

# performance, value and simplicity



### Introducing the

# NEW Thermo Scientific ThermoChill recirculating chiller series

**Simplicity:** innovative yet simple intuitive controller that is easy to use, and a plugand-play design that allows you to be up and running in minutes.

**Value:** when you need conventional cooling requirements for your application, this powerful recirculating chiller offers a high quality, cost effective solution.

**Performance:** enjoy peace of mind for those routine applications where quality, reliable liquid cooling equipment is a necessity.



Accessible fill port for easy filling

Pressure gauge located on control panel for easy viewing of application pressure

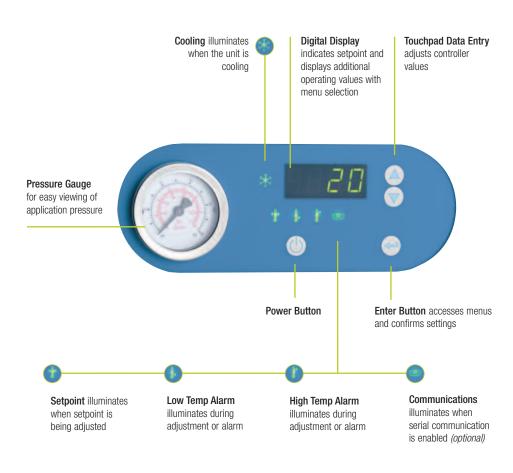
Intuitive digital controller with controller indicator lights (see diagram to the right)

RS232 or RS485 digital communications optional (located on the back of the unit)

Locking casters for easy maneuvering and safety



## Thermo Scientific ThermoChill Series Recirculating Chillers

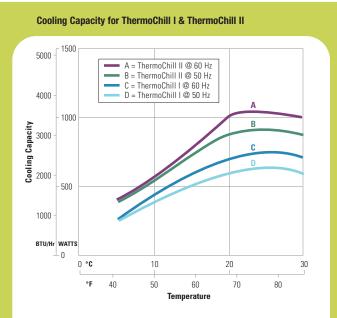


opecifications
Setpoint Temperature Range
Ambient Temperature Range
Temperature Stability
Setpoint Cooling Capacity +20°C
60 Hz
50 Hz
Reservoir Volume
Refrigerant
Physical Dimensions
(H x W x D)
PD-1 – Positive Displacement Pump
60 Hz
50 Hz
PD-2 – Positive Displacement Pump
60 Hz
50 Hz
MD-30 – Mag Drive Centrifugal Pump
60 Hz
50 Hz
Unit Weight
Voltage Options
115 V / 60 Hz
208-230 V / 60 Hz and 200 V / 50 Hz
230 V / 50 Hz
Compliance 61010-1: 2004 (UL Listing Pending)

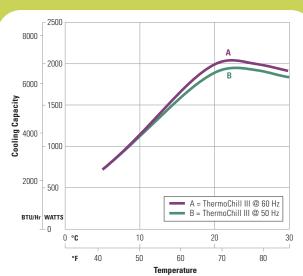
Charifications

Specifications obtained at sea level using water as the recirculating voltage. Other fluids, process temperatures, ambient temperatures, Cooling capacity based on units with PD-1 pumps with no backpre differential pressures between the inlet and the outlet of the unit. S "also operates at 100 V/50 Hz

## performance curves



#### **Cooling Capacity for ThermoChill III**



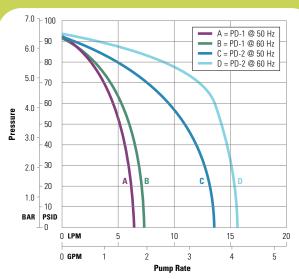
## innovative design

The ThermoChill series of chillers is a compact line of refrigerated recirculators offering cooling capacities up to 2000 watts. Innovative design features such as minimized plumbing connections and an integrated full-flow fluid strainer maximize product reliability.

ThermoChill I	ThermoChill II	ThermoChill III
+5°C to +30°C	+5°C to +30°C	+5°C to +30°C
(+41°F to +86°F)	(+41°F to +86°F)	(+41°F to +86°F)
+10°C to +35°C	+10°C to +35°C	+10°C to +35°C
(+50°F to +95°F)	(+50°F to +95°F)	(+50°F to +95°F)
±0.1°C	±0.1°C	±0.5°C
700 W / 2391 BTU	1000 W / 3415 BTU	2000 W / 6830 BTU
600 W / 2049 BTU	900 W / 3074 BTU	1900 W / 6489 BTU
9.5 liters (2.5 gallons)	9.5 liters (2.5 gallons)	19.0 liters (5.0 gallons)
R134A	R134A	R134A
23.8 x 14.0 x 23.0 in	23.8 x 14.0 x 23.0 in	28.0 x 17.0 x 23.0 in
(60.5 x 35.6 x 58.4 cm)	(60.5 x 35.6 x 58.4 cm)	(71.1 x 43.2 x 58.4 cm)
1.4 gpm @ 60 psid	1.4 gpm @ 60 psid	1.4 gpm @ 60 psid
(5.3 lpm @ 4.1 bar)	(5.3 lpm @ 4.1 bar)	(5.3 lpm @ 4.1 bar)
1.2 gpm @ 60 psid	1.2 gpm @ 60 psid	1.2 gpm @ 60 psid
(4.5 lpm @ 4.1 bar)	(4.5 lpm @ 4.1 bar)	(4.5 lpm @ 4.1 bar)
—	3.6 gpm @ 60 psid	3.6 gpm @ 60 psid
	(13.6 lpm @ 4.1 bar)	(13.6 lpm @ 4.1 bar)
—	2.5 gpm @ 60 psid	2.5 gpm @ 60 psid
	(9.4 lpm @ 4.1 bar)	(9.4 lpm @ 4.1 bar)
—	2.0 gpm @ 6 psid	_
	(7.6 lpm @ 0.4 bar)	
—	2.0 gpm @ 4.4 psid (7.6 lpm @ 0.3 bar)	
00.0 lb (40.9 l/m)		160 0 lb (70 6 kg)
90.0 lb (40.8 kg)	90.0 lb (40.8 kg)	160.0 lb (72.6 kg)
Available*	Available	
Available	Available	Available
Available	Available	Available
CE/UL	CE/UL	CE/UL
UL/UL	UL/UL	UL/UL

fluid, at a +20°C process setpoint, +20°C ambient condition, at nominal operating altitude or operating voltages will affect performance. ssure. Other pumps will affect cooling capacity performance. Pressure values are

pecifications subject to change.





Intuitive controller for ease of use.

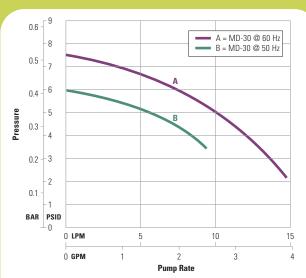


**Removable and** accessible full flow strainer ensures clean recirculating fluid.



Removable and accessible fill for easy filling.

#### Pumping Capacity for Mag Drive Pump (MD-30)



Pumping Capacity for Positive Displacement Pumps (PD-1 and PD-2)

## The Perfect Fit Temperature control products for any application

As an innovative leader in temperature control, we have the expertise to enable you to optimize your liquid cooling and heating applications while increasing productivity and reducing operating costs. With over 50 years of industry leading service and countless successful installations around the world, we collaborate with you to provide product and applications expertise to meet the most demanding temperature control requirements. From bio-tech and pharmaceutical to printing and semiconductor, world class companies and industry leaders continue to make Thermo Scientific temperature control products their first choice.

Select the product that is right for your application from the most comprehensive portfolios of temperature control solutions that deliver scalable product offerings ranging from bench top research to large process manufacturing. Our new and innovative products – developed from customer feedback – represent a giant leap forward in performance, configurability and technology that provide unparalleled advantages including:

A Perfect Fit: Whatever your application or your budget, you can configure the most flexible, cost-effective temperature control system that suits your specific requirements.

**Innovation:** Our research and development team is focused on designing innovative products based on your feedback.

**Global Service and Support:** With our extensive global footprint, service and support are readily available by phone or the web.



## Ordering Information

ThermoChill I (700 W @ 60 Hz / 600 W @ 50 Hz)	Part Number
ThermoChill I 115 V / 60 Hz PD-1	196111010000
ThermoChill I 115 V / 60 Hz PD-1 RS 232	196111120000
ThermoChill I 115 V / 60 Hz PD-1 RS 485	196111220000
ThermoChill I 230 V / 50 Hz PD-1	196121010000
ThermoChill I 230 V / 50 Hz PD-1 RS 232	196121120000
ThermoChill I 230 V / 50 Hz PD-1 RS 485	196121220000

ThermoChill II (1000 W @ 60 Hz / 900 W @ 50 Hz)	Part Number
ThermoChill II 115 V / 60 Hz PD-1	197111010000
ThermoChill II 115 V / 60 Hz PD-1 RS 232	197111120000
ThermoChill II 115 V / 60 Hz PD-1 RS 485	197111220000
ThermoChill II 115 V / 60 Hz PD-2	197112010000
ThermoChill II 115 V / 60 Hz PD-2 RS 232	197112120000
ThermoChill II 115 V / 60 Hz PD-2 RS 485	197112220000
ThermoChill II 115 V / 60 Hz MD-30	197113010000
ThermoChill II 115 V / 60 Hz MD-30 RS 232	197113120000
ThermoChill II 115 V / 60 Hz MD-30 RS 485	197113220000
ThermoChill II 230 V / 50 Hz PD-1	197121010000
ThermoChill II 230 V / 50 Hz PD-1 RS 232	197121120000
ThermoChill II 230 V / 50 Hz PD-1 RS 485	197121220000
ThermoChill II 230 V / 50 Hz PD-2	197122010000
ThermoChill II 230 V / 50 Hz PD-2 RS 232	197122020000
ThermoChill II 230 V / 50 Hz PD-2 RS 485	197122220000
ThermoChill II 230 V / 50 Hz MD-30	197123010000
ThermoChill II 230 V / 50 Hz MD-30 RS 232	197123120000
ThermoChill II 230 V / 50 Hz MD-30 RS 485	197123220000

ThermoChill III (2000 W @ 60 Hz / 1900 W @ 50 Hz)	Part Number
ThermoChill III 208-230 V / 60 Hz PD-1	198131010000
ThermoChill III 208-230 V / 60 Hz PD-1 RS 232	198131120000
ThermoChill III 208-230 V / 60 Hz PD-1 RS 485	198131220000
ThermoChill III 208-230 V / 60 Hz PD-2	198132010000
ThermoChill III 208-230 V / 60 Hz PD-2 RS 232	198132120000
ThermoChill III 208-230 V / 60 Hz PD-2 RS 485	198132220000
ThermoChill III 230 V / 50 Hz PD-1	198121010000
ThermoChill III 230 V / 50 Hz PD-1 RS 232	198121120000
ThermoChill III 230 V / 50 Hz PD-1 RS 485	198121220000
ThermoChill III 230 V / 50 Hz PD-2	198122010000
ThermoChill III 230 V / 50 Hz PD-2 RS 232	198122120000
ThermoChill III 230 V / 50 Hz PD-2 RS 485	198122220000

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#### The External Pressure Reducer (EPR) Accessory

Attaches to the chiller to limit the maximum outlet pressure of the chiller. Choose this accessory when circulating to applications that are sensitive to higher pressures or when circulating through glass.

	Part Number
EPR Kit for ThermoChill I or ThermoChill II	19600000000
EPR Kit for ThermoChill III	19600000001

#### ThermoChill Plumbing Kit

The kit includes (2) ½-in x ½-in mpt fittings, 25 feet of 5/8-in ID Polybraid hose, (2) hose clamps & hose insulation.

	Part Number
ThermoChill Plumbing Kit	61100000108

**Thermo** S C I E N T I F I C Part of Thermo Fisher Scientific