



# The PRO300.chiller series

Cooling technology redefined

**technotrans** 

power to transform

# The new PRO300 chiller series

## Cooling Technology Redefined

We are very proud to introduce our new, state-of-the-art, environment-friendly and future-ready chiller with improved functional security: the PRO300 chiller series.

The PRO300 design concept incorporates the very latest technology in temperature controlling, data communication, and refrigeration.

Engineered to use R290, a natural refrigerant, the air-water types have cooling capacities of up to 4200 watts.

### Innovations

- The tank is a seamless, one-piece plastic construction that allows full access for service and cleaning if needed
- Free of any moving parts, the new electronic tank level sensors enable outstanding precision in controlling water levels continuously
- Flow measurement provides high security and a robust design
- Easy access to water filters and DI cartridges via front panel allows service and maintenance during operation
- The new controller enables dynamic temperature control with high accuracy
- RS-485 and other optional connections such as ethernet provide state-of-the-art access for embedding in control networks

### Optional features on request

- Energy saving measures
- High-performance pump
- DI cartridge and DI controls
- UL compliant
- RS-232 connection
- Ethernet connection
- Water cooled version
- Transformer for worldwide installation
- Protocols and communication via Modbus remote terminal unit, OPC unified architecture, webserver and other user languages



R290 natural refrigerant

## Commitment to the environment

For smaller cooling capacity requirements, technotrans especially recommends the R290 refrigerant.

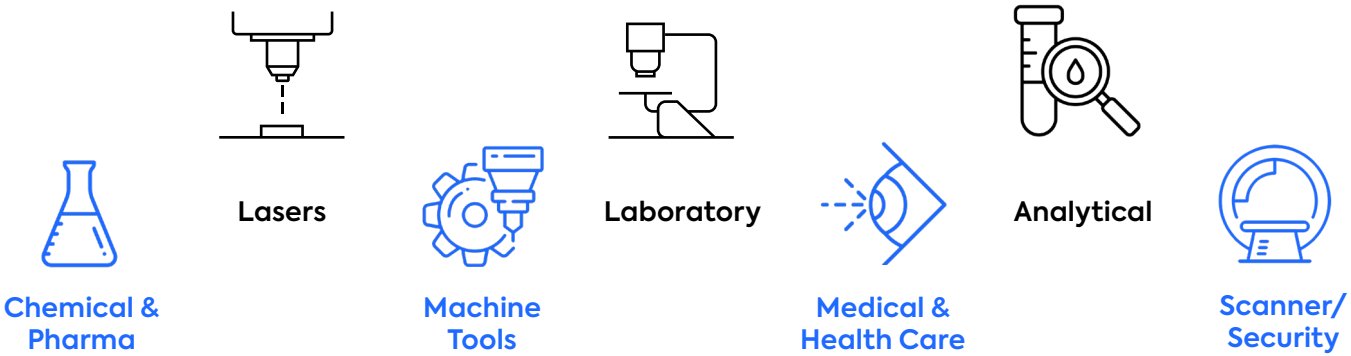
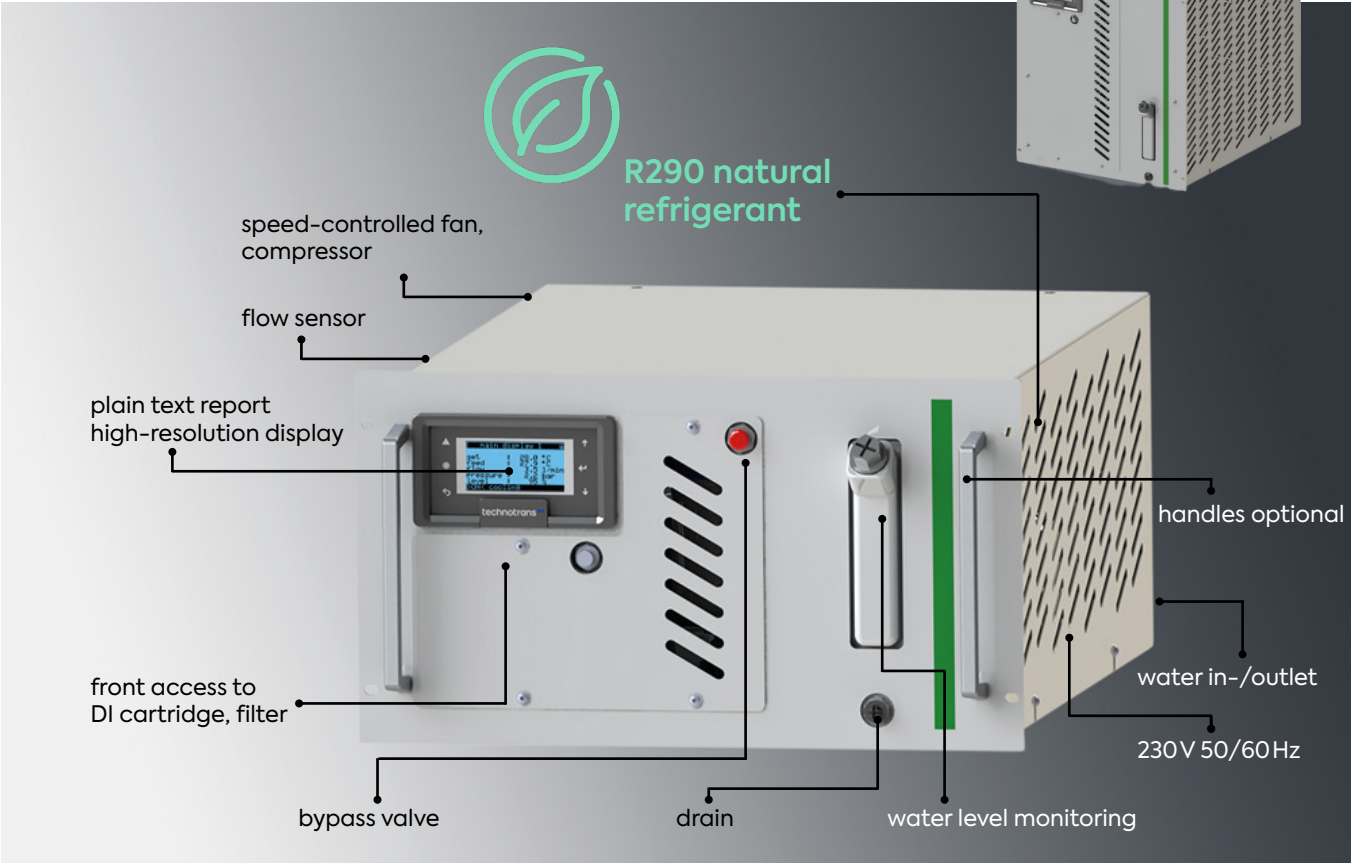
R290 ensures high-efficiency values, and due to its high volumetric refrigeration capacity, enables a very compact design. It has one of the lowest carbon dioxide equivalents, having a Global Warming Potential of 3 (CO<sub>2</sub> has a GWP of 1).

Due to this extremely low GWP, R290 is seen as a long-term solution for replacing chemical refrigerants worldwide. The maximum refrigerant charge is 150 grams, which complies to safety regulations without the need for additional fire prevention measures.

The benchmark for 19" in-rack applications



Cooling capacity: 170 - 4200 W (air-cooled)  
Refrigerant: R290  
Temperature stability: <±0.1 K



air-cooled chiller

	Unit	30017	30057	30080	30100	30150	30200	30240	30300	30420						
Cooling capacity, 50/60Hz <sup>1</sup>	W	170/185	570/670	800/920	1000/1150	1500/1500 <sup>2</sup>	2000/2000 <sup>2</sup>	2400/2400 <sup>2</sup>	3000/3000 <sup>2</sup>	4200/4200 <sup>2</sup>						
Refrigerant		R290 (GWP=3)														
Refrigerant filling	g	<100						<150								
Speed-controlled fan		Standard														
Speed-controlled compressor		On request						Standard								
Water circuit																
Medium		DI water (option: water with additives, water-glycol 35% <sup>3</sup> )														
Process water temperature	°C	13 to 35														
Temperature stability	K	≤ ±0.1 <sup>4</sup>														
Standard flow rate and pressure <sup>5</sup>	l/m, bar	4/1		4/3,5				8/3			11/3					
Water tank volume	l	2		5,2						9						
Filtration grade	µm	5 to 100														
Bypass		Adjustable														
Flow sensor		Flow measurement														
Tank level sensor		Continuous analog sensor														
Connection		G 1/2“						G 3/4“								
Dimensions																
HU (44.45 mm)		4 <sup>6</sup>		6			7			9		12				
Height	mm	178		267			311			400		533				
Depth	mm	645 <sup>7</sup>														
Width	mm	19“ rack-mounted														
Electrical system																
Supply voltage 1-phase		230 V AC (±10%)														
Frequency		50Hz and 60Hz														
Control system																
Controller		ZKS-5														
Interface		RS-485 (on request)														
Protocol		Modbus RTU (TCP on request)														
Service access		USB micro														
Optional features		e.g. DI-cartridge, transformer for various voltages, UL compliant, RS-232 interface, OPC UA protocol, high pressure pump, water cooled versions														
Weight	kg	32		36		40		42		50		55		65		70
Noise level at 1 m	db(A)	52		58		65								70		
Approvals and certifications		CE, REACH, ROHS, UKCA														

¹ Measured at 20°C DI water and 35°C ambient temperature  
² Cooling capacity is achieved with the speed-controlled compressor  
³ Depending on the fluid used, the cooling capacity can be reduced  
⁴ In specified operating range: ambient temperature between 15°C to 40°C and process medium from 5°C to 25°C  
⁵ Water flow rate and pressure at which the available cooling capacity is specified  
⁶ Height may vary depending on the pump used  
⁷ From front panel to the rear cover

NEW ZKS-5 controller



**At a glance:**

- Compact, modern design
- LCD graphic display
- Plain text reports
- Language selection
- Customised icons



remote start

monitoring software

Connections:

- Ethernet (also for system updates)
- RS-485 | RS232 on request | Interlocks
- Micro USB (for system updates only)

System update via:

- USB flash drive | PC (USB or Ethernet connection)
- Option: remote access

Protocols:

- Modbus RTU | Modbus TCP on request
- DHCP, FTP, NTP
- OPC UA on request

PC-Visualisation:

- System visualisation via standard browser; no special software or App for the OS needed

Data logging:

- Data logging can be used via RS-485 or ethernet





## The technotrans service principle.

### High level support

Around the globe, our products control sensitive processes in the field of fluid technology. Our focus: to ensure the maximum reliability of our solutions for you at all times.

### On site in person or virtually

Our professional and flexible full-service concept supports you in repair and maintenance of equipment and system solutions, and also in planning for larger projects: from the assembly drawing to the turnkey installation.

The technotrans service technicians assist you worldwide on site or virtually via a licensed support app. Our multilingual Customer Service Support also ensures optimum support, even outside normal office hours. In training courses, we can use real-life systems to show you everything you need to know about the operation and maintenance of your cooling systems.

### Global Excellence: our team and operations

technotrans has a strong global presence with 17 locations worldwide, including seven manufacturing facilities. Our dedicated team consists of over 1,500 motivated employees. This includes around 60 engineers in research and development, focusing on pioneering new technologies and products. Additionally, we have a committed team of 185 employees in global service, ensuring maintenance and support for our products across the world, showcasing our commitment to quality and customer satisfaction.

## tt.service

24/7 worldwide technical support

Remote support

In-company service

Benefits at a glance:

- Project planning, configuration, and design
- Plant planning and relocation, recommissioning and testing
- Extension and retrofitting for the optimisation of devices and systems
- Project and site management
- Turn-key installation, commissioning and acceptance
- Training and production support
- Adherence to schedules, quality-focused planning and execution
- Warranty extension after maintenance/repair