

Copeland R290 scroll solution for commercial heat pumps

The R290 scroll solution from Copeland is engineered to deliver excellence, efficiency, and reliability, in commercial heating and cooling.



Everything you need to succeed, from a single source

Copeland R290 scroll compressors excel in standalone performance. When integrated with our controllers, drives, and valves, they create an unparalleled solution: Reduced design effort, shorter qualification time, and a flexible range of scrolls and drives reduce the time to market.

Variable speed compressor models

Model	YHV119	Future YHV* Commercial Range
Swept volume (cm ³)	119	96, 155, 180, 260
Refrigerant	R290	R290
Heating capacity (kW)*	42	37 - 86**
Height (mm)	559	559 - 620**
Shell diameter (mm)	186	186 - 232**
Matched drive (3ph)	ED4038	ED40xxx**

* Conditions: Evaporating -7°C, Condensing 50°C, Superheat 5K, Subcooling 4K, at max. speed

** Preliminary data

Key benefits



Matched components—integrated, perfectly matched components that work together seamlessly to ensure efficient operation and long-term durability, simplifying system design.



Scalable and future-ready—equip yourself to meet evolving market needs with a solution designed for the next generation of heat pumps and chillers.



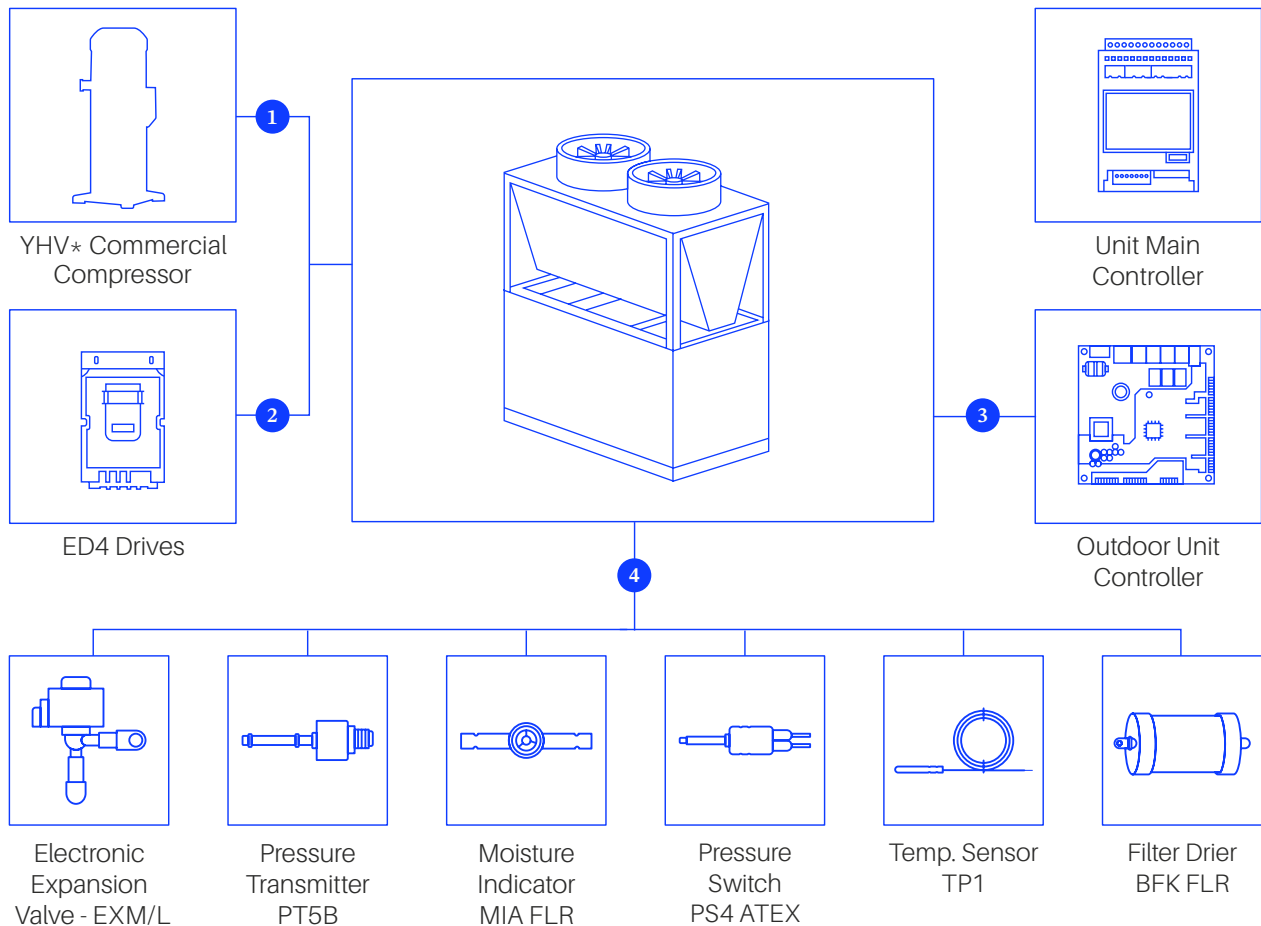
Rapid time to market—our pre-qualified solutions help you bring products to market quickly, with assured performance and compliance.



Expert partnership—benefit from Copeland's experience and comprehensive support, ensuring your systems are well-prepared for market success.

A complete package for commercial heat pumps

Copeland's comprehensive package for commercial heat pumps includes the YHV variable speed scroll compressor, a controller, a perfectly matched drive, and flow controls. Here is how each component contributes to the overall performance:



1

YHV* commercial variable speed scroll compressor—designed specifically for R290, this compressor offers reliable performance and efficiency in commercial heat pumps. Its variable speed capability ensures optimal energy use across different load conditions.

2

ED4 drives—our CE-certified drives are built for compatibility with Copeland variable speed scroll compressors, providing reliable control and energy efficiency.

3

Outdoor Unit Controller (OUC)—the OUC centralizes all control functions, optimizing system performance and simplifying integration, leading to faster development cycles and easier management.

4

Flow controls—Copeland's precision-engineered electrical control valves ensure accurate refrigerant flow control, essential for maintaining system efficiency and reliability under all operating conditions and across varying loads, regardless of demand fluctuations.



Partner with Copeland to develop regulation-compliant and future-proof heat pumps

Choosing Copeland means more than acquiring top-tier components —you are gaining a partner dedicated to helping you succeed in a competitive market: With more than 20 compression product families using R290 for residential and commercial comfort and cold chain applications, we have equipped more than 6,700 stores and 70,000 heat pumps across Europe.

For more details, see copeland.com

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