



**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:

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

Contact Termotek



# P8000

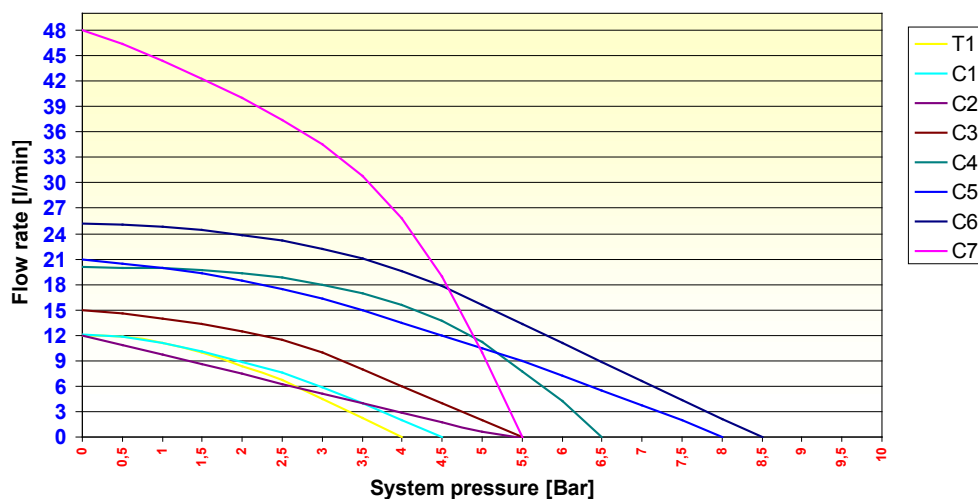
# P800 Series Model Overview (Standard Units)

		P801 ECO	P801	P802	P803	P804	P805	P807	P810	P812	P815	
T ambience (°C)	T water (°C)	Cooling Power (KW)										
25	15	0,7	0,6	1,14	2,5	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	2,6	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	2,9	4,5	6,8	9,7	12	15,1	18,9	
35	15	0,5	0,45	0,9	3,3	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	2,7	4,1	6,3	9	11	13,5	16,8	
40	15	0,35	0,3	0,6	2,1	2,5	3,7	5,5	6	8,5	9,5	
	20	0,6	0,5	0,8	2,5	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 DI 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	150	280	320	
Current (A)		7,5	7,5	9	10	13	11	12	13	15,5	18	
Voltage (VAC)		230	230	230	230	230	400	400	400	400	400	

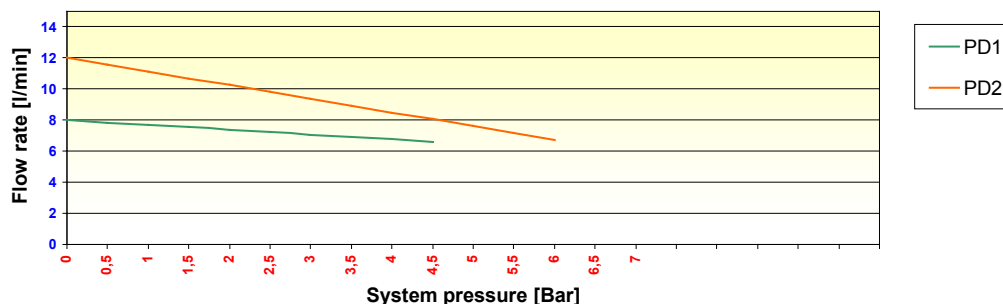
Thermal performance measured with defined standard pumps.

## Flow rate P800 range

### Centrifugal pumps



### Positive displacement pumps



## Model P801 - P804



Front view



Back view

## Model P805 - P815

