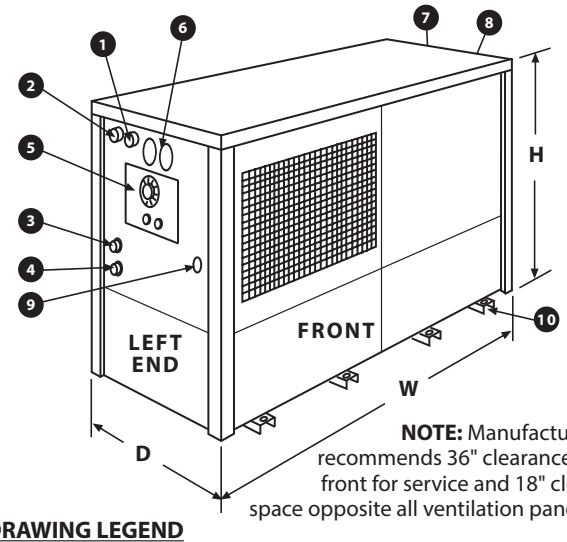
Use with **AR** Models. Furnished complete w/controls for operating in ambient temperatures to minus 20°F (-29°C) - consult factory for specs. Connections for remote condenser are at right end of chiller cabinet.

NOTE

Information given in this bulletin for general use only.
Confirm exact specs with factory for your specific requirements.

STANDARD MODELS

Suffix W, AR & AR-WP



NOTE: Manufacturer recommends 36" clearance at front for service and 18" clear space opposite all ventilation panels.

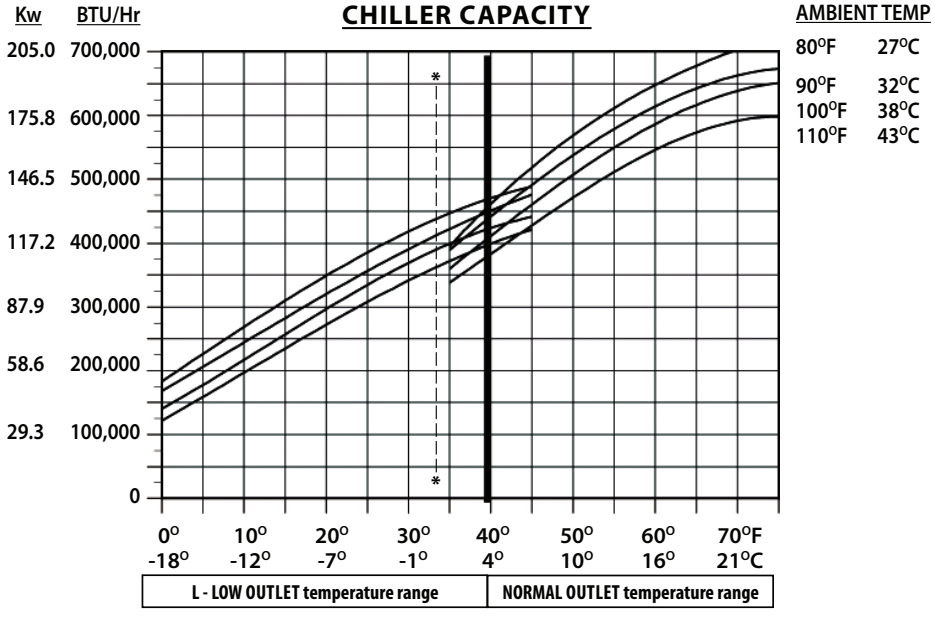
DRAWING LEGEND

1. Air Vent
2. Fill Port
3. Coolant Return
4. Coolant Discharge
5. Control Panel
6. Gauges
7. To Remote Condenser (**AR** units)
   Condenser Water Out (**W** units)
8. From Remote Condenser (**AR** units)
   Condenser Water In (**W** units)
9. Electrical Connection
10. Channel Skids

NOTE: Drawings are not to scale. Shown are composites of various models to illustrate hook-up locations. Confirm footprint with factory.

PUMP CAPACITY					
PUMP MODEL*	GPM @ PRESSURE SHOWN				
	psi	25	35	45	55
	ft	58	80	103	126
STD5C		140	120	80	60
* Standard pump is 5HP, centrifugal (C)					

CHILLER CAPACITY



AMBIENT TEMP
80°F 27°C
90°F 32°C
100°F 38°C
110°F 43°C

* For outlet temperatures below 34° F - use appropriate antifreeze

Filtrine Mfg. Co. • 15 Kit St. Keene, NH 03431 USA
800-930-3367 • 603-352-5500 • FAX 603-352-0330
WEB www.filtrine.com • EMAIL cool@filtrine.com

MADE IN USA

FILTRINE IS ISO 9001:2015 CERTIFIED
PRODUCT LINE APPROVED MARK AVAILABLE