

ZH* KCU Copeland Scroll™

For R290 (Propane)



The Natural Refrigerant For Comfort Applications

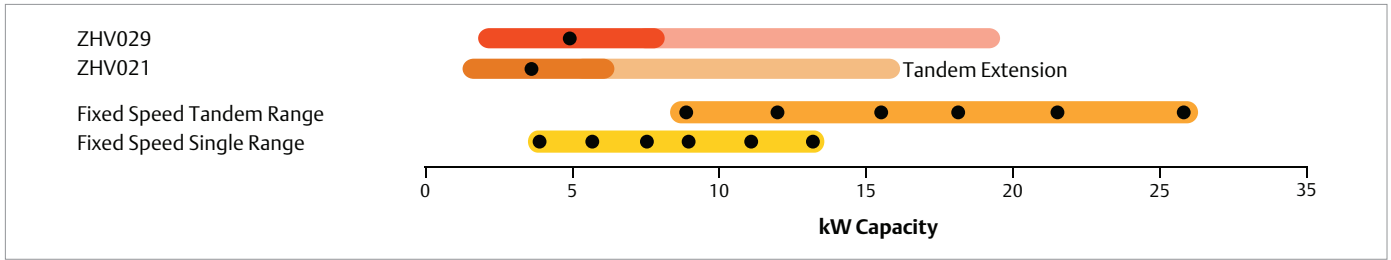
Propane (R290) is a flammable natural refrigerant which has long been known for its good performances. It has zero ozone depletion potential, negligible global warming potential, as well as excellent thermodynamic properties. R290 systems require in average half the charge of hydrofluorocarbons (HFCs). These features make R290 suitable for upcoming F-gas regulations.

Emerson is launching a full line-up of propane Copeland Scroll compressors designed for chillers and heat pump applications. This line-up meets Emerson reliability standards.

Copeland Scroll™


EMERSON™
Climate Technologies

R290 Scroll Compressor Line-Up

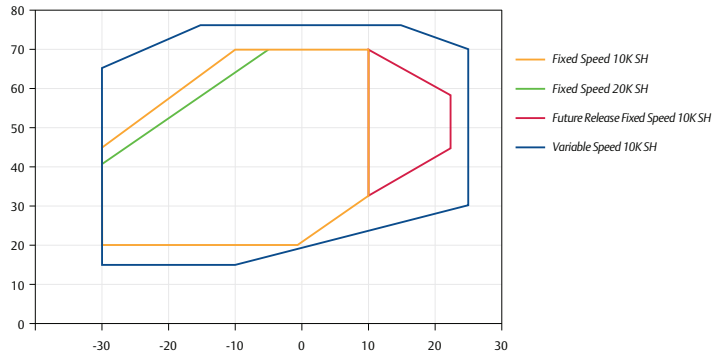


Conditions: Evaporating -7°C, Condensing 50°C, Superheat 10K, Subcooling 4K

Features and Benefits

- Axial and radial compliance
- Dedicated oil for propane
- IP65 (IEC 60529)
- No sight-glass, no Shrader valve
- Hermetic compressor
- Wide operating envelope

Operating Envelope R290



Fixed Speed Models - Technical Overview

Inverter Drive		Displacement (m³/h)	Heating Capacity (kW)*	COP	Sound Pressure @1 m (dBA)**	Length / Width / Height (mm)	Net Weight (kg)	Availability
1 Ph	3 Ph							
ZH04KCU-PFZN	ZH04KCU-TFMN	5.8	4.4	3.2	60	243/242/364	23	Available
ZH06KCU-PFZN	ZH06KCU-TFMN	8.0	6.2	3.2	61	243/242/406	27	
ZH08KCU-PFZN	ZH08KCU-TFMN	10.0	7.7	3.3	64	243/242/419	28	
ZH09KCU-PFZN	ZH09KCU-TFMN	11.7	9.0	3.2	62	247/241/438	38	
ZH11KCU-PFZN	ZH11KCU-TFMN	14.4	10.9	3.3	63	247/241/438	38	
ZH13KCU-PFZN	ZH13KCU-TFMN	17.1	13.0	3.3	65	250/246/450	40	
ZH16KCU-PFZN	ZH16KCU-TFMN	21.4	16.0	3.3	65	250/246/450	40	

Variable Speed Models - Technical Overview

Compressor									
R290	Heating Capacity (kW)		COP*	Displacement (cm³)	Stub suction (inch)	Stub Discharge (inch)	Oil Quantity (l)	Length/Width/Height (mm)	Net Weight (kg)
	Min	Max							
ZHV0211U	1.1	7.1	2.8	21	3/4	1/2	0.7	207/198/334	14
ZHV0291U	1.4	9.7	2.9	29	3/4	1/2	0.7	207/198/334	15

Conditions: Heating kW (-7/50)
*@nominal Speed (90Hz)

Inverter Drive									
Model	Matched Compressor	Nominal Power Input (kW)	Cooling	Frequency (Hz)		Net Weight (kg)	1 Ph 230V	Comm.	Length/Width/Height (mm)*
				Min	Max				
EV2033M	ZHV021	3.3	Air / Liquid	15	120	3.6	✓	ModBus	228/260/156
EV2037M	ZHV029	3.7		15	120	3.6	✓		228/260/116

* Air cooled version including fins

For more details, see www.emersonclimate.eu

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