

**Setting the New Standard in Chiller Technology**

**±0.1°C**



## ZEROPOINT Setting the New Standard in Chiller Technology

Zeropoint chillers provide a range of compact rackmount and stand-alone portable chillers that are designed to cool heat loads from 750-9000W. Bespoke systems can be supplied up to 25kW.

Our chillers have been engineered for laser, medical, scientific and manufacturing applications. With full PID control and intelligent computer interface software the chillers can be stabilised to within  $\pm 0.1^{\circ}\text{C}$  of the set temperature.

From the outset it has been the philosophy of Zeropoint Chillers to source all critical components exclusively from the world leading European manufacturers. This delivers the confidence that the best components available on the market today are used in all of our products.

The use of RS-50 (R442a) refrigerant by Zeropoint can realise substantial cost savings for users because it is significantly more energy efficient than most other refrigerants on the market today. With a low GWP (global warming potential), combined with a high co-efficient of performance, RS-50 (R442a) produces a low carbon footprint.

The R series (rackmount) recirculation chillers are amongst the smallest in its class. The ZP20R (2000W) enclosure measures just 7U in height.

The chillers are easy to service and maintain with all filters and drainage via the front panel, there is no need to remove the unit from the rack.

Quiet operation and very low vibration levels make Zeropoint chillers ideal for all applications. With a choice of different pump configurations of up to 10 litres per minute at 4 bar all flow requirements can be met.



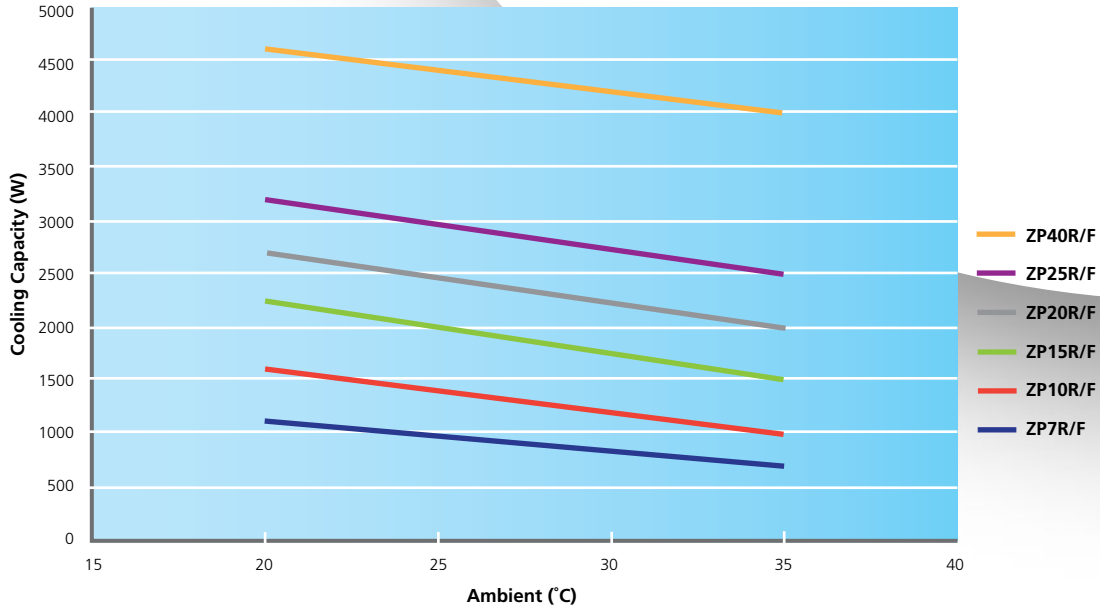
### Standard Features includes

- High performance, low running costs
- Water stability  $\pm 0.1^{\circ}\text{C}$
- Cooling circuit fully compatible with deionized water
- Visual water level display with two point warning signals
- Intelligent and adaptable RS232 software
- CAN bus connection
- Easy fill and drain reservoir on front panel
- 50/60Hz dual frequency
- High accuracy flow monitoring
- Flow rate adjustable via bypass valve on front panel
- Quick change output particle filter on front panel
- Output pressure sensor
- Inlet and outlet temperature sensors
- Ambient temperature sensor
- Adjustable PWM 24VDC high power fan control
- Customer fault interlocks via 9 way standard D-type
- Chiller real-time heat load calculations
- Remote start
- 500 Watt reservoir heater

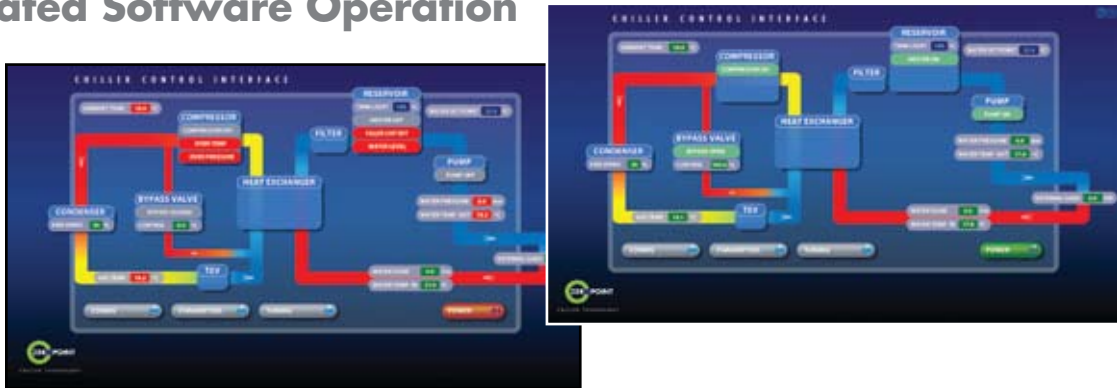
### Optional Features

- Remote output temperature sensor (up to 50 metres from chiller)
- Quick change input particle filter on front panel
- Colour coded front panel to match your equipment
- Conductivity metering and control
- Deionized water cartridge
- Second flow meter turbine
- Custom pump configurations
- Custom design and integration available
- Special voltage requirements
- Remote controller
- Under voltage supply protection circuit

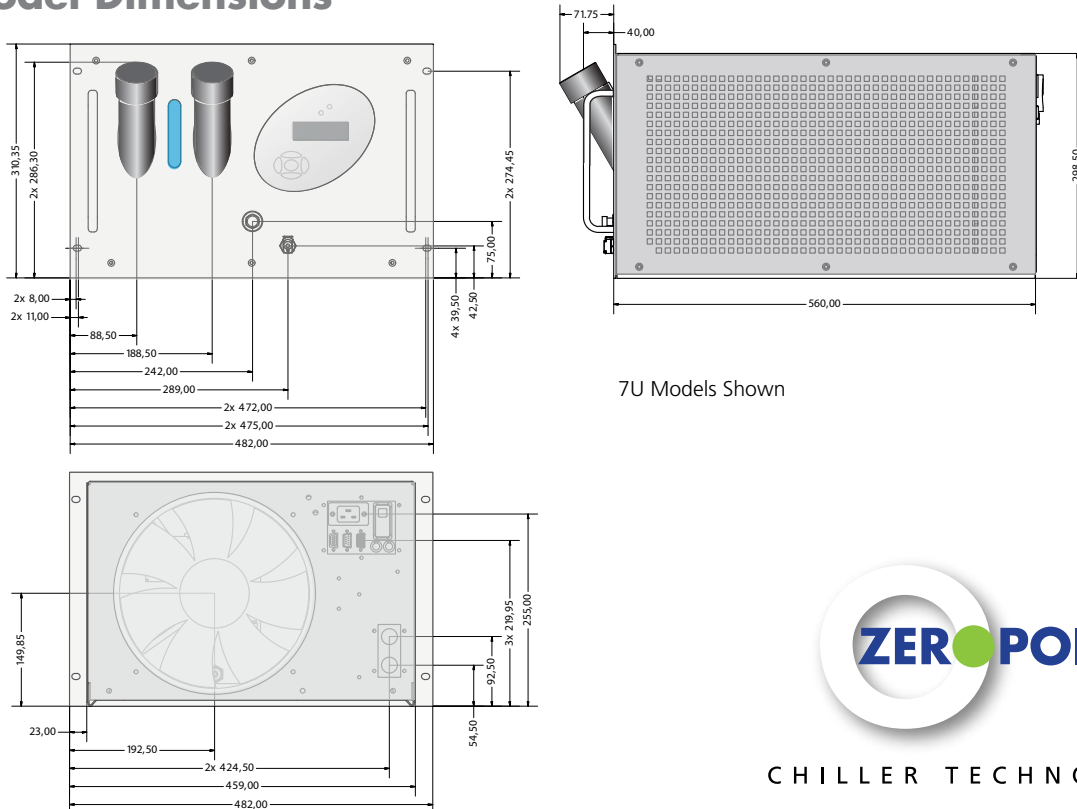
# Unrivalled Performance



# Integrated Software Operation



# Model Dimensions



# Model Overview

MODELS <small>Available as: R - Rackmounted, F - Free Standing</small>	ZP7R/F	ZP10R/F	ZP15R/F	ZP20R/F	ZP25R/F	ZP40R/F
<b>Cooling Capacity</b>						
20°C Temp Water set point / 20°C Temp Ambient (W)	1100	1600	2200	2700	3200	4600
20°C Temp Water set point / 35°C Temp Ambient (W)	700	1000	1500	2000	2500	4000
<b>Temperature Stability</b>						
(°C)	±/-0.1					
Method of control	Hot gas bypass, PID adjustable via software					
<b>Application Range - Temperature</b>						
Coolant outlet (°C)	5 - 35					
Ambient (°C)	10 - 40					
Transportation & storage (°C)	0 - 70					
<b>Air / Water</b>						
Fan Ø (mm)	200	200	250	250	250	250
Air flow direction (VDC)	In through the side panels, expelled out the rear panel					
	24 high output EBM Papst fan					
<b>Water Circuit</b>						
Water filter (Standard grade)	F20 (other grades available on request)					
Air / water-water connections (BSP)	3/8					
Tank volume (l)	3.5					
Water level indication	Optical water level display on front panel - audible alarm screen					
<b>Customer Interlocks</b>	Alarm contacts (normally closed) connected to a 9 way standard D-type on rear panel Alarms can be set as individually or collective fault configuration Both configurations go to a PC via the RS232 port CANBUS					
	All models					
<b>Optional Remote Control</b>						
<b>Enclosure Size</b>						
Height Rackmounted U (1U = 44.45mm)	6	7	7	7	9	11
Height Freestanding (mm)	650	650	650	750	750	800
<b>Water Circuit</b>						
Flow sensor	Flow turbine, set point adjustable					
Default point (l/min)	1-10 (dependant on model)					
Water level monitoring	Two vertical float switches (warning, alarm)					
Default high-low temperature alarm (°C)	10C° fault condition / 35C° fault condition					
Flow rate (litres per minute @ bar)	10 @ 4					
Pressure sensor (bar)	0-10					
<b>Refrigeration Circuit</b>						
High Pressure (bar)	26 +/- 1					
Gas R442A (bar)	26					
<b>Power Supply</b>						
Voltage (VAC)	230 +/- 10%, others on request					
Current (A)	8	8	10	12.5	15	16
Line frequency (Hz)	50 / 60					
Power Connections	IEC 950 with line filter Live and neutral fuses					

Our policy is to improve the design and specification of our products. The details given in this document are not to be regarded as binding.

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CHILLER TECHNOLOGY