

VLZ Inverter Scroll Compressor for Refrigeration

Premium **capacity modulation** for **highest savings**

By continuously matching the load fluctuations, Danfoss Inverter Scroll VLZ technology fulfills a major requirement of commercial refrigeration applications. Temperatures are precisely maintained leading to better food quality and a reduction in the associated energy consumption.

30%

energy savings with
capacity modulation
and inverter scroll



VLZ compressor and drive package 1.7-9.3 kW For stepless cooling capacity

Designed for refrigeration applications at medium temperatures, such as cold rooms and mini chillers for process cooling, or milk cooling, VLZ Inverter Scroll compressors operate with the lower GWP refrigerants R448A/R449A as well as with R404A, and will give you greater efficiency, precision, and simplicity. On top of that, a single compressor and drive can simultaneously handle the load demands of multiple display cabinets or cold rooms running at different temperatures.

Multi

Evaporators control with 1 compressor and drive, for more savings and reduced footprint

Models	Speed in Rotation per Second (RPS)	Rating conditions	Cooling capacity in kW* R404A / R448-9A	Coeff. of Performance (COP)* R404A / R448-9A	Code N. Compressor + Drive: G** models	Code N. Compressor + Drive: J** models
VLZ028	Min speed 30	Min speed ⁽¹⁾	1.91 / 1.74	2.40 / 2.40	120G0162 + 134N4263	120G0171 + 134N4261
	Full speed 100	EN12900 ⁽²⁾	5.73 / 5.26	1.70 / 1.71		
		ARI ⁽³⁾ GBT ⁽⁴⁾	6.07 / 5.75 6.69 / 6.18	1.67 / 1.74 1.99 / 2.03		
VLZ035	Min speed 30	Min speed ⁽¹⁾	2.43 / 2.20	2.56 / 2.55	120G0159 + 134N4263	120G0168 + 134N4261
	Full speed 100	EN12900 ⁽²⁾	7.15 / 6.60	1.74 / 1.74		
		ARI ⁽³⁾ GBT ⁽⁴⁾	7.57 / 7.22 8.34 / 7.76	1.71 / 1.76 2.04 / 2.06		
VLZ044	Min speed 30	Min speed ⁽¹⁾	3.16 / 2.85	2.71 / 2.64	120G0156 + 134N4263	120G0165 + 134N4261
	Full speed 100	EN12900 ⁽²⁾	9.28 / 8.54	1.81 / 1.88		
		ARI ⁽³⁾ GBT ⁽⁴⁾	9.83 / 9.32 10.84 / 10.11	1.78 / 1.88 2.12 / 2.22		

* All data based on code G models

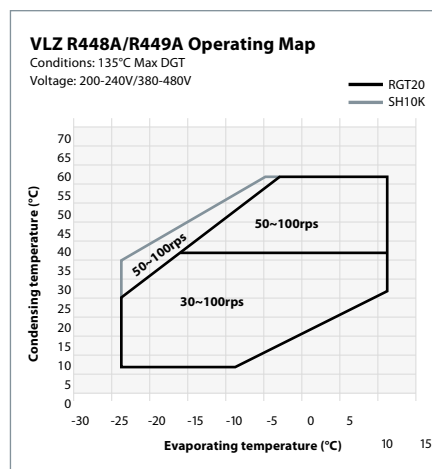
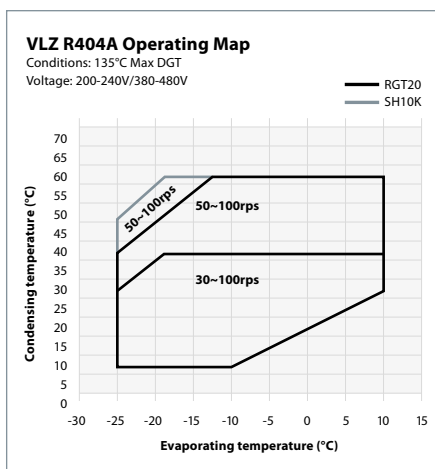
** G voltage code: 380-480V/3ph/50&60Hz – J voltage code: 200-240V/3ph/50&60Hz

⁽¹⁾ Min speed: Evaporating temp. -10°C; Condensing temp. 35°C; RGT20; Subcooling 0K

⁽²⁾ EN12900: Evaporating temp. -10°C; Condensing temp. 45°C; RGT20; Subcooling 0K

⁽³⁾ ARI: Evaporating temp. -6.7°C; Condensing temp. 48.9°C; RGT18.3; Subcooling 0K

⁽⁴⁾ GBT: Evaporating temp. -6.5°C; Condensing temp. 43.5°C; RGT18.5; Subcooling 0K



Advanced efficiency

The DC permanent magnet motor of the compressor with patented Intermediate Discharge Valves (IDV) enhances compressor part-load efficiency and reduces components stress, leading to savings on energy usage. Under part-load conditions, the inverter uses up to 30% less energy than mechanically modulated technology as it is able to slow the compressor down to efficiently match requirements.

Enhanced capacity

Stepless compressor modulation - able to slow down and speed up from 30 to 100 RPS to save energy and match load fluctuations very accurately. The inverter drive incorporates smart logic to increase reliability during operation.

Accurate temperature and humidity control

For greater storage temperature stability, better food preservation, and longer product shelf life.

Simplicity to shorten development time

The pre-qualified compressor and drive package is fully integrated to get your product to market faster and act as a black-box/slave to your application & management controller.

For more information, please contact Danfoss or search for the models in Coolselector®2 software coolselector.danfoss.com