

Semi-Hermetic Refrigeration Units K/L Compressors

Copeland™ air-cooled indoor refrigeration units for medium temperature and low temperature applications.

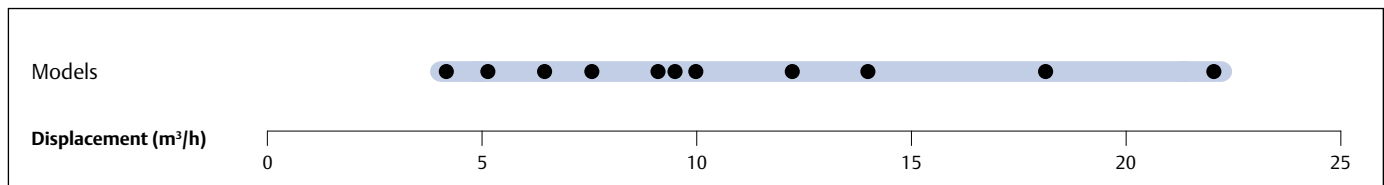
Long-term engineering and manufacturing experience has led to these refrigeration units with reed valve technology compressors. Their excellent quality and reliability is traditionally well known in the refrigeration industry.

This series of refrigeration units is equipped with single fan or twin fans which allows for very compact dimensions. The wide range of models offers solutions for most applications including operation in extreme conditions like high evaporation temperatures and high ambient temperatures.



Semi-Hermetic Refrigeration Unit K/L Compressors

Semi-Hermetic K & L Refrigeration Units Line-up



Features and Benefits

- Standard equipment: compressor, condenser with thermally protected fan(s), discharge line with flexible pipe loop or vibration absorber, liquid receiver with shut-off-valve, HP/LP switch with automatic reset
- Suitable for a broad range of refrigerants: R407A/F, R404A and R134a
- Wide range of quality accessories
- Proven reliability

Maximum Allowable Pressures (PS)

- Low Side PS 22.5 bar (g)
- High Side PS = 28 bar (g)

Technical Overview

| Models | Displacement (m ³ /h) | Receiver Capacity (l) | Number of fans | Total Fan Motor Power (W) | Suction Line Diameter (inch) | Liquid Line Diameter (inch) | Width/Depth/ Height (mm) | Net Weight (kg) | Motor Version/ Code | | Maximum Operating Current (A) | | Locked Rotor Current (A) | | Sound Pressure @ 10m - dB(A)*** |
|---------------------|-------------------------------------|--------------------------|----------------|------------------------------|---------------------------------|--------------------------------|-----------------------------|-----------------|------------------------|--------|-------------------------------------|--------|-----------------------------|--------|------------------------------------|
| | | | | | | | | | 1 Ph* | 3 Ph** | 1 Ph* | 3 Ph** | 1 Ph* | 3 Ph** | |
| B8-KJ-10X-B | 3.3 | 3.3 | 1 | 85 | 5/8 | 1/2 | 560/570/396 | 57.5 | CAG | EWL | 7 | 3 | 32 | 16 | 39.0 |
| B8-KJ-7X-B | 3.3 | 3.3 | 1 | 85 | 5/8 | 1/2 | 560/570/396 | 57.5 | CAG | EWL | 6 | 2 | 35 | 12 | |
| B8-KL-15X-B | 3.3 | 3.3 | 1 | 85 | 5/8 | 1/2 | 560/570/396 | 57.5 | CAG | EWL | 8 | 3 | 43 | 19 | 39.5 |
| B8-KM-5X-B | 3.3 | 3.3 | 1 | 85 | 5/8 | 1/2 | 560/570/396 | 56.0 | CAG | EWL | 5 | 2 | 24 | 12 | 39.0 |
| B8-KM-7X-B | 3.3 | 3.3 | 1 | 85 | 1/2 | 1/2 | 560/570/396 | 57.5 | CAG | EWL | 6 | 2 | 35 | 12 | |
| B8-KSJ-10X-B | 3.3 | 3.3 | 1 | 85 | 5/8 | 1/2 | 560/570/396 | 58.5 | CAG | EWL | 7 | 3 | 32 | 16 | |
| D8-KSJ-15X-B | 3.9 | 3.9 | 1 | 110 | 7/8 | 1/2 | 560/570/446 | 62.0 | CAG | EWL | 9 | 3 | 43 | 19 | 45.6 |
| D8-KSL-20X-B | 3.9 | 3.9 | 1 | 110 | 5/8 | 1/2 | 560/570/446 | 60.0 | | EWL | | 5 | | 23 | |
| D8-LE-20X-B | 3.9 | 3.9 | 1 | 110 | 7/8 | 1/2 | 560/715/446 | 96.5 | | EWL | | 6 | | 38 | |
| D8-LF-20X-B | 3.9 | 3.9 | 1 | 110 | 7/8 | 1/2 | 560/715/446 | 98.5 | | EWL | | 6 | | 38 | |
| H8-KSL-20X-B | 7.9 | 7.9 | 1 | 235 | 5/8 | 1/2 | 735/680/533 | 60.0 | | EWL | | 5 | | 23 | |
| H8-LE-20X-B | 7.9 | 7.9 | 1 | 235 | 7/8 | 1/2 | 735/680/533 | 108.0 | | EWL | | 6 | | 38 | |
| H8-LF-30X-B | 7.9 | 7.9 | 1 | 235 | 7/8 | 1/2 | 735/680/533 | 108.0 | | EWL | | 7 | | 51 | 48.5 |
| H8-LJ-20X-B | 7.9 | 7.9 | 1 | 235 | 7/8 | 1/2 | 735/680/533 | 103.0 | | EWL | | 6 | | 38 | |
| H8-LJ-30X-B | 7.9 | 7.9 | 1 | 235 | 7/8 | 1/2 | 735/680/533 | 108.0 | | EWL | | 7 | | 51 | 48.5 |
| H8-LL-30X-B | 7.9 | 7.9 | 1 | 235 | 1 1/8 | 1/2 | 735/680/533 | 110.0 | | EWL | | 7 | | 53 | 48.5 |
| H8-LL-40X-B | 7.9 | 7.9 | 1 | 235 | 1 1/8 | 1/2 | 735/680/533 | 112.0 | | EWL | | 10 | | 59 | 48.6 |
| H8-LSG-40X-B | 7.9 | 7.9 | 1 | 235 | 1 1/8 | 1/2 | 735/680/533 | 116.0 | | EWL | | 9 | | 69 | |
| K9-LL-30X-B | 7.9 | 7.9 | 2 | 220 | 1 1/8 | 1/2 | 950/640/454 | 134.0 | | EWL | | 7 | | 53 | 47.2 |
| K9-LSG-40X-B | 7.9 | 7.9 | 2 | 220 | 1 1/8 | 1/2 | 950/640/454 | 131.0 | | EWL | | 9 | | 69 | 50.9 |
| P8-LF-30X-B | 7.9 | 7.9 | 2 | 220 | 1 1/8 | 1/2 | 950/640/633 | 127.0 | | EWL | | 7 | | 51 | 47.8 |
| P8-LJ-30X-B | 7.9 | 7.9 | 2 | 220 | 7/8 | 1/2 | 950/640/633 | 127.0 | | EWL | | 7 | | 51 | 47.8 |
| P8-LL-40X-B | 7.9 | 7.9 | 2 | 220 | 1 1/8 | 1/2 | 950/640/633 | 128.0 | | EWL | | 10 | | 59 | 48.0 |

* 1ph: 230V/ 50Hz

** 3 Ph: 380-420V/ 50Hz

*** @ 10m: sound pressure level at 10m distance from the compressor, free field condition

Capacity Data

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|-----|------------------------------|-----|-----|-----|------|------|--------------|-----|------------------------------|-----|-----|-----|-----|-----|
| R407A | | Cooling Capacity (kW) | | | | | | R407A | | Power Input (kW) | | | | | |
| | | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| B8-KM-5X-B | | 0.5 | 0.7 | 1.2 | | | | B8-KM-5X-B | | 0.5 | 0.6 | 0.7 | | | |
| B8-KM-7X-B | | 0.5 | 0.7 | 1.2 | 1.8 | 2.2 | 3.0 | B8-KM-7X-B | | 0.6 | 0.6 | 0.8 | 0.9 | 1.0 | 1.2 |
| B8-KJ-7X-B | | 0.7 | 0.9 | 1.5 | | | | B8-KJ-7X-B | | 0.7 | 0.8 | 1.0 | | | |
| B8-KJ-10X-B | | 0.7 | 0.9 | 1.5 | 2.3 | 2.7 | | B8-KJ-10X-B | | 0.6 | 0.7 | 0.9 | 1.2 | 1.4 | |
| D8-KSJ-15X-B | | 0.9 | 1.2 | 2.0 | 3.0 | 3.6 | | D8-KSJ-15X-B | | 0.9 | 1.0 | 1.3 | 1.5 | 1.7 | |
| B8-KSJ-10X-B | | 0.9 | 1.2 | 1.9 | | | | B8-KSJ-10X-B | | 0.9 | 1.0 | 1.3 | | | |
| B8-KL-15X-B | | 1.0 | 1.3 | 2.1 | | | | B8-KL-15X-B | | 1.0 | 1.1 | 1.4 | | | |
| D8-LE-20X-B | | 0.9 | 1.4 | 2.6 | 4.1 | 5.0 | | D8-LE-20X-B | | 0.9 | 1.1 | 1.5 | 2.0 | 2.2 | |
| H8-LE-20X-B | | 0.9 | 1.5 | 2.8 | 4.6 | 5.6 | 7.9 | H8-LE-20X-B | | 1.0 | 1.2 | 1.6 | 2.1 | 2.3 | 2.7 |
| H8-LF-30X-B | | 1.3 | 2.0 | 3.7 | 5.9 | 7.1 | | H8-LF-30X-B | | 1.4 | 1.6 | 2.2 | 2.8 | 3.1 | |
| P8-LF-30X-B | | 1.4 | 2.1 | 3.9 | 6.2 | 7.5 | 10.6 | P8-LF-30X-B | | 1.3 | 1.6 | 2.2 | 2.7 | 3.0 | 3.6 |
| D8-LF-20X-B | | 1.3 | 1.8 | 3.2 | | | | D8-LF-20X-B | | 1.2 | 1.5 | 2.0 | | | |
| P8-LJ-30X-B | | 1.9 | 2.6 | 4.5 | 6.9 | 8.3 | | P8-LJ-30X-B | | 1.7 | 1.9 | 2.6 | 3.2 | 3.6 | |
| H8-LJ-20X-B | | 1.6 | 2.3 | 4.2 | | | | H8-LJ-20X-B | | 1.5 | 1.8 | 2.5 | | | |
| H8-LJ-30X-B | | 1.8 | 2.6 | 4.3 | 6.6 | 7.9 | | H8-LJ-30X-B | | 1.7 | 2.0 | 2.6 | 3.3 | 3.7 | |
| H8-LL-40X-B | | 2.1 | 3.1 | 5.3 | 8.0 | 9.5 | | H8-LL-40X-B | | 1.9 | 2.2 | 3.1 | 4.1 | 4.6 | |
| H8-LL-30X-B | | 2.1 | 3.0 | 5.2 | | | | H8-LL-30X-B | | 1.8 | 2.2 | 3.1 | | | |
| P8-LL-40X-B | | 2.2 | 3.2 | 5.6 | 8.6 | 10.4 | | P8-LL-40X-B | | 1.9 | 2.2 | 3.1 | 4.0 | 4.5 | |
| K9-LSG-40X-B | | 2.7 | 3.8 | 6.3 | | | | K9-LSG-40X-B | | 2.3 | 2.7 | 3.8 | | | |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

Capacity Data

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|------------------------------|-----|-----|-----|-----|------|------|--------------|------------------------------|-----|-----|-----|-----|-----|-----|
| R404A | Cooling Capacity (kW) | | | | | | | R404A | Power Input (kW) | | | | | | |
| | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| B8-KM-7X-B | 0.3 | 0.6 | 0.8 | 1.3 | 1.9 | 2.2 | 3.0 | B8-KM-7X-B | 0.4 | 0.6 | 0.7 | 0.8 | 1.0 | 1.1 | 1.3 |
| B8-KM-5X-B | 0.3 | 0.6 | 0.8 | 1.3 | | | | B8-KM-5X-B | 0.5 | 0.6 | 0.6 | 0.8 | | | |
| B8-KJ-7X-B | 0.4 | 0.8 | 1.1 | 1.7 | | | | B8-KJ-7X-B | 0.6 | 0.8 | 0.9 | 1.1 | | | |
| B8-KJ-10X-B | 0.4 | 0.8 | 1.1 | 1.7 | 2.4 | 2.8 | 3.6 | B8-KJ-10X-B | 0.5 | 0.8 | 0.9 | 1.1 | 1.4 | 1.5 | 1.8 |
| D8-KSJ-15X-B | 0.6 | 1.1 | 1.4 | 2.2 | 3.2 | 3.8 | | D8-KSJ-15X-B | 0.7 | 1.0 | 1.1 | 1.4 | 1.8 | 1.9 | |
| B8-KSJ-10X-B | 0.6 | 1.1 | 1.3 | | | | | B8-KSJ-10X-B | 0.8 | 1.0 | 1.2 | | | | |
| B8-KL-15X-B | 0.7 | 1.2 | 1.5 | 2.3 | | | | B8-KL-15X-B | 0.9 | 1.1 | 1.3 | 1.6 | | | |
| H8-KSL-20X-B | 0.9 | 1.7 | 2.2 | 3.3 | 4.8 | 5.7 | | H8-KSL-20X-B | 1.1 | 1.5 | 1.7 | 2.1 | 2.6 | 2.8 | |
| D8-KSL-20X-B | 0.9 | 1.6 | 2.0 | 3.1 | 4.3 | | | D8-KSL-20X-B | 1.0 | 1.3 | 1.5 | 2.0 | 2.6 | | |
| H8-LE-20X-B | | 1.3 | 1.9 | 3.2 | 4.8 | 5.8 | 7.8 | H8-LE-20X-B | | 1.2 | 1.4 | 1.9 | 2.3 | 2.5 | 3.0 |
| D8-LE-20X-B | | 1.2 | 1.7 | 2.9 | 4.3 | 5.0 | | D8-LE-20X-B | | 1.1 | 1.3 | 1.7 | 2.2 | 2.5 | |
| H8-LF-30X-B | 0.9 | 2.1 | 2.7 | 4.4 | 6.3 | 7.4 | | H8-LF-30X-B | 1.3 | 1.9 | 2.1 | 2.7 | 3.3 | 3.6 | |
| P8-LF-30X-B | 1.0 | 2.1 | 2.9 | 4.7 | 6.9 | 8.2 | 11.1 | P8-LF-30X-B | 1.3 | 1.9 | 2.1 | 2.6 | 3.2 | 3.4 | 4.0 |
| D8-LF-20X-B | | 1.7 | 2.2 | 3.5 | | | | D8-LF-20X-B | | 1.5 | 1.8 | 2.4 | | | |
| H8-LJ-20X-B | | 2.1 | 2.9 | | | | | H8-LJ-20X-B | | 1.8 | 2.2 | | | | |
| P8-LJ-30X-B | 1.1 | 2.4 | 3.2 | 5.1 | 7.5 | 8.9 | 11.9 | P8-LJ-30X-B | 1.4 | 2.0 | 2.3 | 3.0 | 3.6 | 4.0 | 4.6 |
| H8-LJ-30X-B | 1.1 | 2.3 | 3.0 | 4.7 | 6.8 | 7.9 | | H8-LJ-30X-B | 1.4 | 2.0 | 2.4 | 3.0 | 3.8 | 4.2 | |
| H8-LL-40X-B | 1.4 | 2.8 | 3.6 | 5.7 | 8.1 | 9.4 | | H8-LL-40X-B | 1.7 | 2.4 | 2.8 | 3.7 | 4.7 | 5.3 | |
| H8-LL-30X-B | 1.2 | 2.7 | 3.6 | 5.7 | | | | H8-LL-30X-B | 1.5 | 2.2 | 2.7 | 3.6 | | | |
| P8-LL-40X-B | 1.4 | 2.9 | 3.9 | 6.2 | 9.1 | 10.8 | | P8-LL-40X-B | 1.7 | 2.4 | 2.8 | 3.6 | 4.5 | 5.0 | |
| K9-LL-30X-B | 1.2 | 2.7 | 3.6 | 5.7 | | | | K9-LL-30X-B | 1.5 | 2.2 | 2.6 | 3.6 | | | |
| H8-LSG-40X-B | 1.7 | 3.4 | 4.4 | 6.7 | | | | H8-LSG-40X-B | 1.9 | 2.8 | 3.3 | 4.5 | | | |
| K9-LSG-40X-B | 1.7 | 3.4 | 4.4 | 6.7 | | | | K9-LSG-40X-B | 1.9 | 2.8 | 3.3 | 4.5 | | | |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|------------------------------|-----|-----|-----|-----|-----|------|--------------|------------------------------|-----|-----|-----|-----|-----|-----|
| R134a | Cooling Capacity (kW) | | | | | | | R134a | Power Input (kW) | | | | | | |
| | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| B8-KM-5X-B | | | | 0.8 | 1.2 | 1.5 | 2.2 | B8-KM-5X-B | | | | 0.6 | 0.6 | 0.6 | 0.6 |
| B8-KJ-7X-B | | | | 1.0 | 1.6 | 1.9 | 2.8 | B8-KJ-7X-B | | | | 0.8 | 0.8 | 0.8 | 0.8 |
| B8-KSJ-10X-B | | | | 1.2 | 1.9 | 2.4 | 3.4 | B8-KSJ-10X-B | | | | 0.8 | 0.9 | 1.0 | 0.8 |
| B8-KL-15X-B | | | | 1.4 | 2.2 | 2.6 | 3.7 | B8-KL-15X-B | | | | 0.9 | 1.2 | 1.3 | 1.2 |
| D8-KSL-20X-B | | | | 1.8 | 2.9 | 3.5 | 5.0 | D8-KSL-20X-B | | | | 1.1 | 1.4 | 1.5 | 1.8 |
| H8-KSL-20X-B | | | | 1.9 | 3.0 | 3.7 | 5.4 | H8-KSL-20X-B | | | | 1.2 | 1.5 | 1.6 | 1.8 |
| D8-LE-20X-B | | | | 1.6 | 2.7 | 3.4 | 4.9 | D8-LE-20X-B | | | | 1.4 | 1.4 | 1.4 | 1.4 |
| H8-LE-20X-B | | | | 1.7 | 2.9 | 3.6 | 5.4 | H8-LE-20X-B | | | | 1.5 | 1.5 | 1.5 | 1.5 |
| D8-LF-20X-B | | | | 2.2 | 3.6 | 4.4 | 6.2 | D8-LF-20X-B | | | | 1.7 | 1.7 | 1.7 | 1.7 |
| H8-LJ-20X-B | | | | 2.7 | 4.3 | 5.2 | 7.5 | H8-LJ-20X-B | | | | 2.2 | 2.2 | 2.2 | 2.2 |
| H8-LL-30X-B | | | | 3.2 | 5.2 | 6.4 | 9.2 | H8-LL-30X-B | | | | 2.1 | 2.1 | 2.1 | 2.1 |
| K9-LL-30X-B | | | | 3.2 | 5.3 | 6.5 | 9.3 | K9-LL-30X-B | | | | 2.1 | 2.6 | 2.1 | 2.1 |
| H8-LSG-40X-B | | | | 4.2 | 6.5 | 7.9 | 11.0 | H8-LSG-40X-B | | | | 3.2 | 3.2 | 3.2 | 3.2 |
| K9-LSG-40X-B | | | | 4.2 | 6.6 | 8.0 | 11.1 | K9-LSG-40X-B | | | | 2.5 | 3.2 | 3.6 | 3.6 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

Refrigeration Units with Semi-Hermetic Discus™ Compressors

Copeland™ air-cooled indoor refrigeration units for medium temperature and low temperature applications.

In a further approach to improve compressor performance and reduce compression losses, Emerson Climate Technologies engineers developed the Discus valve technology.

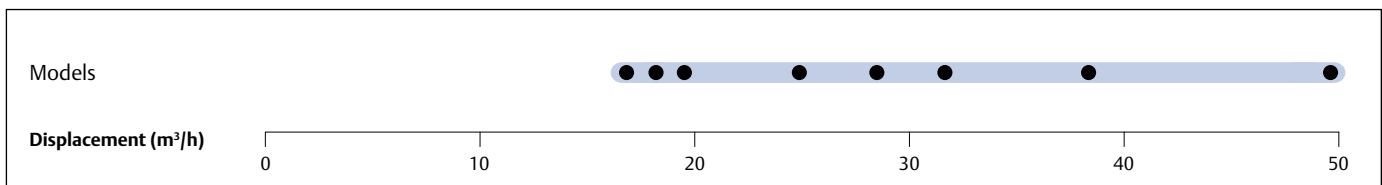
This series of refrigeration units is equipped with 2 or 3 cylinder semi-hermetic compressors with Discus valve technology. The models are specifically suitable for those applications where high efficiency and low energy consumption is required.

The wide range of compressor models combined with 2 or 4 fan high capacity condensers covers most application needs of low temperature and medium temperature applications.



Refrigeration Units with Semi-Hermetic Discus Compressors

Discus Refrigeration Units Line-up



Features and Benefits

- Standard equipment: Discus compressor, condenser with thermally protected fan(s), discharge line with flexible pipe loop or vibration absorber, liquid receiver with shut-off-valve, HP/LP switch with automatic reset, oil pressure safety control OPS2
- Suitable for multiple refrigerants: R407A/F, R448A/R449A, R404A, R134a, R450A and R513A
- Wide range of quality accessories
- Excellent efficiency
- Proven reliability

Maximum Allowable Pressures (PS)

- Low Side PS 22.5 bar (g)
- High Side PS = 28 bar (g)

Technical Overview

| Model | Displacement (m ³ /h) | Receiver Capacity (l) | Number of fans | Total Fan Motor Power (W) | Suction Line Diameter (inch) | Liquid Line Diameter (inch) | Width/Depth/Height (mm) | Net Weight (kg) | Motor Version/Code | Maximum Operating Current (A) | Locked Rotor Current (A) | Sound Pressure @10m - dB(A)*** |
|----------------------|----------------------------------|-----------------------|----------------|---------------------------|------------------------------|-----------------------------|-------------------------|-----------------|--------------------|-------------------------------|--------------------------|--------------------------------|
| | | | | | | | | | 3 Ph** | 3 Ph** | 3 Ph** | |
| P8-2DC-50X-B | 17 | 11.7 | 2 | 220 | 1 3/8 | 5/8 | 950/740/633 | 186.0 | AWM | 9 | 55 | |
| R7-2DD-50X-B | 19 | 15.8 | 2 | 470 | 1 3/8 | 3/4 | 1130/820/633 | 196.0 | AWM | 10 | 55 | |
| P8-2DL-75X-B | 24 | 11.7 | 2 | 220 | 1 3/8 | 5/8 | 950/740/633 | | AWM | 14 | 82 | 50.0 |
| R7-2DL-75X-B | 24 | 15.8 | 2 | 470 | 1 3/8 | 3/4 | 1130/820/708 | 205.0 | AWM | 14 | 82 | |
| P8-2DB-50X-B | 28 | 11.7 | 2 | 220 | 1 3/8 | 5/8 | 950/740/633 | 186.0 | AWM | 13 | 55 | 49.6 |
| P8-2DB-75X-B | 28 | 11.7 | 2 | 220 | 1 3/8 | 5/8 | 950/740/633 | 191.0 | AWM | 16 | 82 | 52.0 |
| S9-2DB-75X-B | 28 | 15.8 | 2 | 470 | 1 3/8 | 3/4 | 1130/820/708 | 212.0 | AWM | 16 | 82 | |
| P8-3DA-50X-B | 32 | 11.7 | 2 | 220 | 1 3/8 | 5/8 | 950/740/633 | 205.0 | AWM | 16 | 55 | 51.6 |
| P8-3DA-75X-B | 32 | 11.7 | 2 | 220 | 1 3/8 | 5/8 | 950/740/633 | 211.0 | AWM | 18 | 106 | 52.0 |
| S9-3DA-75X-B | 32 | 18.9 | 2 | 470 | 1 3/8 | 7/8 | 1330/820/835 | 259.0 | AWM | 18 | 106 | |
| R7-3DC-100X-B | 38 | 15.8 | 2 | 470 | 1 3/8 | 3/4 | 1129/820/633 | 234.0 | AWM | 21 | 121 | 56.0 |
| R7-3DC-75X-B | 38 | 15.8 | 2 | 470 | 1 3/8 | 3/4 | 1130/820/633 | 278.0 | AWM | 18 | 82 | 54.6 |
| S9-3DS-100X-B | 50 | 15.8 | 2 | 470 | 1 3/8 | 3/4 | 1130/820/708 | 239.0 | AWM | 24 | 121 | 54.0 |
| S9-3DS-150X-B | 50 | 15.8 | 2 | 470 | 1 5/8 | 3/4 | 1129/820/708 | 243.0 | AWM | 29 | 123 | 57.0 |

** 3 Ph: 380-420V/ 50Hz

*** @ 10m: sound pressure level at 10m distance from the compressor, free field condition

Capacity Data

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|-----|------------------------------|------|------|------|------|------|---------------|-----|------------------------------|------|-----|------|------|------|
| R407A | | Cooling Capacity (kW) | | | | | | R407A | | Power Input (kW) | | | | | |
| | | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| P8-2DC-50X-B | | 1.8 | 2.6 | 4.5 | 7.1 | 8.7 | 12.3 | P8-2DC-50X-B | | 1.6 | 1.9 | 2.5 | 3.2 | 3.6 | 4.5 |
| R7-2DD-50X-B | | 2.4 | 3.4 | 5.8 | 9.1 | 11.0 | 15.5 | R7-2DD-50X-B | | 2.2 | 2.5 | 3.2 | 4.0 | 4.4 | 5.2 |
| R7-2DL-75X-B | | | | 7.1 | 10.9 | 13.1 | 18.2 | R7-2DL-75X-B | | | | 4.0 | 5.0 | 5.5 | 6.6 |
| P8-2DB-75X-B | | | | 7.9 | 11.4 | 13.2 | | P8-2DB-75X-B | | | | 4.8 | 6.3 | 7.1 | |
| S9-2DB-75X-B | | | | 8.7 | 13.2 | 15.7 | 21.4 | S9-2DB-75X-B | | | | 4.9 | 6.1 | 6.8 | 8.1 |
| P8-2DB-50X-B | | 3.3* | 4.5* | 7.9 | 11.3 | 13.2 | | P8-2DB-50X-B | | 3.0* | 3.5* | 4.7 | 6.2 | 7.1 | |
| S9-3DA-75X-B | | | | 9.8 | 14.7 | 17.5 | 23.7 | S9-3DA-75X-B | | | | 5.6 | 7.0 | 7.8 | 9.4 |
| P8-3DA-50X-B | | 3.7* | 5.0* | 8.7 | 12.1 | 13.9 | | P8-3DA-50X-B | | 3.4* | 4.1* | 5.6 | 7.4 | 8.5 | |
| P8-3DA-75X-B | | | | 8.5 | 12.2 | 14.2 | | P8-3DA-75X-B | | | | 5.5 | 7.2 | 8.2 | |
| R7-3DC-75X-B | | 4.7* | 6.3* | 11.1 | 15.8 | 18.3 | | R7-3DC-75X-B | | 4.3* | 5.1* | 6.8 | 8.8 | 9.9 | |
| V6-3DC-100X-B | | | | 12.6 | 19.1 | 22.9 | 31.5 | V6-3DC-100X-B | | | | 6.6 | 8.2 | 9.0 | 10.6 |
| R7-3DC-100X-B | | | | 11.1 | 16.2 | 18.9 | | R7-3DC-100X-B | | | | 6.5 | 8.5 | 9.6 | |
| V6-3DS-150X-B | | | | 16.1 | 23.8 | 28.2 | 37.8 | V6-3DS-150X-B | | | | 8.9 | 11.2 | 12.4 | 15.0 |
| S9-3DS-100X-B | | 6.3* | 8.5* | 14.7 | 20.5 | 23.6 | | S9-3DS-100X-B | | 5.7* | 6.7* | 9.0 | 11.8 | 13.4 | |
| W9-3DS-150X-B | | | | 16.3 | 24.2 | 28.7 | 38.8 | W9-3DS-150X-B | | | | 8.8 | 11.1 | 12.3 | 14.7 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

* Conditions: EN13215: Suction Superheat 10K

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|-----|------------------------------|-------|------|------|------|------|-------------|-----|------------------------------|------|-----|------|------|------|
| R448A | | Cooling Capacity (kW) | | | | | | R448A | | Power Input (kW) | | | | | |
| | | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| P8-2DC-50X | | 1.7* | 2.8 | 4.9 | 7.6 | 9.1 | 12.6 | P8-2DC-50X | | 1.6* | 2.0 | 2.7 | 3.4 | 3.8 | 4.6 |
| R7-2DD-50X | | 2.0* | 3.3 | 5.9 | 9.2 | 11.1 | 15.6 | R7-2DD-50X | | 2.1* | 2.5 | 3.3 | 4.1 | 4.5 | 5.3 |
| P8-2DL-75X | | 2.6* | 3.7* | 6.7 | 10.1 | 12.0 | | P8-2DL-75X | | 2.5* | 2.9* | 3.8 | 4.9 | 5.6 | |
| R7-2DL-75X | | 2.8* | 4.2 | 7.1 | 11.0 | 13.4 | 18.8 | R7-2DL-75X | | 2.8* | 3.1 | 4.0 | 5.0 | 5.5 | 6.8 |
| P8-2DB-50X | | 3.6* | 4.8* | 8.0 | 11.4 | 13.3 | | P8-2DB-50X | | 3.1* | 3.6* | 4.8 | 6.4 | 7.2 | |
| P8-2DB-75X | | 3.7* | 5.0* | 8.2 | 11.7 | 13.5 | | P8-2DB-75X | | 3.2* | 3.7* | 5.0 | 6.4 | 7.3 | |
| S9-2DB-75X | | 4.0* | 5.4* | 9.2 | 13.6 | 16.3 | 22.1 | S9-2DB-75X | | 3.4* | 3.9* | 5.0 | 6.2 | 6.8 | 8.3 |
| P8-3DA-50X | | 4.0* | 5.2* | 8.6 | 12.2 | | | P8-3DA-50X | | 3.5* | 4.1* | 5.6 | 7.4 | | |
| P8-3DA-75X | | 3.8* | 5.3* | 9.0 | 13.0 | 15.1 | | P8-3DA-75X | | 3.6* | 4.2* | 5.7 | 7.4 | 8.3 | |
| S9-3DA-75X | | 4.2* | 5.9* | 10.4 | 15.5 | 18.4 | 25.1 | S9-3DA-75X | | 3.8* | 4.4* | 5.8 | 7.1 | 7.9 | 9.4 |
| R7-3DC-100X | | 4.6* | 6.6* | 11.5 | 16.5 | 19.2 | | R7-3DC-100X | | 4.1* | 4.8* | 6.6 | 8.5 | 9.6 | |
| V6-3DC-100X | | 5.2* | 7.8 | 13.1 | 19.7 | 23.4 | 32.0 | V6-3DC-100X | | 4.4* | 5.2 | 6.7 | 8.2 | 9.1 | 10.8 |
| R7-3DC-75X | | 5.1* | 6.7* | 11.0 | 15.8 | 18.4 | | R7-3DC-75X | | 4.5* | 5.1* | 6.8 | 8.7 | 9.8 | |
| S9-3DS-100X | | 7.0* | 9.0* | 14.8 | 21.2 | | | S9-3DS-100X | | 5.8* | 6.8* | 9.1 | 11.9 | | |
| S9-3DS-150X | | 7.3* | 9.5* | 15.3 | 21.2 | 24.3 | | S9-3DS-150X | | 6.1* | 7.0* | 9.3 | 11.9 | 13.3 | |
| V6-3DS-150X | | 7.8* | 10.3* | 16.9 | 24.5 | 28.8 | 38.2 | V6-3DS-150X | | 6.3* | 7.2* | 9.2 | 11.4 | 12.6 | 15.2 |
| W9-3DS-150X | | 7.8* | 10.4* | 17.2 | 24.9 | 29.4 | 39.2 | W9-3DS-150X | | 6.3* | 7.2* | 9.1 | 11.3 | 12.5 | 15.0 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

* Conditions: EN13215: Suction Superheat 10K

Preliminary data

Capacity Data

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|-----|------------------------------|-------|------|------|------|------|-------------|-----|------------------------------|------|-----|------|------|------|
| R449A | | Cooling Capacity (kW) | | | | | | R449A | | Power Input (kW) | | | | | |
| | | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| P8-2DC-50X | | 1.7* | 2.8 | 4.9 | 7.6 | 9.1 | 12.6 | P8-2DC-50X | | 1.6* | 2.0 | 2.7 | 3.4 | 3.8 | 4.6 |
| R7-2DD-50X | | 2.0* | 3.3 | 5.9 | 9.2 | 11.1 | 15.6 | R7-2DD-50X | | 2.1* | 2.5 | 3.3 | 4.1 | 4.5 | 5.3 |
| P8-2DL-75X | | 2.6* | 3.7* | 6.7 | 10.1 | 12.0 | | P8-2DL-75X | | 2.5* | 2.9* | 3.8 | 4.9 | 5.6 | |
| R7-2DL-75X | | 2.8* | 4.2 | 7.1 | 11.0 | 13.4 | 18.8 | R7-2DL-75X | | 2.8* | 3.1 | 4.0 | 5.0 | 5.5 | 6.8 |
| P8-2DB-50X | | 3.6* | 4.8* | 8.0 | 11.4 | 13.3 | | P8-2DB-50X | | 3.1* | 3.6* | 4.8 | 6.4 | 7.2 | |
| P8-2DB-75X | | 3.7* | 4.9* | 8.2 | 11.7 | 13.5 | | P8-2DB-75X | | 3.2* | 3.7* | 5.0 | 6.4 | 7.3 | |
| S9-2DB-75X | | 4.0* | 5.4* | 9.2 | 13.6 | 16.3 | 22.1 | S9-2DB-75X | | 3.4* | 3.9* | 5.0 | 6.2 | 6.8 | 8.3 |
| P8-3DA-50X | | 4.0* | 5.2* | 8.6 | 12.2 | | | P8-3DA-50X | | 3.5* | 4.1* | 5.6 | 7.4 | | |
| P8-3DA-75X | | 3.8* | 5.2* | 9.0 | 13.0 | 15.1 | | P8-3DA-75X | | 3.6* | 4.2* | 5.7 | 7.4 | 8.3 | |
| S9-3DA-75X | | 4.2* | 5.9* | 10.4 | 15.5 | 18.4 | 25.1 | S9-3DA-75X | | 3.8* | 4.4* | 5.8 | 7.1 | 7.9 | 9.4 |
| R7-3DC-100X | | 4.6* | 6.6* | 11.5 | 16.5 | 19.2 | | R7-3DC-100X | | 4.1* | 4.8* | 6.6 | 8.5 | 9.6 | |
| V6-3DC-100X | | 5.2* | 7.8 | 13.1 | 19.7 | 23.4 | 32.0 | V6-3DC-100X | | 4.4* | 5.2 | 6.7 | 8.2 | 9.1 | 10.8 |
| R7-3DC-75X | | 5.1* | 6.6* | 11.0 | 15.8 | 18.4 | | R7-3DC-75X | | 4.5* | 5.1* | 6.8 | 8.7 | 9.8 | |
| S9-3DS-100X | | 6.9* | 9.0* | 14.8 | 21.2 | | | S9-3DS-100X | | 5.8* | 6.8* | 9.1 | 11.9 | | |
| S9-3DS-150X | | 7.3* | 9.5* | 15.3 | 21.2 | 24.3 | | S9-3DS-150X | | 6.1* | 7.0* | 9.3 | 11.9 | 13.3 | |
| V6-3DS-150X | | 7.8* | 10.3* | 16.9 | 24.5 | 28.8 | 38.2 | V6-3DS-150X | | 6.3* | 7.2* | 9.2 | 11.4 | 12.6 | 15.2 |
| W9-3DS-150X | | 7.8* | 10.4* | 17.2 | 24.9 | 29.4 | 39.2 | W9-3DS-150X | | 6.3* | 7.2* | 9.1 | 11.3 | 12.5 | 15.0 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

* Conditions: EN13215: Suction Superheat 10K

Preliminary data

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|------|------------------------------|------|------|------|------|------|---------------|------|------------------------------|-----|------|------|------|------|
| R404A | | Cooling Capacity (kW) | | | | | | R404A | | Power Input (kW) | | | | | |
| | | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| P8-2DC-50X-B | | 2.4 | 3.2 | 5.2 | 7.9 | 9.5 | 13.0 | P8-2DC-50X-B | | 2.0 | 2.3 | 3.0 | 3.7 | 4.0 | 4.7 |
| R7-2DD-50X-B | | 3.1 | 4.1 | 6.7 | 9.9 | 11.7 | 15.9 | R7-2DD-50X-B | | 2.6 | 3.0 | 3.8 | 4.5 | 4.9 | 5.6 |
| R7-2DL-75X-B | | 3.8 | 5.0 | 8.0 | 11.8 | 13.9 | 18.6 | R7-2DL-75X-B | | 3.2 | 3.6 | 4.5 | 5.6 | 6.1 | 7.3 |
| P8-2DB-75X-B | | 4.8 | 6.0 | 8.9 | 12.2 | 14.0 | | P8-2DB-75X-B | | 3.7 | 4.2 | 5.5 | 6.9 | 7.7 | |
| S9-2DB-75X-B | | 5.1 | 6.5 | 10.0 | 14.2 | 16.7 | 21.9 | S9-2DB-75X-B | | 3.9 | 4.4 | 5.6 | 6.9 | 7.6 | 8.9 |
| P8-2DB-50X-B | 2.0* | 4.6 | 5.9 | 8.9 | 12.3 | | | P8-2DB-50X-B | 2.5* | 3.4 | 4.0 | 5.4 | 7.0 | | |
| P8-3DA-50X-B | 2.3* | 5.4 | 6.7 | 9.6 | 12.9 | | | P8-3DA-50X-B | 2.9* | 4.2 | 5.0 | 6.5 | 8.3 | | |
| P8-3DA-75X-B | | 5.0 | 6.5 | 9.8 | 13.5 | 15.4 | | P8-3DA-75X-B | | 4.1 | 4.8 | 6.4 | 8.1 | 9.0 | |
| S9-3DA-75X-B | | 5.4 | 7.1 | 11.2 | 16.0 | 18.7 | 24.5 | S9-3DA-75X-B | | 4.4 | 5.1 | 6.5 | 8.0 | 8.7 | 10.3 |
| R7-3DC-75X-B | 3.1* | 6.7 | 8.4 | 12.1 | 16.2 | | | R7-3DC-75X-B | 3.9* | 5.4 | 6.2 | 7.9 | 9.9 | | |
| R7-3DC-100X-B | | 6.3 | 8.2 | 12.3 | 16.6 | 18.9 | | R7-3DC-100X-B | | 5.1 | 5.9 | 7.8 | 9.8 | 10.8 | |
| V6-3DC-100X-B | | 7.1 | 9.3 | 14.6 | 20.9 | 24.5 | 32.5 | V6-3DC-100X-B | | 5.4 | 6.2 | 7.8 | 9.3 | 10.1 | 11.5 |
| S9-3DS-100X-B | 4.2* | 9.0 | 11.3 | 16.2 | 21.5 | | | S9-3DS-100X-B | 5.1* | 7.1 | 8.2 | 10.7 | 13.5 | | |
| V6-3DS-150X-B | | 9.4 | 12.2 | 18.5 | 25.9 | 30.1 | 39.1 | V6-3DS-150X-B | | 7.1 | 8.2 | 10.6 | 12.9 | 14.1 | 16.3 |
| W9-3DS-150X-B | | 9.4 | 12.2 | 18.7 | 26.2 | 30.5 | 39.7 | W9-3DS-150X-B | | 7.1 | 8.2 | 10.5 | 12.9 | 14.0 | 16.2 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

* Conditions: EN13215: Suction Superheat 10K

Capacity Data

| Ambient Temperature: 32°C | | | | | | | | | | | | | | | |
|---------------------------|-----|------------------------------|-----|-----|-----|-----|------|--------------|-----|------------------------------|-----|-----|-----|-----|-----|
| R134a | | Cooling Capacity (kW) | | | | | | R134a | | Power Input (kW) | | | | | |
| | | Evaporating Temperature (°C) | | | | | | | | Evaporating Temperature (°C) | | | | | |
| Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 | Model | -45 | -35 | -30 | -20 | -10 | -5 | +5 |
| B8-KM-5X-B | | | | 0.8 | 1.2 | 1.5 | 2.2 | B8-KM-5X-B | | | | 0.6 | 0.6 | 0.6 | 0.6 |
| B8-KJ-7X-B | | | | 1.0 | 1.6 | 1.9 | 2.8 | B8-KJ-7X-B | | | | 0.8 | 0.8 | 0.8 | 0.8 |
| B8-KSJ-10X-B | | | | 1.2 | 1.9 | 2.4 | 3.4 | B8-KSJ-10X-B | | | | 0.8 | 0.9 | 1.0 | 0.8 |
| B8-KL-15X-B | | | | 1.4 | 2.2 | 2.6 | 3.7 | B8-KL-15X-B | | | | 0.9 | 1.2 | 1.3 | 1.2 |
| D8-KSL-20X-B | | | | 1.8 | 2.9 | 3.5 | 5.0 | D8-KSL-20X-B | | | | 1.1 | 1.4 | 1.5 | 1.8 |
| H8-KSL-20X-B | | | | 1.9 | 3.0 | 3.7 | 5.4 | H8-KSL-20X-B | | | | 1.2 | 1.5 | 1.6 | 1.8 |
| D8-LE-20X-B | | | | 1.6 | 2.7 | 3.4 | 4.9 | D8-LE-20X-B | | | | 1.4 | 1.4 | 1.4 | 1.4 |
| H8-LE-20X-B | | | | 1.7 | 2.9 | 3.6 | 5.4 | H8-LE-20X-B | | | | 1.5 | 1.5 | 1.5 | 1.5 |
| D8-LF-20X-B | | | | 2.2 | 3.6 | 4.4 | 6.2 | D8-LF-20X-B | | | | 1.7 | 1.7 | 1.7 | 1.7 |
| H8-LJ-20X-B | | | | 2.7 | 4.3 | 5.2 | 7.5 | H8-LJ-20X-B | | | | 2.2 | 2.2 | 2.2 | 2.2 |
| H8-LL-30X-B | | | | 3.2 | 5.2 | 6.4 | 9.2 | H8-LL-30X-B | | | | 2.1 | 2.1 | 2.1 | 2.1 |
| K9-LL-30X-B | | | | 3.2 | 5.3 | 6.5 | 9.3 | K9-LL-30X-B | | | | 2.1 | 2.6 | 2.1 | 2.1 |
| H8-LSG-40X-B | | | | 4.2 | 6.5 | 7.9 | 11.0 | H8-LSG-40X-B | | | | 3.2 | 3.2 | 3.2 | 3.2 |
| K9-LSG-40X-B | | | | 4.2 | 6.6 | 8.0 | 11.1 | K9-LSG-40X-B | | | | 2.5 | 3.2 | 3.6 | 3.6 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K

Refer to Emerson's Select software for R450A and R513A capacity data.