## technotrans =

# P300 series chiller

Air-water / water-water chiller





Model MA		P302	P307	P310	P312	P315	P320	P330
Cooling Power	20°TW / 20°Ta	300	720	900	1150	1620	2400	3500
	20°TW / 35°Ta	170	570	720	930	1210	2100	3000
Temperature stability	K	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1
Weight	kg	32	40	42	50	55	65	90
Air-water	fan ø (mm)	130	200	200	250	250	250	2 x 200
Water-water (primary water)	°C	5 - 25						
Water-water (flow required)	l/min	5 - 10						
Water-water (quality requiered)		filtered <50 µM 200 mg chlorine/l						
Water Filter (externally mounted)		F20	F20 or 5"					
Tank volume	I	1.8	2	2	2.5	2.5	2.5	2.5
Default point	l/min	2	2.5	2.5	2.5	2.5	2.5	2.5
Refrigerant circuit		18 bar, hysteresis +/- 1 bar						
Voltage	V AC	230 V AC +/- 10%, others available						
Current	Α	2.5	6.5	7	7.5	8	9	9
Line frequency	Hz	both 50and 60						50 or 60

## Proven 19" plug-in unit for active cooling applications

With areas of application ranging from the classic semiconductor industry and laser cooling applications, up to its use in medical equipment and laboratories: the active cooling system P300 has already proved to be highly useful in numerous industries.

The unit uses a compressor refrigeration circuit that cools either a stainless steel evaporator coil in the cooling water tank or a plate heat exchanger. Its capacity ranges between 200 W and 3 kW with a temperature stability up to +/- 0.1 K. The central control system of the P300 monitors the water temperature as well as the processes in the refrigerant circuit. A particle filter in the outlet of the cooling unit and a flow sensor in the return flow ensure safe and reliable operation. The heat is dissipated via a fan or transferred to an existing water supply through a heat exchanger for further use.

Upon request, the 19" plug-in cooling unit is also available as a desktop unit.

#### Advantages at a glance:

- Extremely high level of temperature stability
- Low maintenance and high level of operational reliability
- Monitoring of all of parameters by way of a central control system
- Energy-efficient solution
- Various options possible

### **Equipment**

- Cooling capacity between 200 W and 3 kW
- For use with deionised water or with water containing specific additives
- Flow measurement and monitoring system
- Adjustable water bypass valve
- Speed-controlled fan
- Remote start via a 24 V DC signal
- RS 232 interface
- Refrigerant R134a
- Other optional features include a conductivity measurement system, heater or air filter

