SMARDT

INNOVATION ENGINEERED,
ENERGY OPTIMISED

AeroMod™

Air-Cooled Chiller



Engineered for scalable performance and flexibility

Efficient. Conventional. Optimized.



About Smardt

Smardt Chiller Group is a recognized innovator in high-efficiency, oil-free chillers, providing advanced heating and cooling solutions for data centers, industrial applications, and commercial HVAC systems. With a strong focus on sustainability, Smardt's product lineup includes air-cooled, water-cooled, and modular chillers designed for performance, reliability, and reduced environmental impact.

The introduction of the Smardt ECO platform broadens the company's portfolio beyond oil-free technology, offering high-efficiency solutions tailored for a wider range of applications. Headquartered in Montréal, Canada, Smardt operates globally, serving customers across North America, Europe, Asia, and Australia.



Smardt ECO represents a new class of chiller technology, engineered for scalable performance and flexibility. Designed to meet today's efficiency standards while fitting seamlessly into evolving building demands, Smardt ECO brings together conventional, proven compressor systems with next generation modular engineering.

From commercial to industrial applications, Smardt ECO delivers optimized efficiency, reliability, and ease of integration, offering a smart, serviceable platform that evolves with your project. It's everything you expect from Smardt's engineering, now with a focus on standardized, streamlined, and cost-effective performance.

AeroMod™

Air-Cooled Chiller (ACC)

Smardt's modular air-cooled chiller delivers reliable, all-electric cooling with flexibility to scale as your needs grow. Whether installed as a standalone unit or in a multi-module array, **AeroMod™ ACC** combines built in redundancy, part-load efficiency, and compact installation.

With internal piping headers, modules mount edge to edge-minimizing footprint and simplifying layout. Variable-speed compressors and EC fans ensure smooth performance across all conditions, helping reduce energy waste and downtime.

Fully compatible with major BAS protocols, **AeroMod™ ACC** offers centralized control in a compact, service-friendly system.

Revolutionary efficiency, Designed to scale



Built for quiet operation

AeroMod™ ACC chiller variable-speed compressors and fan modules are engineered for low-sound operation it is ideal for buildings near residential areas, schools, or offices.

- All-electric, oil-lubricated configurations
- AHRI Certified, ETL Certified
- Low-GWP refrigerant R-454B

SMARDT ECO

Installation advantages





Key features

1 Dynamic Load Balancing:

Dual circuit, variable speed compressor and variable speed fan modules allow for dynamic load balancing in a modular chiller array, leading to gain higher part load efficiency.

2 Turndown Capacity:

At an array's maximum of 10 variable speed, dual-compressor chiller modules, capacity can be reduced to less than 5% total capacity. Internal piping headers and isolation valves allow for individual modules in the array to be serviced, while others continue operation.

3 Operating Range - Cooling only:

Ambient Dry Bulb*:
30°F – 115°F (–1.1°C – 46.1°C)

Leaving Water Temperature (LWT)*:

- 42°F – 65°F (5.6°C – 18.3°C) (without glycol)
- 30°F – 65°F (–1.1°C – 18.3°C) (with glycol)

4 Power & Controls:

- 7-inch HMI touch screen for the master module.
- Single-point power connection. Up to ten modules can be connected via controls to a single BAS (Building Automation System) interface.

* Specifications are subject to change without notice. For the most accurate and up-to-date information, please contact your local Sales Application Engineer.



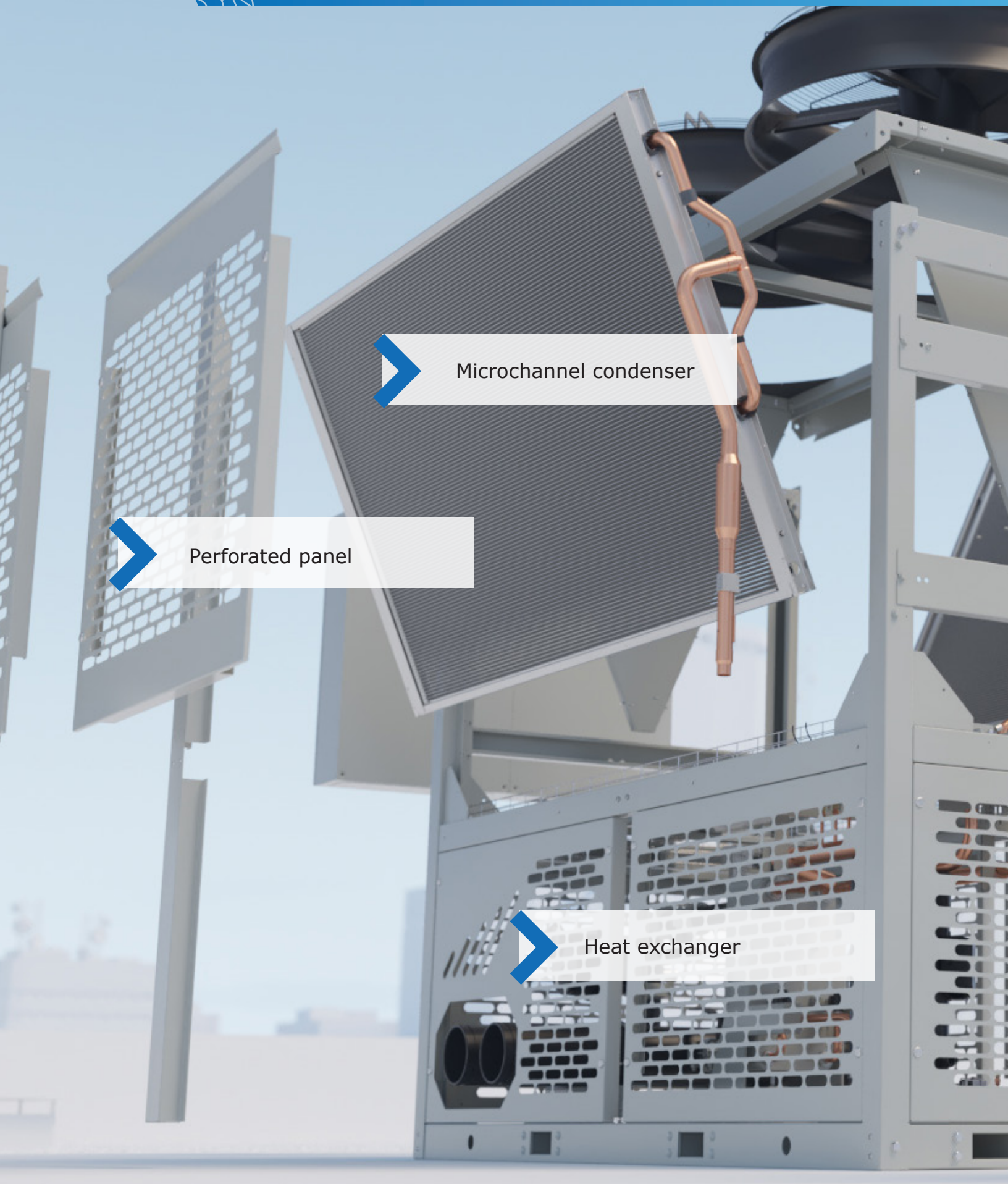
Specifications

	SMACV030*A	SMACV040*A
Refrigerant	R454B	
Nominal capacity (10x multi-module)	30T (300T)	40T (400T)
Rated Input Power (KW) per module	34.87	49.3
EER (FL / IPLV) per module	10.0/17.4	9.8/16.4
Compressor / QTY	Scroll- Variable speed / 2	
Evaporator Type	Dual refrigerant circuit - BPHE	
Fans / Qty	EC Variable speed / 2	
Condenser Coils	Microchannels	
Water Connections per module	6-inch	
Module Dimensions (Inches):		
L x W X H	122.9" X 48.9" X 98.6"	
Estimated Module Weights:	**30T**	**40T**
Empty (lbs/kg)	2700/1225	2822/1280
Refrigerant Charge (lbs/kg)	26/12	26/12
Operating (lbs/kg)	2925/1327	3050/1383

Note: Nominal cooling capacity is based on 44/54°F CHWT and 95°F ambient conditions.

Options

- BMS Protocol controls (standard- Modbus RTU, optional: Modbus IP, BACnet , LONworks)
- Main power distribution panel
- Heat Trace (Freeze Protection)

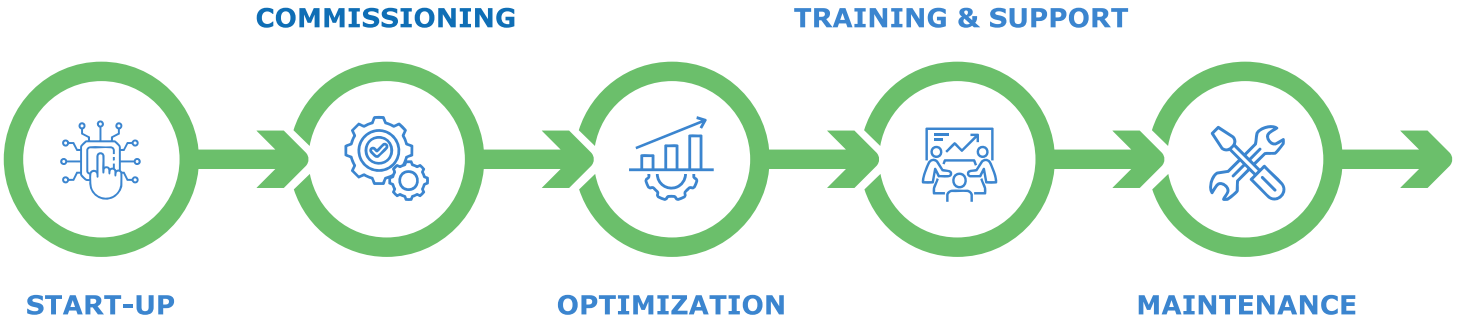

Microchannel condenser
Perforated panel
Heat exchanger



SMARDT ECO

Driving lifecycle performance

Smardt delivers a comprehensive suite of services designed to maximize the performance, reliability, and longevity of your HVAC systems. With global experience across more than 12,000 chiller installations, we support customers throughout the entire equipment lifecycle from start-up to optimization and beyond.





Core Benefits

- Improved system reliability
- Reduced operational risks & costs
- Regulatory & sustainability compliance
- Enhanced energy efficiency

Process-driven optimization

We help you get the most from your central plant systems with a data-driven approach that cuts energy use, lowers costs, and boosts performance.

It starts with an energy audit to pinpoint inefficiencies, followed by tailored solutions built around your plant's needs. Often this includes our **Central Plant Energy Conservation System** (CPECS) a smart platform that dynamically manages equipment for maximum efficiency.

From assessment to full integration, we deliver seamless projects backed by proven results in commercial, institutional, and mission-critical facilities. The outcome: measurable savings, stronger reliability, and greater visibility supporting your efficiency and sustainability goals.



System Capabilities

- Optimized energy performance
- Enhanced system control & transparency
- Lower operating costs
- Improved reliability with seamless execution