

# Qill

INDUSTRIAL

## PU 300

### Liquid-to-Air waterchiller

The PU series brings affordable cooling power to your laser without compromising on performance. Two TCT 4-PP Thermoelectric modules remove 300W of waste heat to ambient, while maintaining the water temperature within  $\pm 50\text{mK}$  from your set point. Due to the absence of heat sinks, the process loop optionally is metal free. That makes it compatible with DI-water and insensitive to corrosion.

## “YOUR AFFORDABLE OUTPERFORMING ALTERNATIVE”

### Features

- Best COP and less heat in your room
- 24L Compact lightweight housing
- Precise temperature control
- Silent fans, fully controllable

### Benefits

- Powered by patented Top-Cool Technology
- Corrosion resistant design: virtually metal free
- Compatible with DI-water
- Yearly maintenance when in 24/7 operation

### Specifications<sup>(1)</sup>

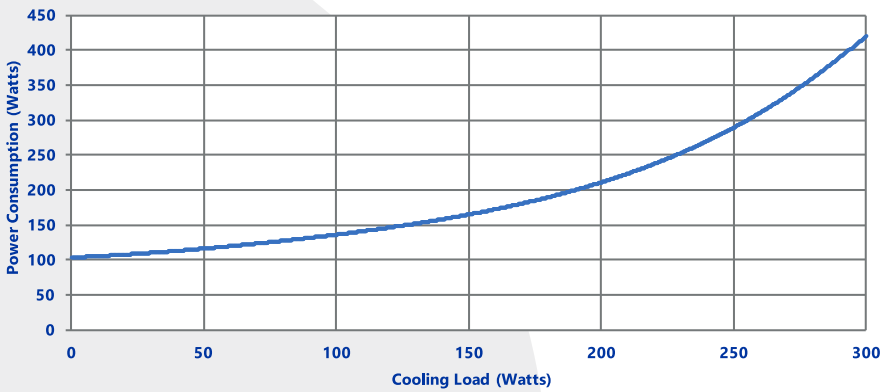
|   |                               |     |
|---|-------------------------------|-----|
| Cooling capacity                              | 300                           | W   |
| Operating environment temperature range       | +10 to +40                    | °C  |
| Control temperature range <sup>(2)</sup>      | +5 to +45                     | °C  |
| Temperature stability                         | $\pm 0,05$                    | °C  |
| Input voltage (50/60Hz)                       | 90 to 260                     | VAC |
| Current @ 230 VAC                             | 2,1                           | A   |
| Max input power                               | 475                           | W   |
| Frequency                                     | 50/60                         | Hz  |
| Total dimensions ( H x W x D ) <sup>(3)</sup> | 30 x 23,5 x 34                | cm  |
| Weight (empty reservoirs)                     | 12,5                          | Kg  |
| Fluid capacity                                | 500                           | ml  |
| Fan control                                   | Automatic and fixed fan speed |     |
| Interlocks/Heating Function                   | Optional/Optional             |     |

<sup>(1)</sup>PU300/01, <sup>(2)</sup>distilled H<sub>2</sub>O as coolant), <sup>(3)</sup>excl. machine feet and CPC's

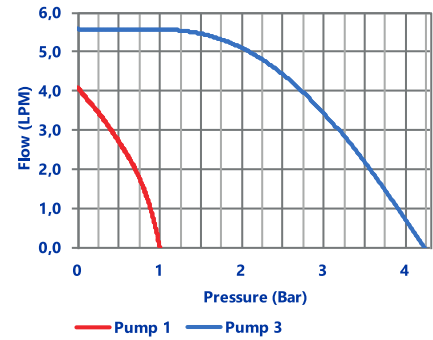


POWERED BY

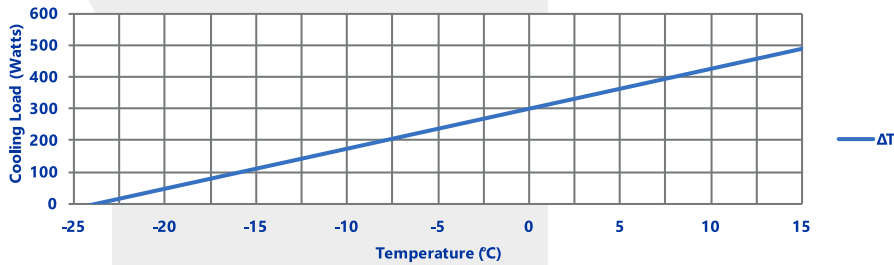
## Cooling Capacity vs Power Consumption



## Pump Curves



## Outlet Fluid Temperature - Ambient Temperature



Test Conditions L-2-A  
 Setpoint = 25 °C  
 Ambient temp = 25 °C  
 Process Flow = 3,5 LPM  
 Process pressure = 1 Bar

## Ordering information

PU300 /0x

-yz\_\_

y=0: No interlocks  
 y=1: 1x normally open & 1x normally closed  
 y=2: 1x normally open & 1x external voltage (2,5V DC)  
 z=0: USB only, no Serial Interface  
 z=1: DB-9 connector RS232/RS485  
 \_\_ : H (Heating Option w/H-bridge)  
 \_\_ : MF (Metal-Free process loop)

x=1: DC Centrifugal pump, fixed flow, 3,5l/min@0,25Bar, self-priming  
 x=2: not used  
 x=3: DC controlled centrifugal pump, variable flow, 2,5l/min@3,35Bar, non-self-priming