Recirculating Chillers

Merlin Series

Applications

- Lasers
- Analytical Instrumentation
- Semiconductor Manufacturing
- Medical Imaging Equipment
- Process Cooling
- Reaction Vessels
- Condensers

Merlin Series

Overview

Improved for 2002!

The Merlin Series of chillers is a compact portable line of refrigerated recirculators ranging in cooling capacity from 810 watts to 5045 watts. Powerful cooling capacities, a variety of standard features and options, and a space saving design equals high performance at a great value. All Merlin chillers have a 2 year warranty and are listed to UL, CE, and CSA, to ensure the utmost in safety, reliability, and quality.

- Circulate to open or closed containers
- Quieter
- Improved plumbing for leak-free operation
- Hundreds of configurations to meet your exact application requirements
- Reservoir isolation valves eliminate reservoir overflow when pumping vertically

Accessories

- *Air Filters*
- *Fluid Filters*
- *Plumbing Kits*
- *Fluids*
- *Deionized Water Pkg.*

810 Watts to 5045 Watts

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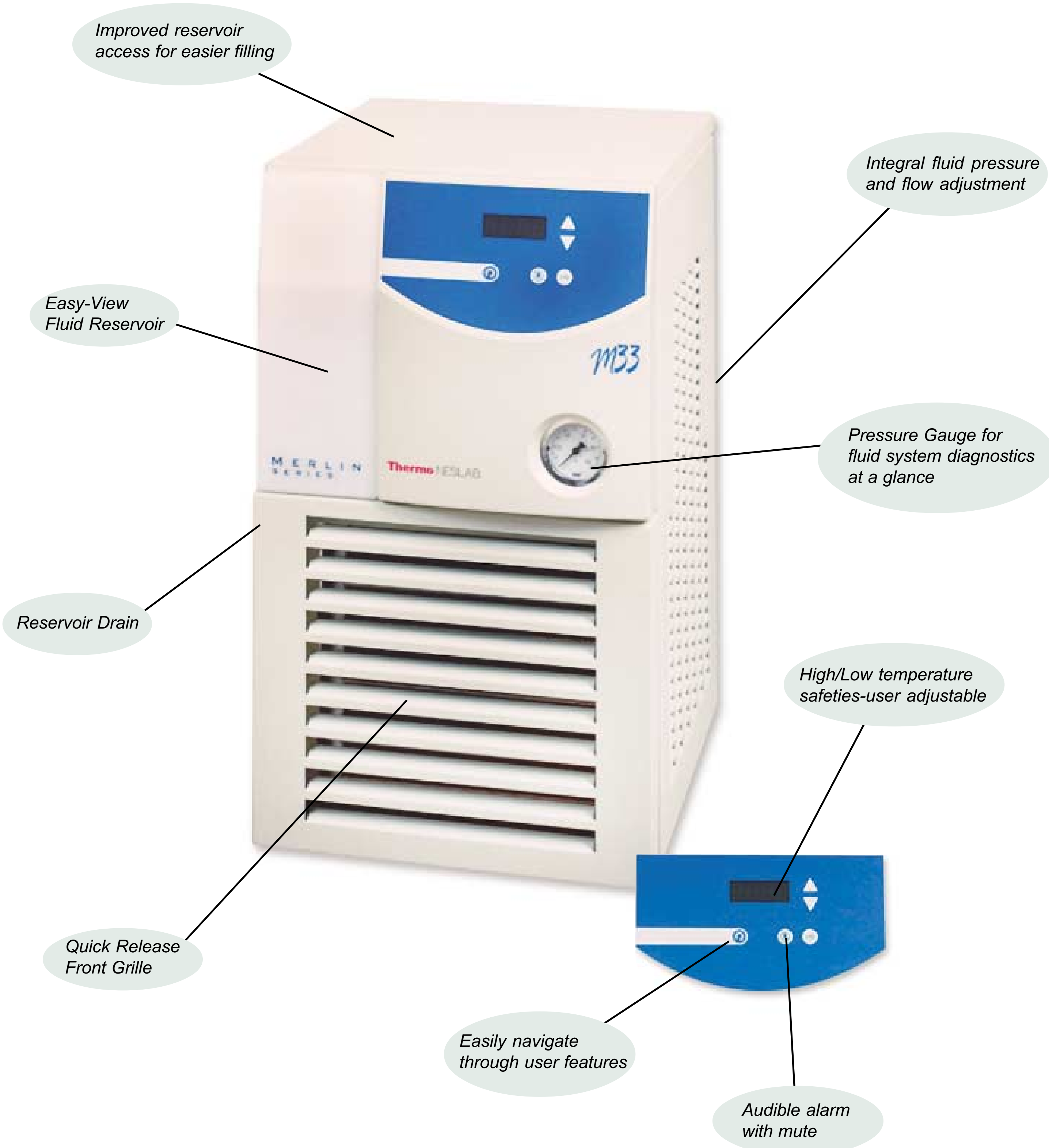
Features



Merlin Series

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Specifications

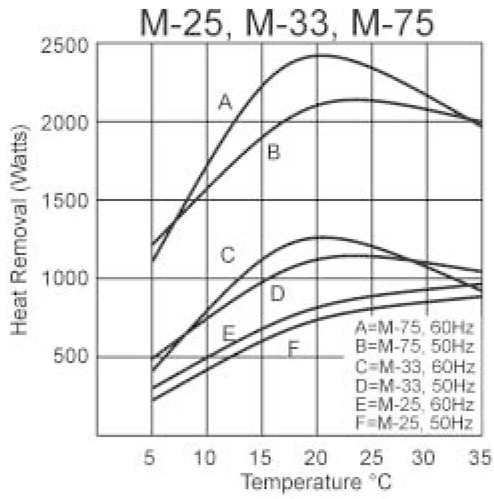
Model	M-25	M-33	M-75	M-100	M-150
Cooling Capacity					
60 Hz	810 Watts at 20°C	1250 Watts at 20°C	2410 Watts at 20°C	3500 Watts at 20°C	5045 Watts at 20°C
	2765 BTU/hr at 20°C	4266 BTU/hr at 20°C	8225 BTU/hr at 20°C	11946 BTU/hr at 20°C	17219 BTU/hr at 20°C
	697 Kcal/hr at 20°C	1075 Kcal/hr at 20°C	2073 Kcal/hr at 20°C	3010 Kcal/hr at 20°C	4339 Kcal/hr at 20°C
50 Hz	725 Watts at 20°C	1125 Watts at 20°C	2180 Watts at 20°C	3500 Watts at 20°C	4540 Watts at 20°C
	2474 BTU/hr at 20°C	3840 BTU/hr at 20°C	7440 BTU/hr at 20°C	11946 BTU/hr at 20°C	15495 BTU/hr at 20°C
	624 Kcal/hr at 20°C	968 Kcal/hr at 20°C	1875 Kcal/hr at 20°C	3010 Kcal/hr at 20°C	3905 Kcal/hr at 20°C
Temp. Range	+5° C to +35° C	+5° C to +35° C	+5° C to +35° C	+5° C to +35° C	+5° C to +35° C
Stability	+/- 0.1° C	+/- 0.1° C	+/- 0.15° C	+/- 0.15° C	+/- 0.15° C
Pump	MD-30/PD-1	MD-30/PD-1/PD-2	PD-1/PD-2	PD-2/CP-55*	PD-2/CP-55*
Reservoir Volume	0.5 Gallons/1.8 Liters	0.5 Gallons/1.8 Liters	0.5 Gallons/1.8 Liters	0.5 Gallons/1.8 Liters	0.5 Gallons/1.8 Liters
Dimensions					
(H x W x D) In.	$23^1/_2$ x $12^5/_8$ x $20^7/_8$	$23^1/_2$ x $12^5/_8$ x $20^7/_8$	$26^1/_8$ x $16^1/_4$ x 24	$30^3/_8$ x $21^1/_4$ x $29^1/_4$	$30^3/_8$ x $21^1/_4$ x $29^1/_4$
Cm.	59.7 x 32.1 x 53.0	59.7 x 32.1 x 53.0	66.4 x 41.3 x 61.0	77.2 x 54 x 74.3	77.2 x 54 x 74.3
Power					
Requirements 60 Hz	115V, 11 Amps	115V, 15 Amps	200-230V, 12 Amps	200-230V, 17 Amps	200-230V, 20 Amps
50 Hz	230V, 6 Amps	230V, 8 Amps	230V, 10 Amps	400V/3 phase, 6 Amps	400V/3 phase, 7 Amps
Shipping Weight	141 Lbs, 64 Kgs	141 Lbs, 64 Kgs	200 Lbs, 91 Kgs	287 Lbs, 130 Kgs	287 Lbs, 130 Kgs

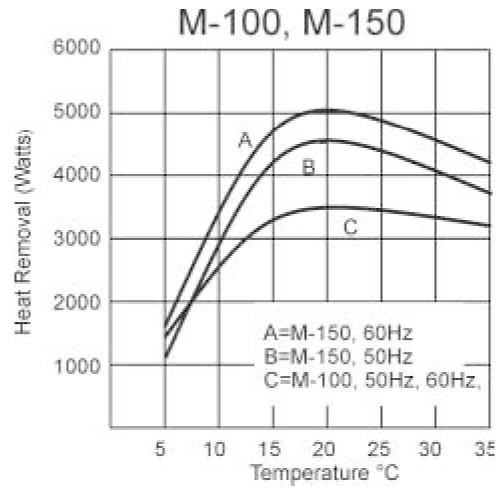
Specifications listed for standard units circulating water at 20°C fluid temperature and 20°C ambient. Other fluids, fluid temperatures, or ambients will affect performance. Cooling capacity and amperage ratings based on units with PD-1 pumps (PD-2 for M100 and M150). Other pumps will affect performance. *Note: M100 and M150 units with CP-55 pump have a height of 36 3/8", and shipping weight of 310 lbs. Specifications subject to change.

810 Watts to 5045 Watts

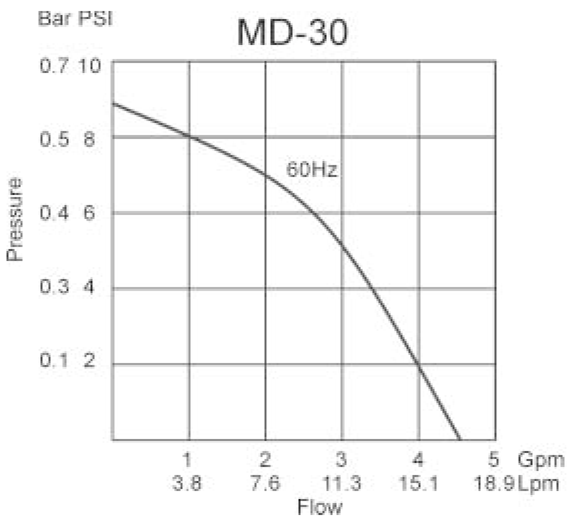
Graphs

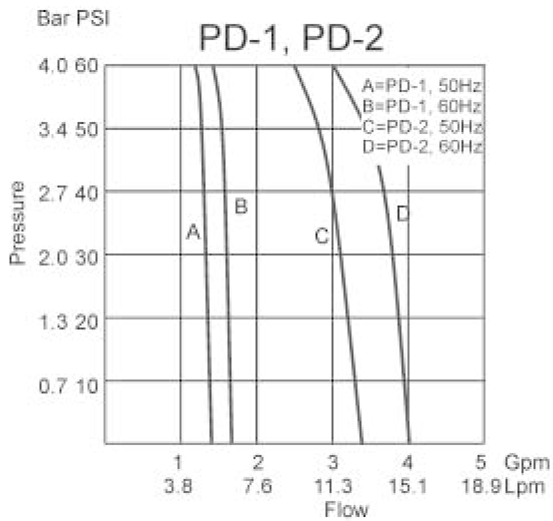
Cooling Capacity

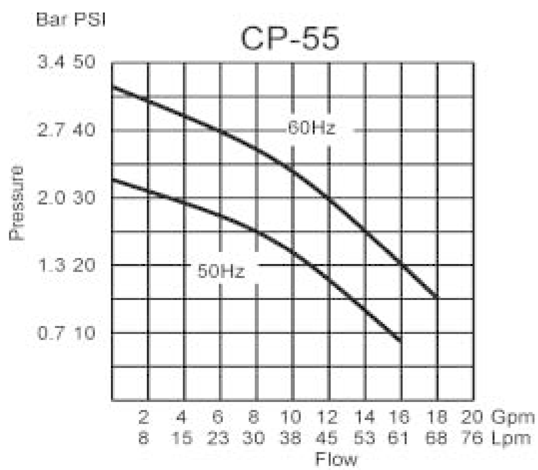




Pumping Capacity





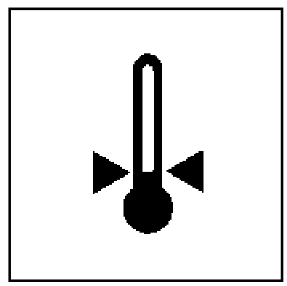


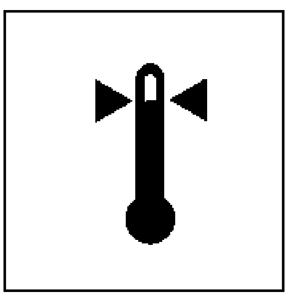
Merlin Options

Communications Package

- RS-232 or RS-485
- Remote Start Stop
- Status Relay
- Remote Sensor Port

-15°C Extended Low Temperature Range





+90°C Extended High Temperature Range

Low Level/Low Flow Package

Provides an additional level of safety should the fluid level in the reservoir or the recirculating flow become low. If a fault occurs, the user can decide if the chiller should continue to run or automatically shut down. The LL/LF option is an ideal choice when the Merlin chiller will run unattended.

Merlin Accessories

Air Filter Kit - Protect your chiller from dusty environments. The aluminum framed filter slides easily into the unit's grille and is washable.

Deionized Water Package – For cooling applications requiring ultra pure water, will maintain a water resistivity level between 1 and 3 megohm/cm^2. Filter good/no good LED indication

Plumbing Package - includes 25' of flexible tubing, 25' of tubing insulation, and hose clamps.

Fluid Filter Package - Available with 5, 10, 25, or 40 micron filters. Choice of full or partial flow through.

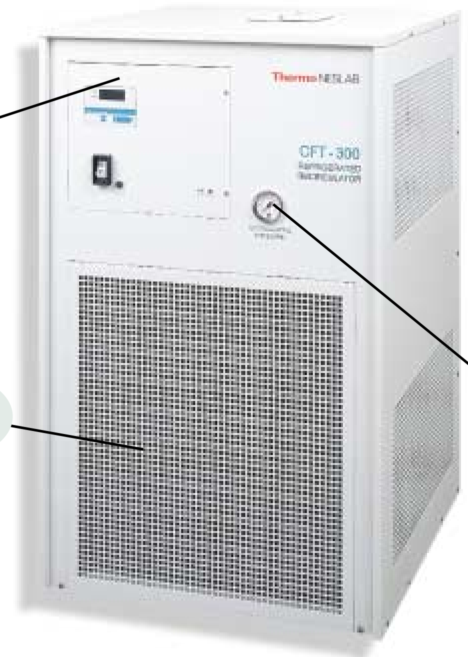
ETR and EPG
The External Temperature Readout and External Pressure Gauge provide status and additonal diagnostics at any point in the fluid path.

CFT300

CFT300

10,650 Watts

10,650 Watts



Economical, industrial, refrigerated recirculating chiller ideal for removing large amounts of heat from a variety of applications including lasers, analytical instrumentation, semiconductor tools, and process cooling.

Model	CFT-300
Cooling Capacity	
60 Hz	10650 Watts at 20°C 36315 BTU/hr at 20°C 9181 Kcal/hr at 20°C
50 Hz	9000 Watts at 20°C 30690 BTU/hr at 20°C 7759 Kcal/hr at 20°C
Temperature Range	+5° C to +35° C
Stability	+/- 1.0° C
Pump	PD-2/CP-55
Reservoir Volume	5.6 Gallons/21.3 Liters
Dimensions	
(H x W x D) In.	43 x 25 1/2 x 27 3/4
Cm.	109.5 x 64.8 x 70.5
Power Requirements	208-230V, 60 Hz, 21 Amps, 3Ø 380-420V, 50 Hz, 12 Amps, 3Ø
Shipping Weight	450 Lbs/204.1 Kgs

Specifications subject to change.