SMARDT

INNOVATION ENGINEERED,
ENERGY OPTIMISED

AeroPure™
Air-Cooled Chiller



Cooling Capacity
60–710 TR
211 kW – 2500 kW

Available Refrigerants
R134a, R513A,
R515B, R1234ze



About Smardt

Global innovation in oil-free technology, products built for high-performance environments.



Smardt is a global leader in oil-free centrifugal chillers, delivering energy-efficient solutions with ultra-low lifecycle costs. With over 12,000 units installed worldwide, we support some of the most demanding environments from hospitals and commercial buildings to manufacturing and mission-critical facilities.

Our chillers are powered by magnetic bearing technology and a Global Controls Platform, offering reliability, low maintenance, and future-ready performance.

As buildings evolve, we continue to reduce energy usage, support global compliance requirements, and help customers move towards more sustainable operations.

AeroPure™

Air-Cooled Chiller AF Series

AeroPure™ AF series continues Smardt's legacy of oil-free innovation, with over 12,000 installations worldwide powered by magnetic bearing compressors, **AeroPure™ AF series** is built to perform in high-demand, uptime-critical environments.

Whether for comfort or process cooling, **AeroPure™ AF series** is your go-to choice for performance, efficiency, and reliability.

Engineered to perform
Designed for reliability



READY TO SHIP.
READY TO PERFORM.

Tailored for your environment

AeroPure™ AF series is engineered to meet the specific needs of various demanding operating conditions:

Process Cooling / Data Centers

- Built to meet uptime, load variability, and redundancy needs
- Clean rooms, telecoms, light manufacturing, and high-density racks
- Delivers rapid system recovery, with compressor restart in as little as 30 seconds following short power interruptions

Comfort Cooling

- Ideal for healthcare, government, hospitality, manufacturing, educational institutions, offices and retail
- Supports quiet operation and easy rooftop or yard installation
- Seamless design integrates into modern building architecture

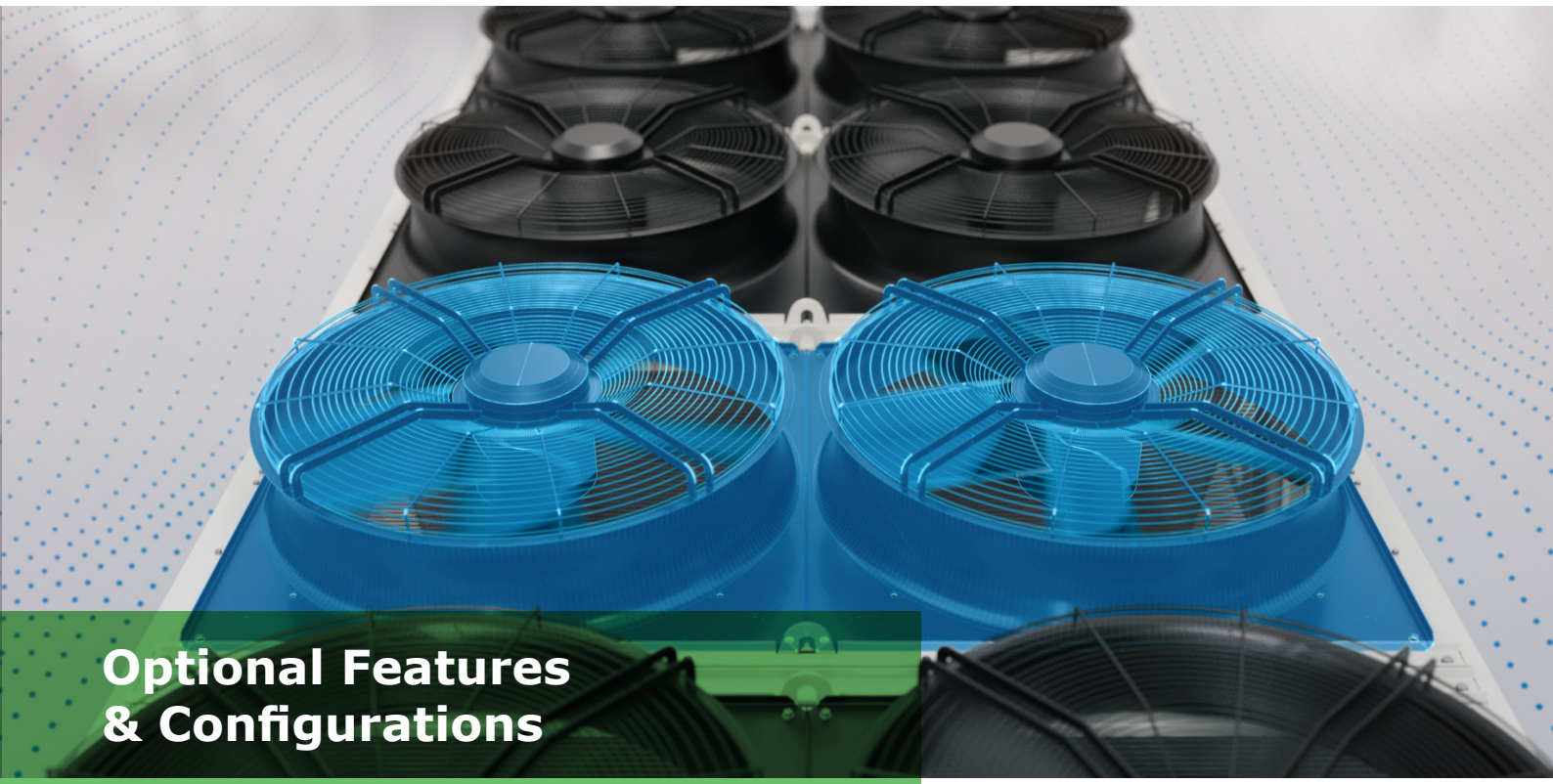
Installation advantages





Key features

1. **Supports Low-GWP Refrigerants** future-aligned options including R513A, R515B, and R1234ze
2. Up to **16.0 EER (Full Load) or 25.9 IPLV** depending on model and application.
3. **Fast Restart*** resumes compressor operation in as little as 30 seconds following brief power interruptions, without requiring manual reset
4. **Redundant Compressor Configuration** allows continued operation, even with only one compressor running
5. **Operating Range** from -20°F to 130°F with extended options, meeting both low and high ambient requirements for mission-critical environments
6. **Global Certifications** meets AHRI, CE, ETL, ASHRAE 15, MEPS, and other international standards



Optional Features & Configurations

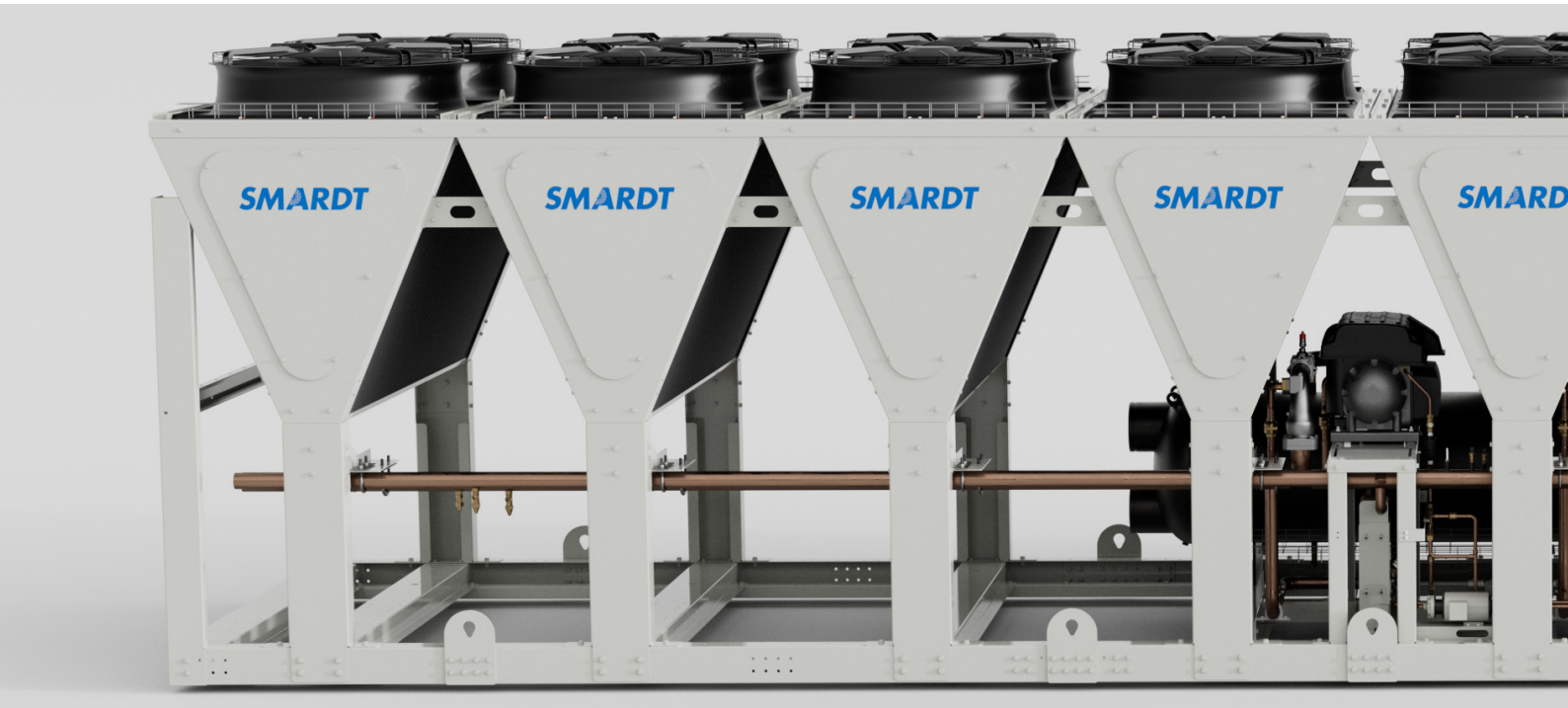
AeroPure™ AF series chillers offer a range of optional features designed to support specific project requirements, improve operational flexibility, and enhance system performance.

These options allow customization based on application needs, environmental conditions, and operational priorities.

Available options include:

- THDI Filter
- ATS (Automatic Transfer Switch)
- EC fans as standard with normal and extended external pressure
- Double refrigerant circuit
- Remote access capability
- Smardt Cool optimization package
- Heat exchanger protective coatings
- Low ambient temperature kit

* By integrating the Smardt Fast Restart feature into water- or air-cooled chillers, operation resumption (compressor RPM > 1) can be achieved in as little as 30 seconds following brief power interruptions. In typical field conditions, compressor speed resumption (achieving 90% of the compressor's pre-outage RPM) can be achieved in as little as 110 seconds following brief power interruptions depending on load, operating conditions, outage duration in the plantroom, etc.



Model Mix (Data Center)

4 Total New Compressors Help Optimize Our Range

R134a/R513a models
(315kW to 1425kW)

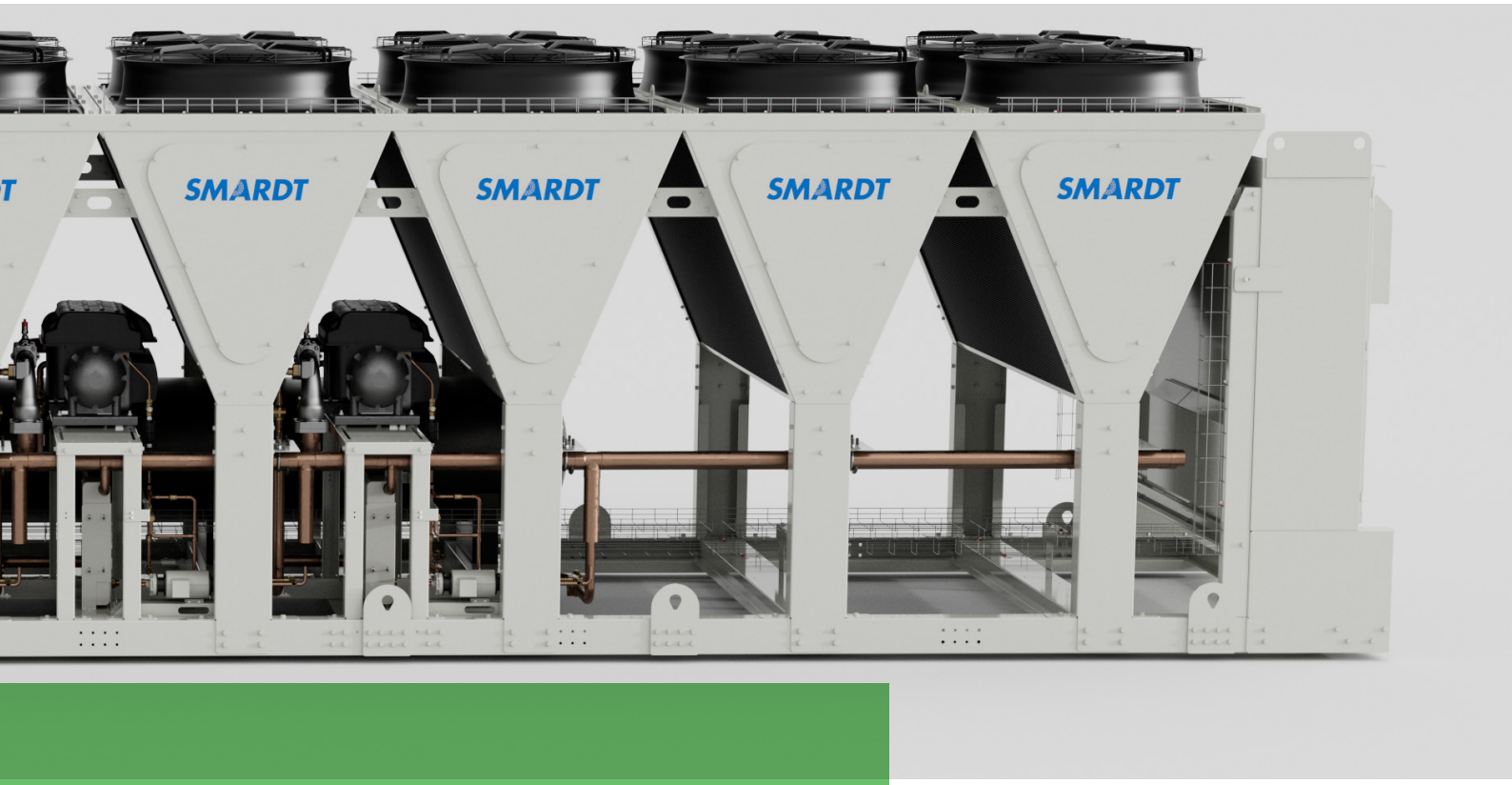
Model Number	Nominal Capacity
AF060.2B.F22.10.S3	630 kW 179 TR
AF060.2D.F22.10.S3	630 kW 179 TR
AF070.2N.F22.12.S3	731 kW 208 TR
AF070.2O.F22.12.S3	731 kW 208 TR
AF080.2E.F24.12.S3	851 kW 242 TR
AF090.2I.F26.14.S3	949 kW 270 TR
AF090.3B.F26.14.S3	946 kW 269 TR
AF090.3D.F26.14.S3	946 kW 269 TR
AF105.3N.F24.16.S3	1094 kW 311 TR
AF105.3O.F24.16.S3	1094 kW 311 TR
AF120.3E.F26.18.S3	1276 kW 363 TR
AF135.3I.F26.20.S3	1425 kW 405 TR

Additional 2 compressors have been added to this range

R1234ze/R515b models
(220kW to 1320kW)

Model Number	Nominal Capacity
AF050.2P.F26.08.S4	520 kW 148 TR
AF050.2Q.F26.08.S4	520 kW 148 TR
AF060.2A.F20.10.S4	601 kW 171 TR
AF060.3F.F22.10.S4	661 kW 188 TR
AF070.2R.F22.10.S4	700 kW 199 TR
AF075.3P.F24.12.S4	781 kW 222 TR
AF075.3Q.F24.12.S4	781 kW 222 TR
AF080.2G.F24.14.S4	870 kW 250 TR
AF090.3A.F26.14.S4	900 kW 256 TR
AF105.3R.F26.16.S4	1052 kW 299 TR
AF120.3G.F26.20.S4	1319 kW 375 TR

Additional 2 compressors have been added to this range



R513A/R134a models

OAT	52 °C
EWT	36 °C
LWT	24 °C

Model Number	Nominal Capacity
AF060.2P.F22.12.S4	600 kW 171 TR
AF070.2N.F24.14.S3	770 kW 219 TR
AF080.2R.F26.14.S4	820 kW 233 TR
AF090.3P.F26.12.S3	900 kW 256 TR
AF105.3N.F26.20.S3	1155 kW 328 TR

Model Number	Nominal Capacity
AF120.4P.F22.24.S4	1200 kW 341 TR
AF120.3R.F20.20.S4	1230 kW 350 TR
AF140.4N.F24.28.S3	1540 kW 438 TR
AF160.4R.F26.28.S4	1640 kW 466 TR

R1234ze/R515b models

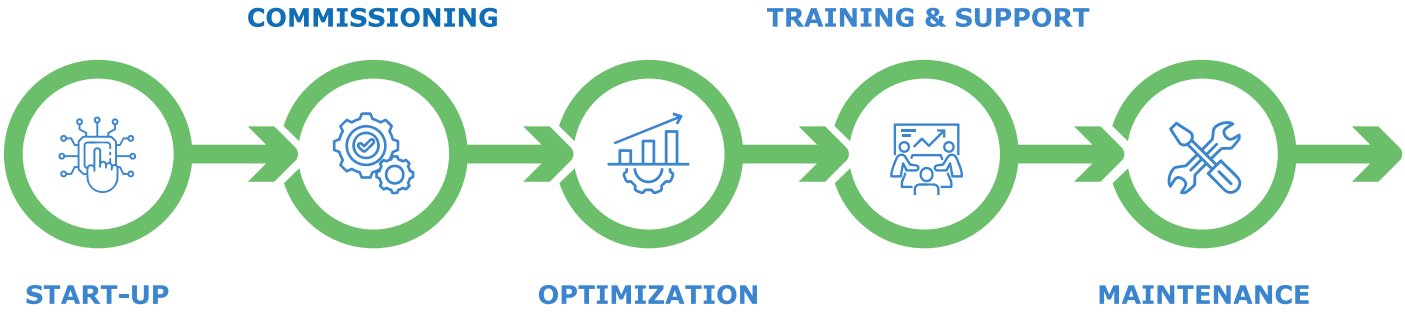
OAT	45 °C
EWT	31 °C
LWT	24 °C

Model Number	Nominal Capacity
AF070.2P.F24.12.S4	700 kW 199 TR
AF070.2R.F18.14.S4	780 kW 222 TR
AF080.2B.F18.14.S3	820 kW 233 TR
AF080.2A.F18.14.S4	840 kW 239 TR
AF090.2N.F20.16.S3	920 kW 262 TR
AF105.3P.F22.18.S4	1050 kW 299 TR
AF110.2E.F22.18.S3	1120 kW 318 TR
AF105.3R.F24.20.S4	1170 kW 333 TR
AF120.2I.F22.20.S3	1220 kW 347 TR
AF120.3B.F24.20.S3	1230 kW 350 TR

Model Number	Nominal Capacity
AF120.2G.F22.20.S4	1250 kW 355 TR
AF120.3A.F24.20.S4	1260 kW 358 TR
AF140.4P.F24.24.S4	1400 kW 398 TR
AF140.4R.F18.28.S4	1560 kW 444 TR
AF160.4B.F18.28.S3	1640 kW 466 TR
AF160.4A.F18.28.S4	1680 kW 478 TR
AF180.4N.F20.32.S3	1840 kW 523 TR
AF220.4E.F22.36.S3	2240 kW 637 TR
AF240.4I.F22.40.S3	2440 kW 694 TR
AF240.4G.F22.40.S4	2500 kW 711 TR

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



System Capabilities

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