

Compact Cooling

P600 series chiller



Air - Water / Water - Water chiller

High power density. Good temperature stability. Reliable operation. Low noise and vibration levels. Low maintenance.

1 - 12 KW cooling capacity. Flow rate: 3 - 30 l/min; 20/25 HU high. Alternative table top design.

Applications include laser cooling, medical and laboratory equipment, printing industry.

The refrigerant compressor cools a stainless steel evaporator plate located in the coolant return flow. A temperature controller monitors the coolant water temperature and controls the refrigerant circuit. The coolant water circuit is designed for use with de-ionised water. The pump, selected to suit the application, pumps the coolant water reliably to the load (e. g. laser). The fine filter in the flow circuit and the flow sensor in the return circuit ensure trouble-free operation in the coolant water circuit. The heat is expelled via a fan or transferred to an existing water supply via a heat exchanger.

**robust - innovative technology - simple
over 5000 systems in the field**



Model overview P600 Series (standard)						
Cooling power (Watt)		P603	P605	P607	P608	P610
	20°Tw / 25°Tu	3800	5750	7800	9100	11200
	20°Tw / 30°Tu	3600	5000	7000	8000	10000
	20°Tw / 35°Tu	3400	4600	6400	7200	9000
	20°Tw / 40°Tu	3200	4000	5200	6000	7800
Temperature stability		"±0,1K"	"±0,1K"	"±0,1K"	"±0,1K"	"±0,1K"
	Control type	Hot gas bypass, PID				
Enclosure	HU	20	20	20	20	25
	HxWxD mm	1040 with rollers x 553 x 847				25HU x 553 x 847
	Noise (db (A))	< 70	<75	< 75	< 75	< 78
	Weight (approx.)	115	125	130	135	140
Application range - temperature	Standard coolant water outlet	10 - 30°C				
	Ambient temperature	5 - 40°C				
	Storage	0 - 70°C				
	Air quantity	1800m3/h	2500 m3/h	2500 m3/h	2500 m3/h	2x1800 m3/h
	Air flow	Suction via side panel; exulsion via rear panel				
Water circuit	Water filter (AVP,F20, 10 µm)	Internal				
	Water connections	2 x 3/4 external thread V4A sleeve				
	Tank volume (liter)	24				
	Level display	optical water level display on front panel				
Standard alarm interlocks		Alarm contacts (open circuit in alarm state) at 9pin SUB D (Interlock)				
	Water circuit	Flow turbine, set point adjustable				
	Flow sensor	Flow turbine, set point adjustable				
	Default switching point (l/min)*	9	9	9	9	9
	Level monitoring	Two vertical float switches (Warning, Alarm)				
	Default high-low temperature alarm	15°C Low, 32°C High temperature alarm, contact at SUB D				
Refrigerant circuit	High pressure	18.5 bar, reset				
Power supply	Voltage	400 V +/- 10%				
	Current (A)	6	7	7,5	8	10
	Line frequency	50/60 Hz				
	Power connections	loose cable 5x2,mm ² 2,5 meter long				
Pumping power (possible combination)	Model/ Type	See curves for choice of pump				
	PD1	X	X			
	PD2	X	X			
	Y 2051 (centrifugal)	X	X			
	QY 1042 (centrifugal)	X	X			
	CY4081 (centrifugal)	X	X	X	X	X

*Thermal performance quoted with a centrifugal pump CY4081 17l/min at 4 Bar

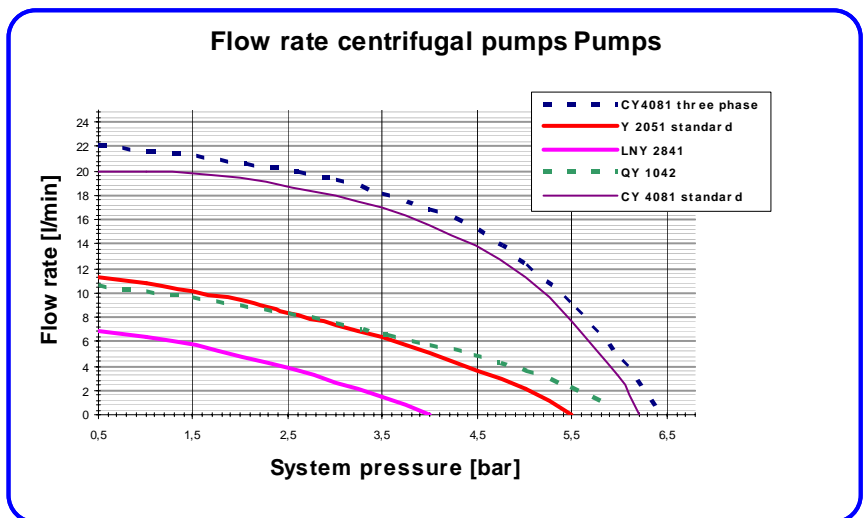
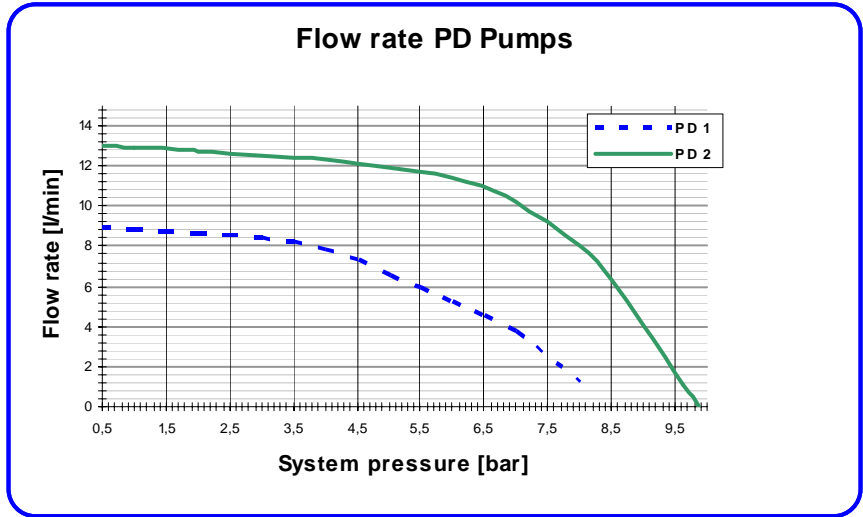
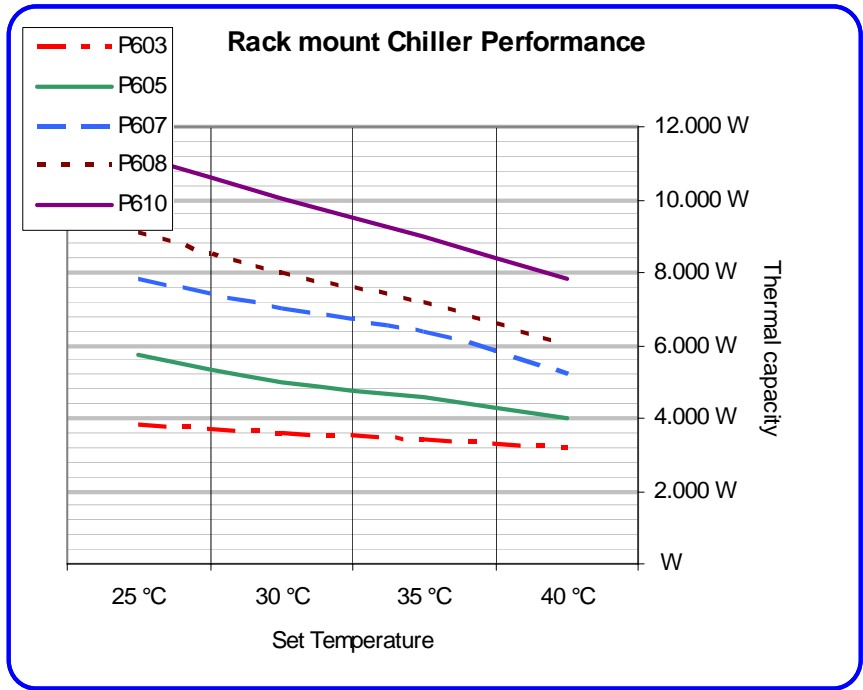
Standard equipment

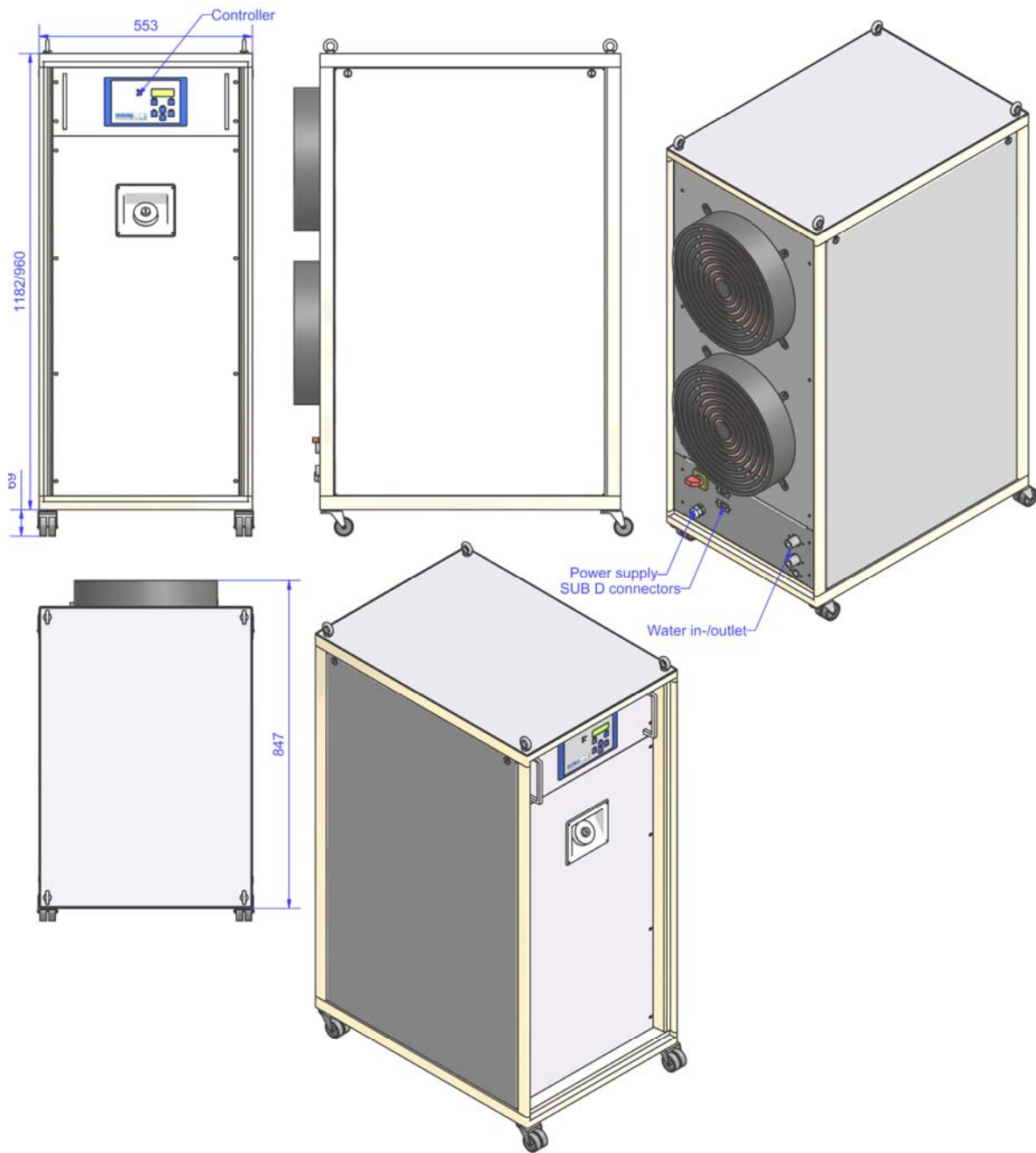
Designed for de-ionised water	Water level display
High temperature stability "± 0.1K"	Fan speed control
Customised alarm dry contacts via 9 pole SUB D on rear panel	RS 232 interface 24VDC external start signal
Water filter externally or internally mounted, various grades (on request)	Remote start
Flow rate measuring & monitoring	50Hz/60Hz usable

Additional technical extras/options to standard chiller series P600

Conductivity measurement & monitoring:	Conductivity monitoring of the coolant water
Conductivity control:	Regulating the conductivity by set point (+/-1µS/cm)
DI-Cartridge:	Replaceable cartridge in water bypass (0.35l or 0.5l)
Ambient temperature sensor:	Ambient temperature measurement via PT100
Cooling power measurement:	Additional temperature sensor on return flow
Heating:	Start-up heating of the coolant water at low ambient temperatures (< 15°C); 1000 Watt
Pressure measurement & monitoring:	Pressure sensor on chiller outlet
Water bypass for flow adjustment:	Adjustment of max pressure for flow adjustment
Second flow sensor:	Second flow sensor for additional water circuit
Air filter:	Air filter in side panel 140µm
Other pumps available:	please contact Termotek product management
Customised design:	please contact Termotek product management







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