

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



FEATURES

- Compact indoor cabinet contains cooling tank, pump, filter and all necessary diagnostic and operator controls
- Outdoor, weather-resistant condensing unit takes the heat and operating noise away to a remote location
- Low profile condensing unit for low visibility - 44" [112 cm] high, may be concealed by parapet
- Microprocessor-based controls available to interface with building monitoring systems

DESCRIPTION

A closed loop, packaged chiller designed specifically to cool **VARIAN CLINAC UNIQUE, HALCYON** and **ETHOS** linear accelerators.

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 and is supplied with a manually adjustable bypass valve.

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.

MODEL..... TPCP-200-24-ARC HERMETIC SCROLL MODELS

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]

OUTDOOR SECTION

Compressor HP: 2
Description: Lifetime lubricated hermetic scroll compressor and air cooled condenser supplied with high/low pressure controls, pump-down controls, refrigerant sight glass, dehydrator and receiver with full charge of refrigerant. All enclosed in weather resistant housing.
Controls and Gauges:
Pressure Gauges: Refrigerant head and suction
Supply Power 208-230/60/3 or 460/60/3
Full Load Amps* 14.8 or 7.4
Cabinet: Heavy gauge anodized aluminum panels on welded steel frame with stainless steel top and corner legs. Panels removable without tools for access to all components.

INDOOR SECTION

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 1/2
Capacity 4 GPM @ 32 PSI [15 lpm @ 2.2 bar]
Description: Stainless steel centrifugal pump mounted on a rubber pad over a stainless steel condensation tray and supplied with unions and service valves and a manually adjusted bypass valve. All piping and fittings brass, copper or bronze, and insulated with closed cell thermo-elastomer with an R factor of 3.7.
Controls and Gauges:
Temperature Stability ±1.5°F [0.8°C]
Dial Thermometers: Water out & return
Pressure Gauges: Water out & return/Refrigerant head & suction
Flow Meter: 0 - 10 GPM
Low Flow Interlock: Flow switch lights a warning light if flow rate drops below safe low limit.
High Temperature Interlock: Thermostat lights a warning if coolant temperature rises above safe high limit.
Manual Switchover to City Water: In case of pump or compressor failure, city water switchover is manually activated to allow for temporary cooling using city water.
Filter 75 micron polypropylene cartridge inside stainless steel housing
Supply Power 115 or 230/60/1 or 208-230/60/3 or 460/60/3
Full Load Amps* 1.8 or 0.9
Cabinet: Heavy gauge painted aluminum panels on welded steel frame with stainless steel top and corner legs. Panels removable without tools for access to all components.
Plumbing Connections: In & Out 3/4" [19 mm] FPT
Liquid 1/2" [13 mm]
Suction 7/8" [22 mm]
Decibel Rating: [nominal at 5 ft.] 40 dBA
Shipping Weights..... On Reverse

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

"FAIL SAFE" OPTIONS: (Designated by suffix)

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

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

CHILLER EQUIPMENT SCHEDULE

MODEL NUMBER	OUTDOOR SECTION: CONDENSING UNIT				INDOOR SECTION: COOLING TANK and CIRCULATION SYSTEM						
	Comp	Cooling Cap	Ambient Rating	Power Supply	Circulation Pump	Flow Rate	Head	Storage Evaporator	Outlet Temperature	Filter	Power Supply
TPCP-200-24-ARC	2 hp hemetic scroll	23,900 btu / hr	-20 to 100°F ---- -29 to 38°C	208-230/60/3 or 460/60/3	1/2 hp stainless steel	4 gpm ---- 15 lpm	32 psi @ 2.2 bar	20 gal stainless steel	68°F [20°C] ---- ±1.5°F [0.8°C]	75 µm poly	115 or 230/60/1 or 208-230/60/3 or 460/60/3

STANDARD OUTDOOR AMBIENT

-20°F to 100°F [-29°C to 38°C]

OPTIONAL OUTDOOR AMBIENT

UP TO 120°F [49°C]

LEGEND

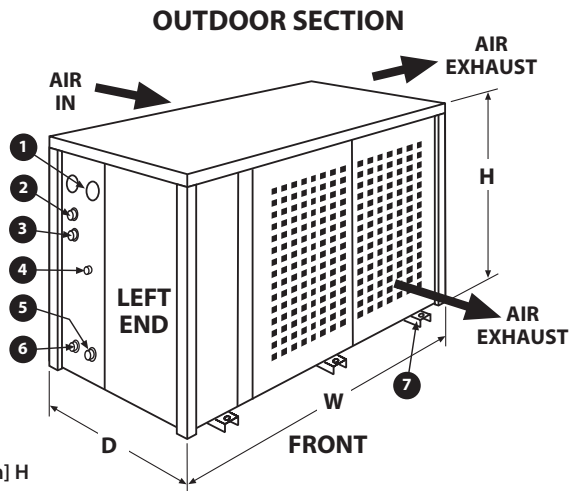
1. Refrigerant Gauges
2. Refrigerant Line From Indoor Unit
3. Refrigerant Line To Indoor Unit
4. Thermal Overload Warning Light
5. Control Electric
6. Remote Electric
7. Channel Skids

SHIPPING WEIGHT

600 lbs

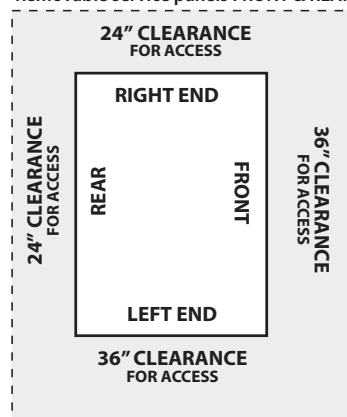
DIMENSIONS

48" [122 cm] W x 27" [69 cm] D x 28" [71 cm] H



PLAN VIEW: OUTDOOR SECTION

Removable service panels FRONT & REAR



LEGEND

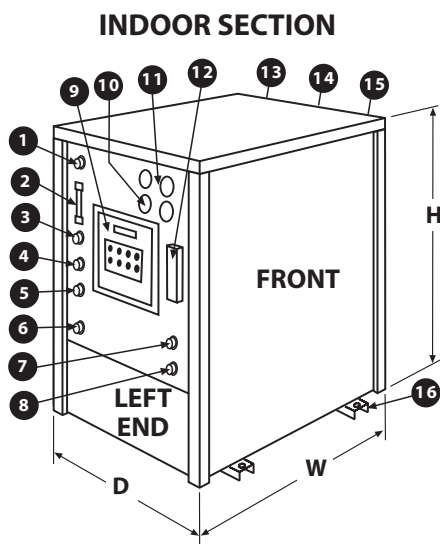
1. Fill Port
2. Sight Glass
3. Return Water In
4. City Water Out
5. Discharge Water Out
6. City Water In
7. Unit Electric
8. Remote Electric
9. Controls & Warning Lights
10. Thermometers
11. Pressure Gauges
12. Flow Meter
13. Refrigerant To Remote Condenser
14. Refrigerant From Remote Condenser
15. Electric To Remote Condenser
16. Channel Skids

SHIPPING WEIGHT

700 lbs

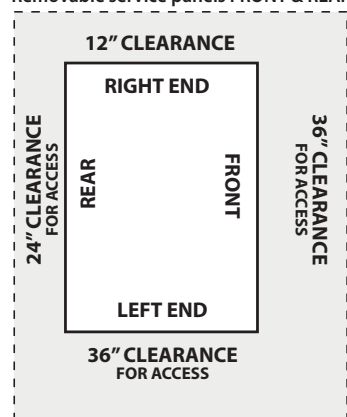
DIMENSIONS

30" [76 cm] W x 30" [76 cm] D x 50" [127 cm] H



PLAN VIEW: INDOOR SECTION

Removable service panels FRONT & REAR



NOTE: Chiller drawings are provided to illustrate typical unit. Chiller dimensions and shipping weights may vary depending on options, including higher ambient.

NOTE: Channel skids project 2" [5 cm] front and rear. 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.

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