



**Compact  
Cooling**

**P800 series chiller**

## P800 series | Air - Water / Water - Water chiller

Compact stand alone enclosure. Excellent cooling power to size ratio.

High temperature stability. Reliable operation.

Low noise and vibration levels. Low maintenance.

Small water tank.

Cooling capacity: 1 kW - 15 kW

Flow rate: 3 - 30 l/min and more on demand

### Applications

- Cooling of lasers (CO<sub>2</sub>, passively cooled lasers, fibre lasers)
- Cooling of medical and laboratory equipment
- Printing industry
- HSC Spindles
- Tooling machines
- Laboratories
- Optical assemblies

The refrigerant compressor cools a heat exchanger plate. The central chiller control (CCC3) monitors the coolant water temperature and controls the refrigerant circuit.

A pump circulates the coolant water reliably to the load (e. g. laser). A particle filter on the chiller output and the flow sensor in the return, ensure trouble-free operation throughout the cooling water circuit.

The heat is expelled via a speed driven fan or transferred to an existing primary water supply via a heat exchanger.

### Equipment

Designed for water with additions or de-ionized water

High temperature stability

Alarm dry contacts via 9-pole Sub-D on rear panel

Water level display

Fan speed control

RS232 interface

Remote start via 24V DC signal

50Hz/60Hz design

Refrigerant R134A

### Optional Equipment

Water filter:

Externally or internally mounted, various filter grades available

Conductivity measurement and monitoring:

Conductivity monitoring of the coolant water

Conductivity control:

Regulation of the conductivity range (1 – 30µS, +/- 1µS/cm)

DI-cartridge:

Replaceable cartridge in water by-pass (0.35l or 0.5l)

Ambient temperature sensor:

Ambient temperature measurement using a PT100 sensor

Cooling power measurement:

Additional temperature sensor on return flow

Heating:

Start-up heating of the coolant water at low ambient temperatures (< 15°C) 1000W

Pressure measurement and monitoring:

Pressure sensor on chiller outlet

Water bypass:

Adjustment of flow via reduction valve

Flow rate:

Measuring, monitoring, controlled

Second flow sensor:

Second flow sensor on the return flow or for an additional water circuit

Relief valve:

Pressure & flow regulation

Air filter:

Air filters in the front panels

Customized like:

Contact Termotek

Other motors & pumps, design, rollers, extra enclosure color



# P800

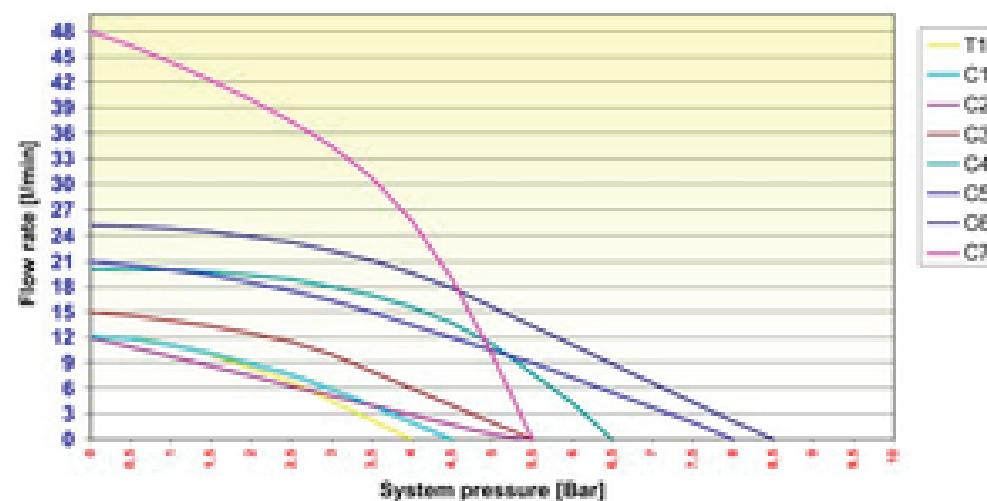
## P800 Series Model Overview (Standard Units)

		P801 ECO	P801	P802	P803	P804	P805	P807	P810	P812	P815
Tambience (°C)	Twater (°C)	Cooling Power (kW)									
25	15	0.7	0.6	1.14	2.4	3.3	5.3	7.1	9	12.7	15.7
	20	1	0.9	1.5	3.0	4.4	6.7	8.8	11	15.3	19
	25	1.2	1.1	1.7	3.2	4.7	8	10.7	14	16.7	20.8
30	15	0.6	0.5	1	2.3	3	4.5	6.2	7.7	11.45	14
	20	0.9	0.8	1.4	2.8	3.9	5.7	7.6	9.5	13.8	17.2
	25	1.15	1	1.6	3.1	4.5	6.8	9.7	12	15.1	18.9
35	15	0.5	0.45	0.9	2.2	2.7	4.2	5.7	7	10	12.3
	20	0.8	0.75	1.3	2.5	3.4	5.2	7	9	12.3	15.2
	25	1	0.95	1.5	2.9	4.1	6.3	9	11	13.5	16.8
40	15	0.35	0.3	0.6	1.9	2.5	3.7	5.5	6	8.5	9.5
	20	0.6	0.5	0.8	2.1	3.1	4.7	6.5	8	10	12
	25	0.9	0.8	1.1	2.7	3.7	5.7	7.7	10	11.5	13.5
Temperature stability (K)		+/- 0.5	+/- 0.1						+/- 0.2		
Standard Pump Basic line		T1/PD1	PD1		C3	C6			C7		
Standard Pump Oil line		NA	C1		C3	C6			C7		
Water connections		3/8" int. thread	1/2" internal thread		3/4" external thread					1" internal thread	
Size (ca.) H/W/D (cm)		70/35/40	79.5/40/45		90.5/50/52	110/65/65		150/65/65	150/130/65		
Weight (ca.) (kg)		60	65		70	80		90	130		140
Current (A)		7.5	7.5		9	10		13	11		12
Voltage (VAC)		230	230		230	230		400	400		400

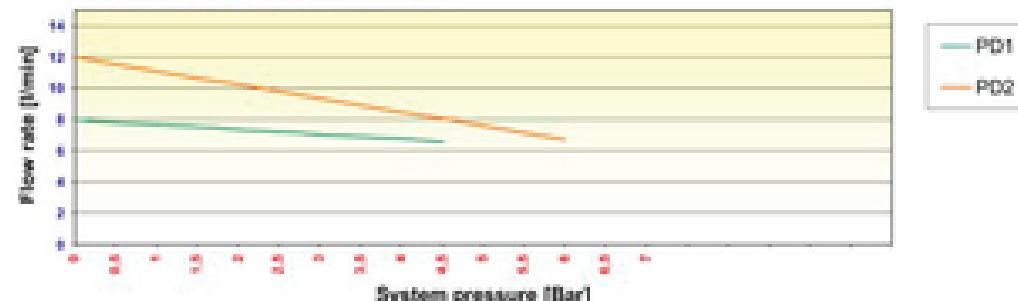
Thermal performance measured with defined standard pumps.

### Flow rate P800 range

#### Centrifugal pumps



#### Positive displacement pumps



### Model P801 - P804



Front view



Back view

### Model P805 - P815

