

# ARIES N

R290

Air-cooled liquid chillers with scroll compressors and R290 refrigerant gas.  
Nominal cooling capacity 165 – 240 kW



# ARIES N

## High performance and sustainability in one versatile solution

**Designed to deliver unmatched energy efficiency across both Comfort and Process Cooling applications, this unit offers exceptional versatility thanks to its wide operating map, with leaving water temperatures ranging from -12 °C to +25 °C.**

Its all-in-one configuration — with optional integrated hydraulic kits and partial heat recovery — makes it a flexible solution for a broad range of needs.

The optimized refrigeration circuit features scroll compressors in tandemXtrio configurations across two independent circuits, combined with micro-channel condenser coils and a brazed plate evaporator, ensuring top-level performance.

Sustainability is at the core, with the use of R290 refrigerant — non-ozone-depleting and boasting an ultra-low Global Warming Potential (GWP).

The ARIES N series is available in three models, compact and with integrated components, covering cooling capacities from 165 to 240 kW.

All configurations come with key hydraulic and mechanical elements already built into the unit, resulting in a space-saving footprint and streamlined installation.

Advanced control is provided by the latest Trane Symbio™ 800 adaptive controller, allowing precise and intelligent system management.



### An air-cooled chiller with wide operating limits

The ARIES N air-cooled chillers are **designed for efficient year-round operation in both cold and hot climates**. They can be configured to operate at full load within a wide outdoor air temperature range, from -20 °C to +48 °C.

With a leaving water temperature range from -12 °C to +25 °C, these chillers are **ideal for a variety of applications, from comfort cooling to the most demanding process cooling needs**.



### Unmatched Energy Efficiency in every condition

ARIES N chillers deliver exceptional efficiency under all conditions:

- **Full Load Efficiency:** Average Energy Efficiency Ratio (EER) above 3.4;
- **Partial Load Efficiency for Comfort Cooling:** Seasonal Energy Efficiency Ratio (SEER) of 5;
- **Partial Load Efficiency for Process Applications:** Average Seasonal Energy Performance Ratio for High Temperature (SEPR HT) of more than 6.4.

## What makes ARIES N stand out

- ▶ Unmatched energy efficiency in every condition, both in Comfort and Process Cooling applications;
- ▶ Wide operating map: leaving water temperature from -12 °C to +25 °C, ideal for many applications;
- ▶ All-in-one solution with optional integrated hydraulic kits and partial heat recovery;
- ▶ Optimized refrigeration circuit with scroll compressors in tandem or trio configuration across 2 independent circuits, micro-channel condenser coils and brazed plate evaporator;
- ▶ Equipped with the latest Trane Symbio™ 800 adaptive controller for precise management;
- ▶ Non-ozone-depleting and ultra-low global warming potential (GWP) R290 refrigerant.

## Technical specifications

- **Cooling capacity: 165 – 240 kW**
- **Eurovent certification**
- **ErP Certification**
- **Refrigerant gas: R290**
- **Operating mode: Cooling only**
- **Energy saving: Heat recovery**
- **Compressor: Scroll**



## Partial Heat Recovery: Enhance sustainability by reusing heat

The **Partial Heat Recovery option** allows for the recovery of rejection heat to produce **hot water**, using an additional plate heat exchanger. This recovery exchanger is externally clad with thermal insulation to prevent heat dispersion.

It also features a manual air bleed valve at the top and a drain valve at the bottom. The water-side connections are easily accessible from the exterior.



## Comprehensively engineered with a focus on safety

The Aries N units are designed with safety as a top priority. The **refrigeration circuit is housed in a separate compartment equipped with an ATEX-certified leak detector** that cuts the power supply to the main loads and activates the ATEX-certified extraction fans.

For additional safety, the electrical cabinet is detached from the main unit. Additionally, **safety relief valves are provided on both the low-pressure and high-pressure sides.**

| ASN                            | 050     |      |      | 060          |      |      | 070   |      |      |      |
|--------------------------------|---------|------|------|--------------|------|------|-------|------|------|------|
| Versions                       | SN      | LN   | XLN  | SN           | LN   | XLN  | SN    | LN   | XLN  |      |
| Nominal cooling capacity (1) ▼ | kW      |      |      | 165,7        |      |      | 206   |      |      |      |
| EER (2) ▼                      | -       |      |      | 3,47         |      |      | 3,4   |      |      |      |
| SEER (3) ▼                     | -       |      |      | 4,8          |      |      | 5,07  |      |      |      |
| SEPR HT (4) ▼                  | -       |      |      | 6,42         |      |      | 6,49  |      |      |      |
| Power supply                   | V/Ph/Hz |      |      | 400 / 3 / 50 |      |      |       |      |      |      |
| Circuits / Compressors         | n° / n° |      |      | 2 / 4        |      |      | 2 / 6 |      |      |      |
| Sound Power (5) ▼              | 89      | 87   | 84   | 91           | 89   | 86   | 92    | 90   | 87   |      |
| Width                          | mm      |      |      | 2230         |      |      | 2230  |      |      |      |
| Depth                          | mm      |      |      | 2475         |      |      | 2475  |      |      |      |
| Height                         | mm      |      |      | 2525         |      |      | 2525  |      |      |      |
| Installed Weight               | kg      | 1489 | 1499 | 1504         | 1984 | 2000 | 2007  | 1995 | 2011 | 2019 |

**Data declared according to UNI EN 14511. All data refers to standard units without accessories/options which require an electrical feeding source and in nominal working conditions. The listed noise levels, weights and dimensions refer to base units with no options fitted.**

- (1) Data referred to nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- (2) Data referred to the full load functioning and nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- (3) Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products (air conditioning application);
- (4) Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products and high temperature process chillers;
- (5) Determined on the basis of measurements taken in accordance with the standard ISO 3744;

▼ Eurovent certified data.



MTA is ISO9001 certified, a sign of its commitment to complete customer satisfaction.

MTA products comply with European safety directives, as recognised by the CE symbol.

MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on [www.eurovent-certification.com](http://www.eurovent-certification.com). Certification applied to the units:  
- Air/Water up to 600 kW  
- Water/Water up to 1500 kW

