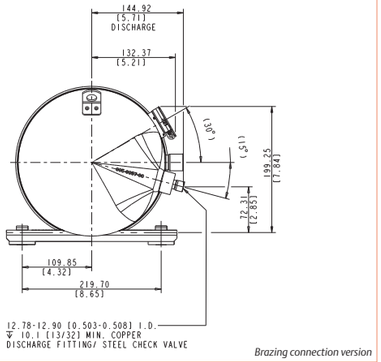
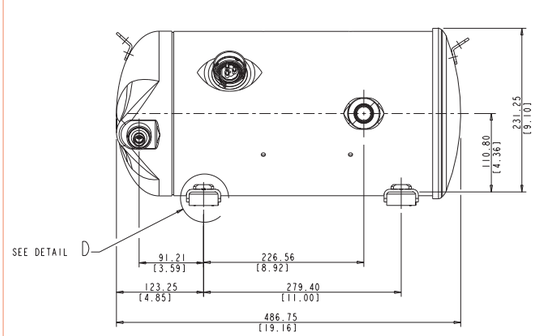
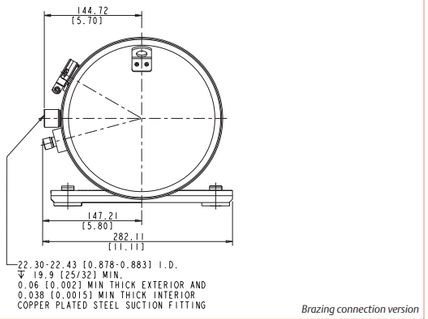
Scroll Compressors for Transport Air-Conditioning
Maximizing Passenger Comfort

Dimensions

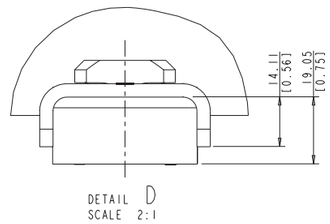


Brazing connection version





Brazing connection version



Options

- Plug/cable assembly: 300 cm, Protection class: IP56.
  To fit bill of material 65x
- Brazed or rotalock connection for suction and discharge lines
- Motor variants: TFD 460/3~/50Hz, TF5 200/3~/50Hz, 230/33~/60Hz

For more details, see www.eCopeland.com

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Copeland®

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Copeland® Scroll™

Horizontal Scroll Compressors for Transport Air-Conditioning

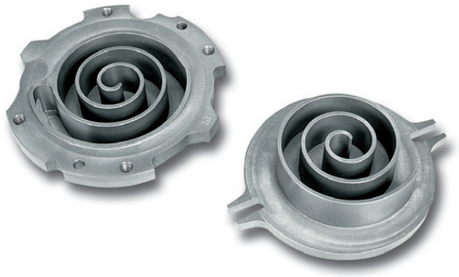
Maximizing Passenger Comfort

EMERSON
Climate Technologies

Copeland is the world's leading compressor manufacturer, delivering comprehensive solutions to numerous climate technology applications. The new ZRH compressor range addresses the specific needs of transport air-conditioning.

Copeland Scroll™ Horizontal
The Answer to Transport Air-Conditioning

Air-conditioning for passenger comfort is a pre-requisite in today's public transport vehicles. At the same time, maximisation of passenger space and streamlining of high speed trains increasingly impose limitations on height. The low profile design and modulation capabilities of the ZRH compressor range are the ideal response to these market needs.



Compactness

Compactness and low weight are design inherent strengths of the Copeland Scroll™ technology. The horizontal arrangement of ZRH compressors bundles these advantages onto the height sensitive railway and bus air-conditioning applications. With less than 250 mm height it is the perfect fit to top mounted air-conditioning units, as found in many railway vehicles.

Reliability

ZRH compressors are based on the unique Copeland Scroll™ design and provide for the same reliability as a standard Copeland Scroll™. The addition of an oil pump covers for the specific needs in transport air-conditioning and the horizontal compressor arrangement in general.

Being an all hermetic design, horizontal scroll compressors eliminate the potential risk of refrigerant leakage through the drive shaft sealing, a problem frequently encountered with open compressors in bus air-conditioning and other applications. This contributes to system reliability as well as to environmental friendliness.

Capacity Modulation

Its integral motor makes these compressors independent from the main vehicle's drive engine speed. This ensures sufficient air-conditioning in the passenger compartment at all times. ZRHV compressors top this advantage further by offering modulation from 70% to 150% of its rated capacity. In applications such as commuter trains, with permanently changing loads, this ensures always a perfect capacity match in an energy efficient way.

Copeland Scroll™ Horizontal
The solution for sensitive transport applications

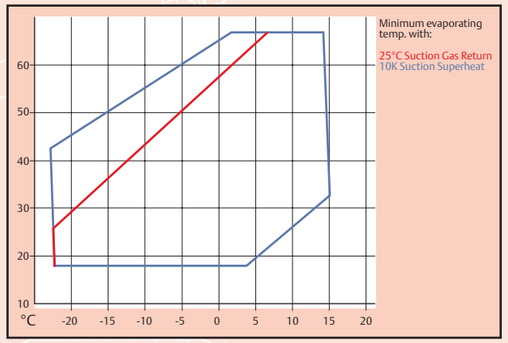
Model Overview

Model	Nominal Horse Power hp	Cooling Capacity at 100% kW[(1)]	COP @ 100% Capacity	Displacement m3/h	Net Weight kg	Motor Code 400/3/50
ZRH49KJE	4	9.9 (6.9)	2.9	11.8	55	TFD
ZRH61KJE	5	12.4 (8.6)	2.9	14.5	55	TFD
ZRH72KJE	6	14.7 (10.2)	2.8	17.1	55	TFD
ZRHV72KJE	6.5	14.7 (10.2)	2.8	17.1	55	TFD

[(1)] EN 12900: R407C Dew Point (R134a), Evaporating 5°C, Condensing 50°C, Suction Superheat 10K, Subcooling 0K,

Operating Envelopes

ZRH R407C



ZRH R134a