



# Support your bioprocess systems with optimal temperature control

High-performance equipment for advancing biotechnology

Maintain optimal conditions for your bioreactors, fermentors, and bioprocess tanks with reliable and accurate Thermo Scientific™ ThermoFlex™, ThermoChill™, and Merlin™ recirculating chillers.

## Designed for a wide range of applications

- Configuration flexibility
- Customized solutions and logistics
- Global voltage options
- World-class manufacturing and testing
- Global service availability
- Global compliance (CE, CSA/UL, RoHS/WEEE)
- Scalability to support bioreactors from 50 L to 3,000 L

Visit our website to inquire about nonstandard installations for other custom options.

[thermofisher.com/recirculatingchillers](http://thermofisher.com/recirculatingchillers)





## Specifications for ThermoFlex, ThermoChill, and Merlin recirculating chillers

### Ordering information

	ThermoFlex 1400	ThermoFlex 2500	ThermoFlex 5000	ThermoFlex 10000	ThermoFlex 24000	ThermoChill I	ThermoChill II	ThermoChill III
Cooling capacity 60 Hz*	1,400 watts	2,500 watts	5,000 watts	10,000 watts	24,000 watts	700 watts	1,000 watts	2,000 watts
Cooling capacity 50 Hz*	1,170 watts	2,200 watts	4,400 watts	8,500 watts	21,000 watts	600 watts	900 watts	1,900 watts
Heater capacity	1.0 kW @ 208 V	2.8 kW @ 230 V	2.8 kW @ 230 V	6.1 kW @ 460 V	22.5 kW @ 460 V	–	–	–
Temperature range	5°C to 90°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-10°C to 30°C	-10°C to 30°C	-10°C to 30°C
Temperature stability	+/- 0.1°C	+/- 0.1°C	+/- 0.1°C	+/- 0.1°C	+/- 0.1°C	+/- 0.1°C	+/- 0.1°C	+/- 0.5°C
Air-cooled condensor	Y	Y	Y	Y	NA	Y	Y	NA
Water-cooled condensor	Y	Y	Y	Y	Y	NA	NA	NA
Anti-drainback	Y	Y	Y	Y	Y	NA	NA	NA
Auto-refill	Y	Y	Y	Y	Y	NA	NA	NA
Flow control with flow readout	Y	Y	Y	Y	Y	NA	NA	NA
Pump performance 60 Hz**	4.0 gpm @ 60 PSID	3.5 gpm @ 60 PSID	10 gpm @ 32 PSID	10 gpm @ 32 PSID	20 gpm @ 60 PSID	1.4 gpm @ 60 PSID	3.6 gpm @ 60 PSID	1.4 gpm @ 60 PSID
Pump performance 50 Hz**	12.5 lpm @ 4.1 bar	9.5 lpm @ 4.1 bar	37.9 lpm @ 1.4 bar	37.9 lpm @ 1.4 bar	75.7 lpm @ 1.4 bar	4.5 lpm @ 4.1 bar	9.4 lpm @ 4.1 bar	9.4 lpm @ 4.1 bar
Communications	RS232/RS485/Analog	RS232/RS485/Analog	RS232/RS485/Analog	RS232/RS485/Analog	RS232/RS485/Analog	RS232	RS232	RS232
Power options	Global voltage	Global voltage	Global voltage	50/60 Hz, 3Ph 400-460V	50/60 Hz, 3Ph 400-460V	Multiple	Multiple	Multiple
Cat. No.***	1111C10500200100 1147C23161200400 1147C23161200400	12C7C23169220001 12B7C23169220001	14B7823169220001 14C7823169220001	16C8823164220001 16B8823164220001	19C8A23168220001	196211120000 196221120000 196224120000	197212120000 197222120000 197224120000	198231120000 198222120000 198224120000

\* Capacity at 20°C. \*\* Positive-displacement and magnetically coupled centrifugal pump options are available. \*\*\*For a complete list of our product offerings, please contact a local sales representative.

### Ordering information

Merlin recirculating chillers	Cooling capacity	Temp range	Power	Pump performance	Cat. No.
Merlin M75 Recirculating Chiller	Up to 2,156 watts	-15°C to +35°C	60Hz	3 gpm @ 60 psi	264216044000
Merlin M150 Recirculating Chiller	Up to 4,832 watts	-15°C to +35°C	60Hz	10 gpm @ 34 psi	266216024000

Find out more at [thermofisher.com/recirculatingchillers](http://thermofisher.com/recirculatingchillers)