

TRANE/FILTRINE CHILLER – VARIAN CLINAC UNIQUE, HALCYON AND ETHOS



TYPICAL CHILLER

FEATURES

- Uses HFO Refrigerant - Ozone Safe - Low Global Warming Potential (GWP) Optional anodized aluminum and stainless steel exterior
- "Space-saving design" models available

DESCRIPTION

A closed loop, packaged chiller designed specifically to cool **VARIAN CLINAC UNIQUE, HALCYON** and **ETHOS** linear accelerators, to recirculate a clean coolant at a constant temperature, pressure and flow. Ideal for all installations where a dependable source of clean cooling water is not available.

Filtrine PCP 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 or fouling, and supplied with a liquid level gauge, fill port and clean out. The pump recirculates the coolant at a constant temperature, pressure and flow.

AVAILABLE IN FOUR STANDARD CONFIGURATIONS

A: Self-contained air cooled model should be installed in a well ventilated room. **W:** Water cooled model may be installed in a non-ventilated room but requires a source of condenser cooling water. **AR:** Remote air cooled model may be installed in a non-ventilated area with the condensers mounted outdoors. **WP:** Weather-resistant model would be installed completely outdoors.

**ENERGY SAVING OPTIONS AVAILABLE
CONSULT FACTORY**

MODEL TPCP-200-24 WELDED HERMETIC COMPRESSOR

SPECIFICATIONS:

Cooling Capacity:

Btu/hr..... 23,900

Watts..... 7,000

Rating Conditions:

Coolant Discharge Temperature..... 68°F [20°C]

Ambient Air Temperature..... 90°F [32°C]

Condensing Unit: Compressor HP..... 2

Description: Lifetime lubricated hermetic compressor with condenser as specified [see options below] supplied with high/low pressure stat, anti-migration solenoid valve, head and suction gauges, thermostatic expansion valve, refrigerant sight glass and dehydrator.

Condenser Options

A Self-contained air cooled condenser.

W Water cooled condenser.

AR Remote air cooled condenser.

WP Weather-resistant for outdoor installation.

Cooling Tank & Evaporator: Capacity 20 gal [76 ltr]

Construction: Welded stainless steel shell with stainless steel immersion coil evaporator. Tank tested at 250# for 125# working pressure, supplied with drain connection and insulated with closed cell thermo-elastomer with an R factor of 3.7.

Pump: Motor HP 1/3

Capacity 4 GPM @ 32 PSI [15 lpm @ 2.2 bar]

Description: Bronze fitted turbine pump mounted on a rubber pad over a stainless steel condensation tray and supplied with unions and service valves and a pressure relief bypass valve. All piping and fittings brass, copper or bronze, and insulated with closed cell thermo-elastomer with an R factor of 3.7.

Adjustable Differential Thermostat..... 40° to 90°F [4° to 32°C]

Temperature Stability ±1.5°F [0.8°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:..... 208-230/60/3 or 460/60/3 or 575/60/3

Full Load Amps..... 10 or 5 or 4

NOTE: FLA may vary depending on options. See MCA and MOP ratings on nameplate of as-built unit.

Plumbing Connections In & Out..... 3/4" [19 mm] FPT

Decibel Rating [nominal at 5 ft.] 72dBA

Shipping Weight..... Chart on reverse

"FAIL SAFE" OPTIONS [Designated by suffix]

DP DUAL PUMPS: Automatic switchover to backup pump on loss of coolant flow.

LL LOW COOLANT LEVEL INTERLOCK: Float switch in tank lights a warning light if coolant level drops below safe low limit.

LF LOW COOLANT FLOW INTERLOCK: Flow switch lights a warning light if flow rate drops below safe low limit.

HT HIGH TEMPERATURE INTERLOCK: Thermostat lights a warning if coolant temperature rises above safe high limit.

AS AUTOMATIC SWITCHOVER TO CITY WATER: In case of pump or compressor failure, city water switchover solenoids are activated to allow for temporary cooling using city water.

CHILLER DIMENSIONS & WEIGHTS

MODEL NUMBER	W		D		H		SHIP WT	
	in	cm	in	cm	in	cm	lb	kg
TPCP-200-A	48	122	27	69	45	114	700	315
TPCP-200-W	48	122	27	69	45	114		
TPCP-200-AR	48	122	27	69	45	114		
TPCP-200-WP	62	158	27	69	52	132		
TPCP-200-WP-LP*	70	179	59	150	30	76		
TPCP-200-A-SSD**	27	69	30	76	74	188		
TPCP-200-W-SSD**	27	69	27	69	72	183		
TPCP-200-AR-SSD**	27	69	27	69	72	183		

*Low profile, weather-resistant unit for installation on roof

**Space saving design

NOTE: Chiller dimensions and shipping weights may vary depending on options – confirm with 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 120°F [49°C]

Down to -30°F [-34°C]

NOTE: Higher ambient options may affect unit dimensions.

REMOTE CONDENSER

Use w/Standard 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.

VENTILATION PANELS

Standard models: Air intake at rear, air discharge at right end and front on A and WP models. Manufacturer recommends 24" [61 cm] minimum clear space opposite all ventilation panels.

REMOVABLE SERVICE PANELS

Front and rear on all models. Manufacturer recommends 36" [91 cm] clearance at front for service.

CHANNEL SKIDS

Channel skids project 2" [5 cm] front and rear. Allow additional 2" [5 cm] to height for channel skids. Center of 5/8" [1.6 cm] mounting holes located 6" [15 cm] from chiller end and 1" [2.5 cm] from chiller edge front and rear.

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.

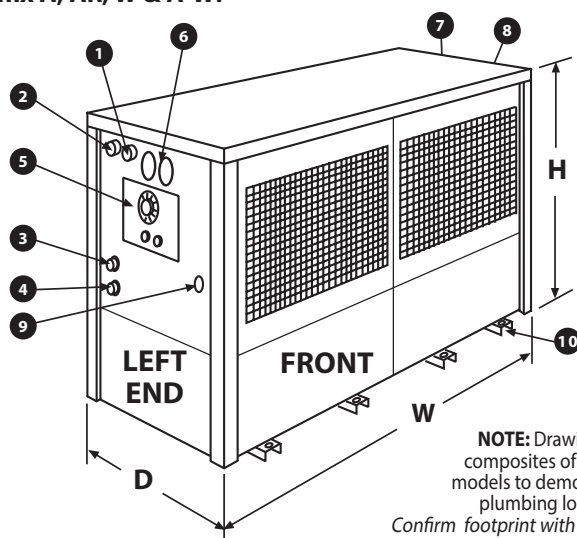
WARRANTY

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

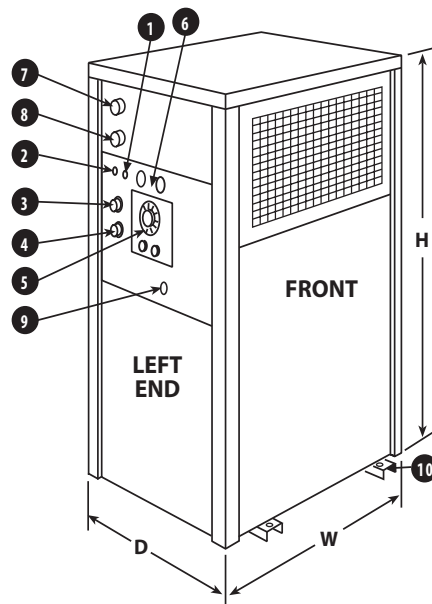
Recognizing that downtime on critical medical equipment is unacceptable, Filtrine has established a national network of qualified service technicians, selected because of their extensive experience working on medical equipment chillers and their location within the "Emergency Response Zone" (approximately 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.

STANDARD MODELS: Suffix A, AR, W & A-WP



NOTE: Drawings are composites of various models to demonstrate plumbing locations. Confirm footprint with factory.

SSD - SPACE SAVING DESIGN MODELS: Suffix A, AR & W [A-WP not available in SSD model]



LEGEND

1. Air Vent
2. Fill Port
3. Coolant Return
4. Coolant Discharge
5. Control Panel
6. Gauges
7. To Remote Condenser [AR Models]
8. From Remote Condenser [AR Models]
9. Electrical Connection
10. Channel Skids

All information given on this bulletin is for general use only.
Confirm specifications with factory for your specific requirement.