# **Copeland two-stage scroll compressors for residential applications**

#### How it works

Two internal bypass ports enable the compressor to run at ~65% part-load capacity during times when only partload heating or cooling is needed. When demand increases, the modulation ring is activated, sealing the bypass ports and instantly shifting capacity to 100%.



#### Features

- 1.5 6 ton application
- Excellent comfort and humidity control
- Designed to meet 2023 Department of Energy regulations
- Improved second stage capacity
- Enhanced modulation design
- Optimized for mid-tier comfort at an affordable cost; energy efficiency rebates

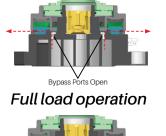
## Benefits of modulation

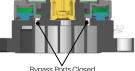
- Precise temperature control
- Humidity control improved by 53%

## R-410A platform

- · ZPSK5, ZPSK6, ZPSK7
- Single and three phase models available

#### Part load operation





#### Temperature Control



Two-stage compressor Fixed speed compressor Humidity Control 50% Felative Humidity 40%

Two-stage compressor



Fixed speed

compresso

30%

# **Copeland two-stage scroll compressors for commercial applications**

#### Features and benefits

- 6-15 ton application
- Energy efficiency, +12-15% IEER
- Comfort 
  Low complexity modulation
- Proven performance and reliability of Copeland two-stage scroll compressors
- Able to be applied in tandem dessign for even greater efficiency gains, staging, and turndown
- Easy transition to 2023 regulations



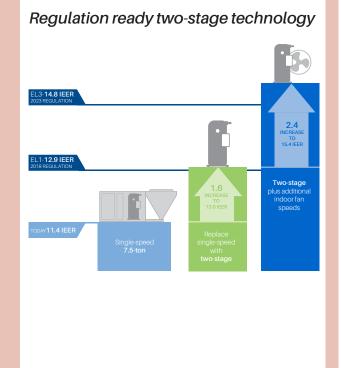
## Regulations

IEER Efficiency Standard	System Tonnage		
	6-10 Ton	11-20 Ton	21-63 Ton
Pre-2018 Levels	11.4	11.2	10.1
EL1 - 2018 levels	12.9	12.4	11.6
EL3 - 2023 Levels	14.8	14.2	13.2

6-10 ton two-stage is an attractive technology to achieve 2018 regulatory compliance in light commercial rooftop equipment. A choice to adopt a 6-10 ton two-stage design facilitates a smooth regulatory transition without compromising ease of system installation and servicing.

# For more information

Online Product Information: <u>Copeland.com/CopelandOPI</u> Residential applications: <u>Copeland.</u> <u>com/Copeland-ResidentialTwoStage</u> Commercial applications: <u>Copeland.</u> <u>com/Copeland-CommercialTwoStage</u> Video: <u>Copeland.com/</u> <u>HowCopelandTwoStageWorks</u>



# To learn more, visit copeland.com

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