
R1 COMPRESSOR™

for Air to Water Heatpump

R1 Compressor is one that combines high-efficiency, low sound characteristics of the scroll and the simple compressing structure of the rotary compressor. This technology enables a highly efficient compact model.



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WHY R1 COMPRESSOR™

Air to Water HeatPump with LG R1 Compressor™

Featuring a groundbreaking design that combines the technology of a conventional scroll and rotary compressor, the R1 scroll compressor delivers enhanced heating performance. With the motor positioned at the top of the unit and the scroll at the center, the R1's simplified structure leads to significant efficiency improvement and sound reduction. With increased heating performance and high compression rate, the R1 is ideal for various heat pump applications, operating in extremely cold conditions.



FEATURES AND BENEFITS



High Compression Ratio

The new R1 Compressor delivers 20% higher compression ratio compare to conventional model, providing better heating performance.



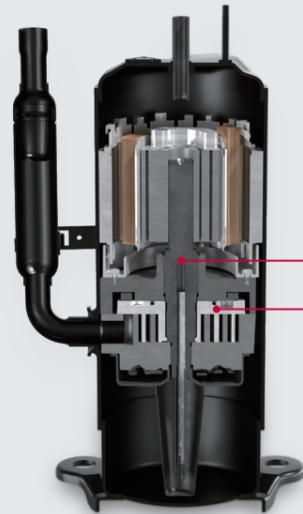
Wide Operating Envelope

Flash gas injection extend the compressor's operating envelope, improving heating capacity.



Optimized For Heatpump Applications

R1 is a great choice for various heatpump application operating in extreme cold weather.



Shaft-Through Structure

With increased stability the R1 features a shaft that runs through the compressor, controlling the orbit with less impact and unleveling. Compared to conventional scroll designs with cantilevered mechanicals, better stability contributes to quieter operation and increased efficiency.



Groundbreaking Design

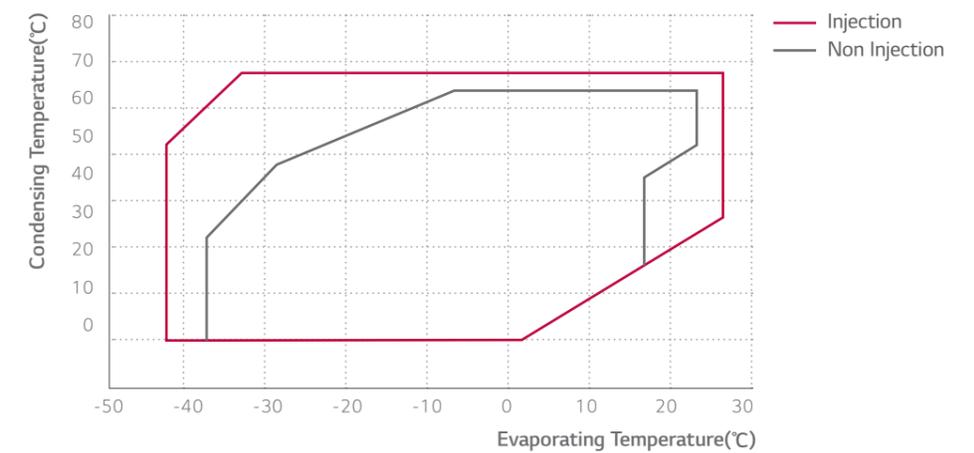
With the motor positioned at the top of the unit and the scroll located in the center, the R1 represents a combination of technologies found in conventional scroll and rotary compressors.

SPECIFICATIONS

LG R1 Compressor™	
Refrigerant	R32
Model	RJB036M
Type	Variable Speed
Displacement [cm ³ / rev]	31.6
Operation Speed [rps]	10-150
Frequency [Hz]	Inverter
Phase [Ø]	3
Voltage [V]	DC 520
Heating Capacity [Btu/hr]	46,826
Heating Capacity [Watt]	13,720
EER [Btu/W.hr]	3.31

※ Test Condition : Cond. / Evap. Temperature (50°C / -7°C) @ 80rps

OPERATING ENVELOPE



DIMENSIONS

ID Ø 12.75 - 12.85 ID Ø 19.10 - 19.20

(unit : mm)

