

# ZP725 Copeland Scroll™

Large Commercial Scroll Up To 1 MW Cooling Capacity



## Enhanced Reliability And Efficiency In Air Conditioning Systems

Continuing to leverage on the advantages of R410A and with a 50% larger capacity than its predecessor, the Copeland Scroll ZP725K (60hp) opens the door to the widespread use of R410A for chiller systems up to 1 MW (air-cooled) and 1.25 MW (water-cooled). ZP725K can be applied in a wide range of Copeland™ qualified combinations, which is ideal for manufacturers who benefit from increased flexibility in system design as well as stock optimization.

### Features And Benefits

- **Superior Efficiency**

Publications from the Eurovent directory demonstrate that systems with scroll technologies and R410A have an overall better seasonal performance (ESEER) than similar systems using R134a screw compressors. A wide modulation range can be achieved by multi-scroll assemblies thanks to the different combinations they enable: up to 12 capacity steps can be achieved. When only one compressor of a trio assembly is running, its performance is not affected by any unloading feature.

- **Flexibility**

The wide range of Copeland Scroll even and uneven tandem and trio assemblies enables manufacturers to produce a full system line-up with a reduced number of compressor models, while increasing the inventory turns and ensuring short lead time for customers.

- **Outstanding Reliability**

As other Copeland Scroll compressors, the axial and radial compliance robustness of the ZP725 can withstand the most demanding systems, such as reversible ones. The extended operating envelope allows the compressor to be used in a wide variety of applications, while always benefiting from the best performance and reliability. With over 15 years of experience in the qualification of large commercial multi-scroll assemblies, Emerson ensures a safe and long life to your system. Copeland Scroll compressors are service-free compressors which do not require any specific inspection during their lifetime.

- **Reduced Complexity And Applied Cost**

With Copeland Scroll ZP725K, there is no need for a soft starter, thanks to part winding which reduces the starting current. The refrigerant R410A has the

proven benefit of reducing the exchanger size due its properties; it allows the manufacturing of compact and more economical systems.

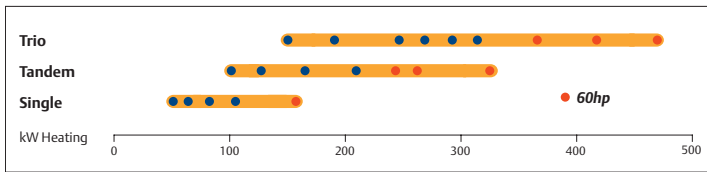
**Enhanced Electronic Features**

The CoreSense™ Communications module sends real time compressor data via RS485 Modbus to the main system controller and provides temperature protection, to ensure greater reliability for demanding applications. It can adapt compressor operation according to the importance and seriousness of detected faults. This helps avoid service disruption and unnecessary system downtime.



CoreSense™ Communications module

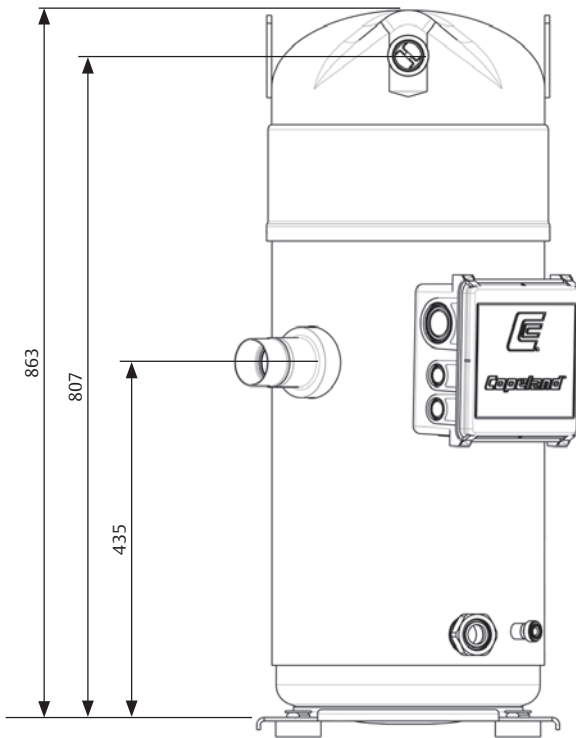
**Compressor Line-up**



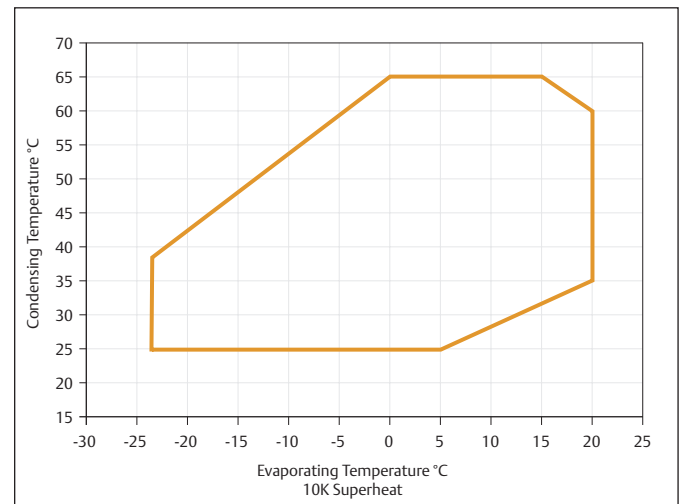
Conditions EN12900: Nominal Cooling Evaporating 5°C, Condensing 50°C, Superheat 10K, Subcooling 0K - 1 Circuit

**Technical Overview**

Model Name	ZP725KCE
Refrigerant	R410A
Cooling Capacity (kW) EN12900	160
Power (kW) EN12900	50
Energy Efficiency Ratio (EER) W/W	3.22
Cooling Capacity (kW) ARI-A	180
Power (kW) ARI-A	55
Energy Efficiency Ratio (EER) W/W ARI	3.27
Heating Capacity (kW) - 7/50	156
COP -7/50	3.17
Heating Capacity (kW) - 7/35	166
COP -7/35	4.7
Tandem (Even / Uneven)	Yes
Trio (Even / Uneven)	Yes
Height (mm)	863
Stub Suction	2-1/8"
Stub Discharge	1-3/8"
Starting Method	Part Winding
Starting Current A (Part Winding)	384



**Operating Envelope - R410A**



For more details, see [www.emersonclimate.eu](http://www.emersonclimate.eu)

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