



FILTRINE MEDICAL & PROCESS WATER CHILLER 60+

OPTIONS/ACCESSORIES TO MEET YOUR SPECIFIC REQUIREMENTS

Options Identified By Suffix and Description

SENSOR CONTROLS

ADT - AMBIENT DRIVEN THERMOSTAT

Senses the ambient air temperature and maintains the chilled water at a fixed differential (plus or minus) from that ambient.*

CDT - COMPUTER DRIVEN THERMOSTAT

Solid state temperature controller with appropriate output to communicate with computers.

CTC - CLOSE TEMPERATURE CONTROL

Solid state temperature controller and hot gas bypass maintain liquid temperature at $\pm 0.5^{\circ}\text{F}$ [$\pm 0.3^{\circ}\text{C}$] of setting.

HGBP - HOT GAS BYPASS

Allows compressor to run constantly without cycling. When thermostat is satisfied, liquid line solenoid closes causing the hot refrigerant gas to bypass through a regulating valve directly into the evaporator until the water temperature rises enough to reactivate the thermostat.

PLC - PROGRAMMABLE LOGIC CONTROLLER

Controls operation of refrigeration unit, circulation pump, fans and other accessories of Filtrine chillers. Compatible with most building monitoring systems. Available with touch screen display.

SST - SOLID STATE THERMOSTAT

Temperature controller available with a variety of outputs to operate customers' recording device or other communication functions. Controllers can also feature programming functions such as PD, PID, ramp/soak and deviation alarms.

TEMPERATURE RANGE

L - LOW TEMPERATURE

Chill water down to 34°F [1°C] or antifreeze liquids down to 0°F [-18°C].*

ILH - IN-LINE HEATER

Heat liquids to optimum temperature automatically. Specify heater KW and temperature range.

H/C - HEAT OR COOL

Switch instantly from hot to cold and back. Example: Heat up work piece for vacuum coating then quickly cool it down for handling. Example: Product testing with quick and extreme coolant temperature changes.*

MHC - MIXED HOT & COLD

Complete dial-a-temp control over a wide temperature range. Outlet temperature will follow the set point control up or down as it is changed. Example: Ramp heating and cooling of electronic components for precise computer-monitored testing.*

BHC - BATH COIL HEATER/CHILLER

Extremely wide range heater/chiller. Ideal for cooling fluids at high temperatures. Example: Heat up a device to optimum process temperature, then cool it to maintain that temperature during the process.*

SWITCHES, INDICATORS AND ALARMS

DT - DIAL THERMOMETER

Makeup and/or discharge temperature.

DGT - DIGITAL THERMOMETER

Makeup and/or discharge temperature.

FCL - FILTER CHANGE LIGHT

Warning light activates when water filter element needs changing.

HT - HIGH TEMPERATURE INTERLOCK

Warning set off when chiller temperature exceeds set high temperature, signifying refrigeration failure.

PM - PHASE MONITOR

Protection from under or over voltage, phase loss or reversal and short cycling automatic reset included.

LF - LOW FLOW INTERLOCK

Warning signal triggered upon low flow signifying pump failure.

LL - LOW LEVEL INTERLOCK

Float switch in tank activates a warning light if coolant level drops below safe limit.

LP - LOW PRESSURE INTERLOCK

Warning signal triggered upon low pressure; signifying pump failure.

LT - LOW TEMPERATURE INTERLOCK

In-line sensor sets off warning when chiller temperature falls below set low temperature.

PG - PRESSURE GAUGE

Return and/or discharge water pressure.

FM - FLOW METER

Indicates water flow in gpm or lpm.

OPG - OIL PRESSURE GAUGE

Analog or digital on semi-hermetic compressors only.

HPG - HEAD PRESSURE GAUGE

Analog or digital refrigerant gauge.

SPG - SUCTION PRESSURE GAUGE

Analog or digital refrigerant gauge.

UVML - UV STERILIZER MONITOR LIGHT

Light indicates in-line UV sterilizer requires maintenance.

FOR SPECIAL CONDITIONS

N12 - NEMA 12 ENCLOSURE

Oil tight NEMA 12 external electrical enclosures.*

XP - EXPLOSION PROOF

All motors, wiring and controls rated for Class 1, Group D, Division 1, explosive environment. Groups B and C available on some models.*

WP - WEATHER-RESISTANT

For outdoor installation in most climates. Standard weather-resistant is sufficient for ambients between -20°F [-29°C] and 100°F [38°C]. For higher ambients see the **HA OPTION**. For lower ambients consult factory.

CF - COPPER FIN CONDENSER

Condensers supplied with copper fins instead of aluminum to prevent corrosion from salt spray or chemicals in the air.

DPD - DUST PROOF DESIGN

Air filter on intake to condenser.

SP - SOUND PROOF DESIGN

Acoustical insulation on all panels to reduce noise.

OSP - PRE-APPROVED FOR OSHPD SPECIAL SEISMIC CERTIFICATION

By the State of California Office of Statewide Health Planning & Development Facilities Development Division for specific closed loop chiller models

EC - EPOXY COATING

Helps to protect the condenser in a marine/salt atmosphere.

PUMPS

OP/T - OPTIONAL PUMP, TURBINE

Turbine or gear pump to provide head pressures up to 200 psi with flow rates less than 20 gpm.

OP/C - OPTIONAL PUMP, CENTRIFUGAL

Larger than normal centrifugal pump to provide higher head pressure and flow rates than standard.

DP - DUAL PUMPS

Provide complete backup. Available with automatic switchover in case of failure.

Options available for both Medical and Process Liquid Chillers (PW) unless otherwise indicated.

**PW only.*

MORE OPTIONS ON REVERSE

FILTRINE MEDICAL & PROCESS WATER CHILLER OPTIONS/ACCESSORIES (continued)

ACCESSORIES

QCP - QUICK CONNECT PANEL

See at a glance if your chiller is operating correctly. Complete pre-plumbed diagnostic panel allows for instant availability to city water backup (optional), pressure and temperature gauges, flow meter and in-line bag filter. Housed in 18 ga. stainless steel corner legs and top, and clear aluminum panels.

PS - PURE SYSTEM

For deionized water or other liquids that cannot come into contact with copper or brass. Evaporator fabricated from type 304 stainless steel with polypropylene piping and fittings. Type 316 stainless steel also available for salt water or acids.

ILF - IN-LINE FILTER

Removes sediment from makeup water and/or from water in circulating loop. Filter elements available with rating of 1 to 75 microns.

ILD - IN-LINE DEIONIZER

Installed in-line; specify requirements.

ILS - IN-LINE STERILIZER

UV sterilizer installed in makeup line and/or recirculating line to kill bacteria and other waterborne microorganisms.

AF - AUTO FILL

On closed-loop chillers, float switch senses liquid level in tank and activates solenoid valve on makeup line to keep tank full.

AAV - AUTO AIR VENT

Automatically vents air from system.

LCI - LIQUID COOLANT INTERCHANGER

Shell-in-tube or plate-type heat exchanger to cool corrosive, viscous or high temperature liquids.

BD - BATCH DRAW

Stainless steel cooling tank automatically fills with water, which is constantly agitated and chilled to as cold as 34°F [1.1°C]. When water is drawn off, a solenoid valve shuts off the makeup water preventing the mixing of warm and chilled water and insuring a uniform batch temperature from first drop to last.*

OCO - OTHER COOLANT INTERCHANGER OPTION

Designed for cooling high temperature, dirty or oil based fluids. A double circuit configuration sends water (or glycol) to be chilled using Filtrine's storage tank. The cooled water is then circulated through a water-to-liquid heat exchanger permitting a closer temperature differential to avoid fouling. The heat exchanger is available as a cleanable type that won't contaminate the refrigeration system.

COMPRESSORS/CONDENSERS

AR - REMOTE AIR-COOLED CONDENSER

Ready for remote installation outdoors or indoors.

ARC - REMOTE AIR COOLED CONDENSING UNIT

Outdoor refrigeration system, indoor evaporator and pump only – saves indoor space, reduces noise, exhausts heat.

AB - BLOWER

Built into cabinet for ducting hot air out of building.

W - WATER COOLED CONDENSER

For hookup to city water, tower water or plant chilled water.

AS - AUTOMATIC SWITCHOVER

Auto switchover to city water in case of pump or compressor failure.

HA - OVERSIZED CONDENSER

For safe chiller operation in ambients over 100°F [38°C]. Specify maximum ambient of 110°F [43°C] or 120°F [49°C].

ELECTRICAL

110-120/1/60, 220-240/1/60, 220-240/1/50, 208-230/3/60, 200-240/3/50, 440-480/3/60, 380-420/3/50, 380/3/60, 575/60/3

REFRIGERATION

RED: STANDBY REFRIGERATION

For critical applications where downtime can be extremely expensive. Failsafe design with 50% or 100% backup refrigeration and circulating system packaged within a single housing.

RED2: TWO REFRIGERATION UNITS

One active and one standby

RED3: THREE REFRIGERATION UNITS

Two active and one standby

DUC: TWO REFRIGERATION UNITS

Each handle 50% of the total cooling capacity. Other capacity splits available.

CABINET DESIGN CHOICES

SSC - STAINLESS STEEL CABINET

Cabinet exterior constructed of stainless steel.

RC - RUBBER CASTERS

Rubber casters for complete mobility.

SSD - SPACE SAVING DESIGN

Smaller footprint available on many designs (consult factory) – not available on weather-resistant models.

ADJ - ADJUSTABLE LEGS

Stainless steel legs adjustable from 6" to 8".

LH - LIFTING HOOKS

For lifting with a crane. Ideal for loading chiller onto ship or high platform.

LP - LOW PROFILE

Reduced height available on many models (consult factory).

VIBRATION PADS

Neoprene pads in rugged, vast iron casings mounted under channel skids.

SPECIAL PAINTS AND CUSTOM COLORS

Available to match any space.

Options available for both Medical and Process Liquid Chillers (PW) unless otherwise indicated.

**PW only.*

**PLEASE CONTACT FILTRINE FOR ANY
REQUIREMENT NOT LISTED HERE**