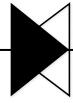


COMMERCIAL REFRIGERATION



ORDERS

All products, except surface coils and parts, are shipped F.O.B. point of shipment with full freight allowed on single orders with a net price value of \$10,000 or more, within the continental USA (excluding Alaska and Hawaii). Buyer will bear all additional costs for special routing or handling requests.



256-259-7400 Customer Service 1-800-288-9488 Equipment Orders 1-855-HTPARTS (1-855-487-2787)

Parts Orders



equipment@htpg.com

parts@htpg.com



Russell.HTPG.com

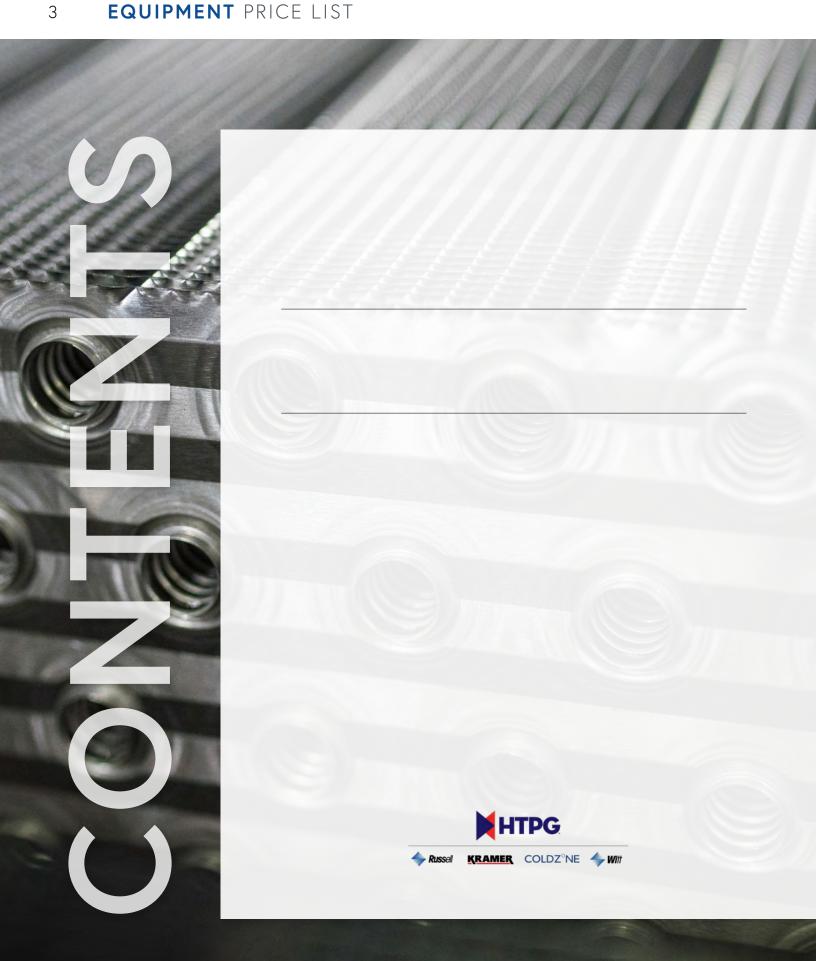
WARRANTY

The Seller warrants against defect in materials and workmanship in products which it manufactures for (1) year from the date of installation or up to 18 (eighteen) months from the date of shipment, whichever event occurs first, when properly installed and operated under normal use. This guarantee does not include any labor or other charges made outside of the Seller's factory for replacement or repair of defective parts unless specifically stated in the body of the Sellers invoice. On parts not manufactured by HTPG, such as motors, controls, valves and compressors we extend to the Buyer the same warranties made to us by the manufacturer.

The Seller's only liability under this warranty or otherwise shall be the repair or replacement (at Seller's option) of nonconforming goods or parts. Seller assumes no liability for incidental or consequential damages such as injury to persons or property, or lost profits.

Claims must be submitted to our Warranty Group within 90 days of the repair. To submit a claim, visit https://www.htpg.com/submit-a-claim/

VIEW TERMS & WARRANTY





MODEL NOMENCLATURE

Not all combinations of nomenclature are available. For specific offering, see following pages or consult with one of our sales representatives.

| R | Α | L | 6 | E | 042 | E | D | Α |
|-------------|----------------------|--|------------------------|-------------------------|----------------|--|-------------------|---------|
| Brand | Refrigerant Class | Style | Fins Per Inch (FPI) | Defrost Type | Capacity | Voltage | Motor Type | Vintage |
| R - Russell | A2L | L - Low Profile U - Low Profile Reverse Connections E - Center Mount V - Low Velocity Center Mount | 6 FPI 4 FPI | A - Air E - Electric | # x 100 = BTUH | A - 115/1/60 D - 230/1/60 E - 208-230/3/60 | D - Dual Speed EC | |

MODELS



DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

Small to Medium Walk-Ins Cooler and Freezer Applications



втин

Air Defrost

Electric Defrost

5,000 - 47,700

3,200 - 34,300

MODEL NOMENCLATURE // CONFIGURABLE BASE MODEL

| R | Α | L | 6 | Е | 042 | E | D | A |
|-------------|----------------------|---|------------------------|---------------------------------------|----------------|--|-------------------|----------|
| Brand | Refrigerant Class | Style | Fins Per Inch (FPI) | Defrost Type | Capacity | Voltage | Motor Type | Vintage |
| R - Russell | A2L | L - Low Profile (Standard) U - Low Profile Reverse Connections | 6 FPI 4 FPI | A - Air E - Electric (Low Temp) | # x 100 = BTUH | A - 115/1/60 D - 230/1/60 E - 208-230/3/60 | D - Dual Speed EC | |

PRE-CONFIGURATION CODES²

| R | S | F |
|--|---------------------------------------|--|
| Refrigerant | Valve | Pre-assembly Code |
| R - EcoNet Approved Refrigerants ³ T - 454A V - 454C, R455A | S - Sporlan SER P - Mechanical TXV | F - EcoNet 2.0 Control Package ⁴ N - Mounted TXV & Electronic Thermostat M - Mounted TXV & Mechanical Thermostat ⁵ |



DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

Small to Medium Walk-Ins Cooler and Freezer Applications





Air Defrost

Electric Defrost

5,000 - 47,700

3,200 - 34,300

STANDARD FEATURES

- Textured aluminum construction
- All units are provided with sweat refrigerant connections
- All units suitable for use with R454A, R454C and R455A
- Flush ceiling mount with slotted hangers and hinged access end panels
- Face mounted heaters and fixed defrost termination, fan delay and heater safety controls
- Dual Speed EC motors are compliant with California Title 24 regulations

OPTIONS

- Coated aluminum fins.
- ► EcoNet® Enabled Unit Cooler controller
- EcoNet Command Center

- Coated housing
- Adjustable termination/fan delay control
- Insulated drain pan
- 1 Refrigerant and electrical connection locations have been changed for the Next-Gen All-Temp design. Standard connections "L" are now opposite of the legacy All-Temp models. Mirror connections "U" are the same end as legacy All-Temp models and are available only as built-to-order base units with no installed options.
- 2 Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.
- 3 EcoNet approved refrigerants are: R454A, R454C, and R455A.
- 4 EcoNet Control Package includes: An electronic expansion valve (EEV); a suction pressure transducer; a suction temperature thermistor and an entering air coil temperature thermistor; local on-board two-row LCD display and push-button adjustments. (EcoNet Control package replaces the thermostatic expansion valve (TXV), a liquid line solenoid valve (LLSV), a room thermostat, defrost termination and fan delay, and a defrost time clock.)
- 5 Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and -20°FSST/10°FTD (Electric Defrost).
- · EcoNet Control Package is not available in 50 Hz.
- •CO2 and Glycol Next-Gen All-Temp Unit Coolers available. If required, please contact factory.

AIR DEFROST CONFIGURABLE BASE MODELS

| | DUAL SPEED EC MOTORS - 6 FPI | | | | | | |
|----------------|------------------------------|-------------------|-------------|-------------------|--|--|--|
| No. of Fans | 115 | v | 230 V | | | | |
| | Model No. | List Price (\$US) | Model No. | List Price (\$US) | | | |
| | RAL6A050ADA | 3,798 | RAL6A050DDA | 3,798 | | | |
| 1 | RAL6A062ADA | 3,900 | RAL6A062DDA | 3,900 | | | |
| | RAL6A081ADA | 4,528 | RAL6A081DDA | 4,528 | | | |
| | RAL6A088ADA | 5,916 | RAL6A088DDA | 5,916 | | | |
| 2 | RAL6A113ADA | 6,701 | RAL6A113DDA | 6,701 | | | |
| 2 | RAL6A141ADA | 7,039 | RAL6A141DDA | 7,039 | | | |
| | RAL6A159ADA | 7,517 | RAL6A159DDA | 7,517 | | | |
| | RAL6A170ADA | 9,094 | RAL6A170DDA | 9,094 | | | |
| 3 | RAL6A196ADA | 10,098 | RAL6A196DDA | 10,098 | | | |
| | RAL6A220ADA | 11,005 | RAL6A220DDA | 11,005 | | | |
| | RAL6A234ADA | 11,857 | RAL6A234DDA | 11,857 | | | |
| 4 | RAL6A289ADA | 14,380 | RAL6A289DDA | 14,380 | | | |
| | RAL6A316ADA | 15,670 | RAL6A316DDA | 15,670 | | | |
| 5 | RAL6A375ADA | 17,969 | RAL6A375DDA | 17,969 | | | |
| , | RAL6A404ADA | 19,286 | RAL6A404DDA | 19,286 | | | |
| 6 | RAL6A477ADA | 21,654 | RAL6A477DDA | 21,654 | | | |

EC motors are rated for 50Hz operations. Dual Speed EC motors are compliant with California Title 24 regulations. Dual Speed motor operation employs a relay to control motor speed • Reverse Connections (U) are available at no charge and cannot be ordered with any factory mounted options.

AIR DEFROST CONFIGURABLE OPTIONS

EcoNet 1.0 & EcoNet 2.0 Control Package w/Sporlan OEV Control Package no longer available

| FANS | | FACTORY MOUNTED OPTIONS // LIST PRICE ADDER (\$US) | | | | | | | |
|---------|-------|--|--|---|--------------------------|--------------------------|------------------------|--|--|
| # OF FA | TXV | EEV ¹ | EcoNet 2.0 Control Package w/Sporlan SER | KE2 Evaporator Defrost Control Package ² | Mechanical Thermostat | Electronic Thermostat | Insulated Drain Pan | | |
| 1 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 999 | | |
| 2 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 1,262 | | |
| 3 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 1,532 | | |
| 4 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 1,761 | | |
| 5 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 2,011 | | |
| 6 | 1,446 | 2,472 | 3,180 | 6,937 | 567 | 850 | 2,286 | | |

¹ Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Shipped-Loose Accessories are found on page 20 • Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating • ElectroFin, Bronz-Glow and Heresite are available coating options.

² KE2 Evaporator Control Package includes KE2 OEM control board, Liquid Line Solenoid Valve (LLSV) and Electronic Expansion Valve (EEV).

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NEXT-GEN ALL-TEMP · LOW PROFILE

AIR DEFROST PRE-CONFIGURED¹ MODELS // ECONET 2.0 WITH SPORLAN SER

| No. of | | DUAL SPEED EC MOTORS - 6 FPI | |
|--------|----------------|------------------------------|-------------------|
| Fans | 115 V | 208-230 V | List Price (\$US) |
| | RAL6A050ADARSF | RAL6A050DDARSF | 6,978 |
| 1 | RAL6A062ADARSF | RAL6A062DDARSF | 7,080 |
| | RAL6A081ADARSF | RAL6A081DDARSF | 7,708 |
| | RAL6A088ADARSF | RAL6A088DDARSF | 9,096 |
| 2 | RAL6A113ADARSF | RAL6A113DDARSF | 9,881 |
| Z | RAL6A141ADARSF | RAL6A141DDARSF | 10,219 |
| | RAL6A159ADARSF | RAL6A159DDARSF | 10,697 |
| | RAL6A170ADARSF | RAL6A170DDARSF | 12,274 |
| 3 | RAL6A196ADARSF | RAL6A196DDARSF | 13,278 |
| | RAL6A220ADARSF | RAL6A220DDARSF | 14,185 |
| | RAL6A234ADARSF | RAL6A234DDARSF | 15,037 |
| 4 | RAL6A289ADARSF | RAL6A289DDARSF | 17,560 |
| | RAL6A316ADARSF | RAL6A316DDARSF | 18,850 |
| 5 | RAL6A375ADARSF | RAL6A375DDARSF | 21,149 |
| , | RAL6A4O4ADARSF | RAL6A404DDARSF | 22,466 |
| 6 | RAL6A477ADARSF | RAL6A477DDARSF | 24,834 |

¹ Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Kramer sales representative.

² Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and -20°FSST/10°FTD (Electric Defrost).

AIR DEFROST PRE-CONFIGURED¹ MODELS // R-454A Models include mounted TXV and Electronic Thermostat²

| No. of | | DUAL SPEED EC MOTORS - 6 FPI | |
|--------|----------------|------------------------------|-------------------|
| Fans | 115 V | 208-230 V | List Price (\$US) |
| | RAL6A050ADATPN | RAL6A050DDATPN | 5,417 |
| 1 | RAL6A062ADATPN | RAL6A062DDATPN | 5,519 |
| | RAL6A081ADATPN | RAL6A081DDATPN | 6,147 |
| | RAL6A088ADATPN | RAL6A088DDATPN | 7,535 |
| 2 | RAL6A113ADATPN | RAL6A113DDATPN | 8,320 |
| 2 | RAL6A141ADATPN | RAL6A141DDATPN | 8,658 |
| | RAL6A159ADATPN | RAL6A159DDATPN | 9,136 |
| | RAL6A170ADATPN | RAL6A170DDATPN | 10,713 |
| 3 | RAL6A196ADATPN | RAL6A196DDATPN | 11,717 |
| | RAL6A220ADATPN | RAL6A220DDATPN | 12,624 |
| | RAL6A234ADATPN | RAL6A234DDATPN | 13,476 |
| 4 | ral6a289adatpn | ral6a289ddatpn | 15,999 |
| | RAL6A316ADATPN | ral6a316ddatpn | 17,289 |
| 5 | RAL6A375ADATPN | RAL6A375DDATPN | 19,588 |
| , | RAL6A404ADATPN | RAL6A404DDATPN | 21,582 |
| 6 | RAL6A477ADATPN | RAL6A477DDATPN | 23,950 |
| | | | |

¹ Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

² Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and -20°FSST/10°FTD (Electric Defrost).

AIR DEFROST PRE-CONFIGURED¹ MODELS // R-454C & R-455A Models include mounted TXV and Electronic Thermostat²

| No. of | | DUAL SPEED EC MOTORS - 6 FPI | |
|--------|----------------|------------------------------|-------------------|
| Fans | 115 V | 208-230 V | List Price (\$US) |
| | RAL6A050ADAVPN | RAL6A050DDAVPN | 5,417 |
| 1 | RAL6A062ADAVPN | RAL6A062DDAVPN | 5,519 |
| | RAL6A081ADAVPN | RAL6A081DDAVPN | 6,147 |
| | RAL6A088ADAVPN | RAL6A088DDAVPN | 7,535 |
| 2 | RAL6A113ADAVPN | RAL6A113DDAVPN | 8,320 |
| 2 | RAL6A141ADAVPN | RAL6A141DDAVPN | 8,658 |
| | RAL6A159ADAVPN | RAL6A159DDAVPN | 9,136 |
| | RAL6A170ADAVPN | RAL6A170DDAVPN | 10,713 |
| 3 | RAL6A196ADAVPN | RAL6A196DDAVPN | 11,717 |
| | RAL6A220ADAVPN | RAL6A220DDAVPN | 12,624 |
| | RAL6A234ADAVPN | RAL6A234DDAVPN | 13,476 |
| 4 | RAL6A289ADAVPN | RAL6A289DDAVPN | 15,999 |
| | RAL6A316ADAVPN | RAL6A316DDAVPN | 17,289 |
| 5 | RAL6A375ADAVPN | RAL6A375DDAVPN | 19,588 |
| , | RAL6A404ADAVPN | RAL6A404DDAVPN | 21,582 |
| 6 | RAL6A477ADAVPN | RAL6A477DDAVPN | 23,950 |
| | | | |

Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

 $^{2\}quad \text{Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and Mechanical or Electronic Thermostat)}$ -20°FSST/10°FTD (Electric Defrost).

AIR DEFROST PRE-CONFIGURED MODELS // R-454A Models include mounted TXV and Mechanical Thermostat²

| No. of | DUAL SPEED EC | MOTORS - 6 FPI | | |
|--------|----------------|-------------------|--|--|
| Fans | 115 V | List Price (\$US) | | |
| | RAL6A050ADATPM | 5,134 | | |
| 1 | RAL6A062ADATPM | 5,236 | | |
| | RAL6A081ADATPM | 5,864 | | |
| | RAL6A088ADATPM | 7,252 | | |
| 2 | RAL6A113ADATPM | 8,037 | | |
| 2 | RAL6A141ADATPM | 8,375 | | |
| | RAL6A159ADATPM | 8,853 | | |
| | RAL6A170ADATPM | 10,430 | | |
| 3 | RAL6A196ADATPM | 11,434 | | |
| | RAL6A220ADATPM | 12,341 | | |
| | RAL6A234ADATPM | 13,193 | | |
| 4 | RAL6A289ADATPM | 15,716 | | |
| | RAL6A316ADATPM | 17,006 | | |
| 5 | RAL6A375ADATPM | 19,305 | | |
| , | RAL6A4O4ADATPM | 21,299 | | |
| 6 | RAL6A477ADATPM | 23,667 | | |

Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

 $^{2\}quad \text{Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and Mechanical or Electronic Thermostat)}$ -20°FSST/10°FTD (Electric Defrost).

AIR DEFROST PRE-CONFIGURED¹ MODELS // R-454C & R-455A Models include mounted TXV and Mechanical Thermostat²

| No. of | DUAL SPEED EC | MOTORS - 6 FPI | |
|--------|----------------|-------------------|--|
| Fans | 115 V | List Price (\$US) | |
| | RAL6A050ADAVPM | 5,134 | |
| 1 | RAL6A062ADAVPM | 5,236 | |
| | RAL6A081ADAVPM | 5,864 | |
| | RAL6A088ADAVPM | 7,252 | |
| 2 | ral6a113adavpm | 8,037 | |
| 2 | RAL6A141ADAVPM | 8,375 | |
| | RAL6A159ADAVPM | 8,853 | |
| | RAL6A17OADAVPM | 10,430 | |
| 3 | RAL6A196ADAVPM | 11,434 | |
| | RAL6A220ADAVPM | 12,341 | |
| | RAL6A234ADAVPM | 13,193 | |
| 4 | RAL6A289ADAVPM | 15,716 | |
| | RAL6A316ADAVPM | 17,006 | |
| 5 | RAL6A375ADAVPM | 19,305 | |
| , | RAL6A4O4ADAVPM | 21,299 | |
| 6 | RAL6A477ADAVPM | 23,667 | |

Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

 $^{2\}quad \text{Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and Mechanical or Electronic Thermostat)}$ -20°FSST/10°FTD (Electric Defrost).

AIR DEFROST // REVERSE CONNECTION No Configuration Allowed

| No. of | | DUAL SPEED EC MOTORS - 6 FPI | |
|--------|-------------|------------------------------|-------------------|
| Fans | 115 V | 208-230 V | List Price (\$US) |
| | RAU6A050ADA | RAU6A050DDA | 3,798 |
| 1 | RAU6A062ADA | RAU6A062DDA | 3,900 |
| | RAU6A081ADA | RAU6A081DDA | 4,528 |
| | RAU6A088ADA | RAU6A088DDA | 5,916 |
| 2 | RAU6A113ADA | RAU6A113DDA | 6,701 |
| 2 | RAU6A141ADA | RAU6A141DDA | 7,039 |
| | RAU6A159ADA | RAU6A159DDA | 7,517 |
| | RAU6A170ADA | RAU6A170DDA | 9,094 |
| 3 | RAU6A196ADA | RAU6A196DDA | 10,098 |
| | RAU6A220ADA | RAU6A220DDA | 11,005 |
| | RAU6A234ADA | RAU6A234DDA | 11,857 |
| 4 | RAU6A289ADA | RAU6A289DDA | 14,380 |
| | RAU6A316ADA | RAU6A316DDA | 15,670 |
| 5 | RAU6A375ADA | RAU6A375DDA | 17,969 |
| 4 | RAU6A4O4ADA | RAU6A4O4DDA | 19,286 |
| 6 | RAU6A477ADA | RAU6A477DDA | 21,654 |

Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

 $^{2\}quad \text{Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and Mechanical or Electronic Thermostat)}$ -20°FSST/10°FTD (Electric Defrost).

ELECTRIC DEFROST CONFIGURABLE BASE MODELS

| | | DUAL SPEED EC | MOTORS - 230 V | | |
|----------------|-------------|-------------------|----------------|-------------------|--|
| No. of Fans | 6 | FPI | 4 FPI | | |
| | Model No. | List Price (\$US) | Model No. | List Price (\$US) | |
| | RAL6E042DDA | 5,182 | RAL4E032DDA | 4,974 | |
| 1 | RAL6E051DDA | 5,764 | RAL4E040DDA | 5,532 | |
| | RAL6E058DDA | 6,342 | RAL4E046DDA | 6,090 | |
| | RAL6E079DDA | 7,992 | RAL4E061DDA | 7,670 | |
| 0 | RAL6E092DDA | 8,407 | RAL4E076DDA | 8,074 | |
| 2 | RAL6E110DDA | 8,654 | RAL4E099DDA | 8,309 | |
| | RAL6E129DDA | 10,141 | | | |
| 3 | RAL6E148DDA | 11,339 | RAL4E114DDA | 10,882 | |
| 3 | RAL6E173DDA | 12,936 | RAL4E133DDA | 12,421 | |
| 4 | RAL6E194DDA | 15,174 | RAL4E150DDA | 14,563 | |
| 4 | RAL6E218DDA | 16,744 | RAL4E170DDA | 16,070 | |
| 5 | RAL6E237DDA | 18,828 | RAL4E184DDA | 18,079 | |
| 4 | RAL6E290DDA | 22,088 | RAL4E232DDA | 21,205 | |
| 6 | RAL6E343DDA | 24,456 | RAL4E281DDA | 23,477 | |

EC motors are rated for 50Hz operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed. • Reverse Connections (U) are available at No Charge. Reverse Connection models cannot be ordered with any factory mounted options. • 5 & 6 fan electric defrost models are also available wired for 208-230/3/60. EcoNet is not available on 208-230/3/60 Models.

ELECTRIC DEFROST CONFIGURABLE OPTIONS

EcoNet 1.0 Control Package & EcoNet 2.0 Control Package w/Sporlan OEV **no longer available**

| SZ | FACTORY MOUNTED OPTIONS // LIST PRICE ADDER (\$US) Adjustable | | | | | | | |
|----------|--|------------------|--|---|--------------------------|--------------------------|--|------------------------|
| # OF FAI | TXV | EEV ¹ | EcoNet 2.0 Control Package w/Sporlan SER | KE2 Evaporator Defrost Control Package ² | Mechanical Thermostat | Electronic Thermostat | Adjustable Termination Switch/Fan Delay | Insulated Drain Pan |
| 1 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 585 | 999 |
| 2 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 585 | 1,262 |
| 3 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 585 | 1,532 |
| 4 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 585 | 1,761 |
| 5 | 769 | 2,472 | 3,180 | 6,937 | 567 | 850 | 585 | 2,011 |
| 6 | 1,446 | 2,472 | 3,180 | 6,937 | 567 | 850 | 585 | 2,286 |

See notes on next page.

ELECTRIC DEFROST PRE-CONFIGURED¹ MODELS // CODE RSF // ECONET 2.0 WITH SER VALVE Models include EcoNet 2.0 Control Package³

| | DUAL SPEED EC MOTO | DRS - 6 FPI - 230 V | | |
|----------------|---|---------------------|--|--|
| No. of Fans | EcoNet 2.0 Control Package ^{2,3,4} | | | |
| | Model No. | List Price (\$US) | | |
| | RAL6E042DDARSF | 8,362 | | |
| 1 | RAL6E051DDARSF | 8,944 | | |
| | RAL6E058DDARSF | 9,522 | | |
| | RAL6E079DDARSF | 11,172 | | |
| 2 | RAL6E092DDARSF | 11,587 | | |
| Ζ | RAL6E110DDARSF | 11,834 | | |
| | RAL6E129DDARSF | 13,321 | | |
| 3 | RAL6E148DDARSF | 14,519 | | |
| | RAL6E173DDARSF | 16,116 | | |
| 4 | RAL6E194DDARSF | 18,354 | | |
| 4 | RAL6E218DDARSF | 19,924 | | |
| 5 | RAL6E237DDARSF | 22,008 | | |
| 6 | RAL6E290DDARSF | 25,268 | | |
| O | RAL6E343DDARSF | 27,636 | | |

¹ Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for $\pm 25^{\circ}$ FSST/10°FTD (Air Defrost) and $\pm 20^{\circ}$ FSST/10°FTD (Electric Defrost).

² EcoNet approved refrigerants are: R454A, R454C, and R455A.

³ EcoNet Control Package includes: An electronic expansion valve (EEV); a suction pressure transducer; a suction temperature thermistor and an entering air coil temperature thermistor; local on-board two-row LCD display and push-button adjustments. (EcoNet Control package replaces the thermostatic expansion valve (TXV), a liquid line solenoid valve (LLSV), a room thermostat, defrost termination and fan delay, and a defrost time clock.)

SSOV and CSOV valves are still required with EcoNet Enabled Unit Coolers to satisfy safety mitigation requirements.

⁴ EcoNet Control Package is not available in 50 Hz.

ELECTRIC DEFROST PRE-CONFIGURED⁵ MODELS // CODE TPN/VPN Models include mounted TXV and Electronic Thermostat⁶

| | | DUAL SPEED EC MOTORS - 6 FPI | |
|----------------|-----------------|------------------------------|-------------------|
| No. of Fans | | 230 V | |
| | Model No. R454A | Model No. R454C, R455A | List Price (\$US) |
| | RAL6E042DDATPN | RAL6E042DDAVPN | 6,801 |
| 1 | RAL6E051DDATPN | RAL6E051DDAVPN | 7,383 |
| | RAL6E058DDATPN | RAL6E058DDAVPN | 7,961 |
| | RAL6E079DDATPN | RAL6E079DDAVPN | 9,611 |
| 2 | RAL6E092DDATPN | RAL6E092DDAVPN | 10,026 |
| 2 | RAL6E110DDATPN | RAL6E110DDAVPN | 10,273 |
| | RAL6E129DDATPN | RAL6E129DDAVPN | 11,760 |
| 3 | RAL6E148DDATPN | RAL6E148DDAVPN | 12,958 |
| 3 | RAL6E173DDATPN | RAL6E173DDAVPN | 14,555 |
| 4 | RAL6E194DDATPN | RAL6E194DDAVPN | 16,793 |
| 4 | RAL6E218DDATPN | RAL6E218DDAVPN | 18,363 |
| 5 | RAL6E237DDATPN | RAL6E237DDAVPN | 20,447 |
| 6 | RAL6E290DDATPN | RAL6E290DDAVPN | 24,384 |
| U | RAL6E343DDATPN | RAL6E343DDAVPN | 26,752 |

ELECTRIC DEFROST CONFIGURABLE OPTIONS (previous page)

- 1 Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
- 2 KE2 Evaporator Control Package includes KE2 OEM control board, Liquid Line Solenoid Valve (LLSV) and Electronic Expansion Valve (EEV).

Shipped-Loose Accessories are found on page 20 · Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating • ElectroFin, Bronz-Glow and Heresite are available coating options.

ELECTRIC DEFROST PRE-CONFIGURED OPTIONS

- Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.
- Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and -20°FSST/10°FTD (Electric Defrost).

ELECTRIC DEFROST PRE-CONFIGURED¹ MODELS // CODE TPM/VPM Models include mounted TXV and Mechanical Thermostat²

| | \ | DUAL SPEED EC MOTORS - 6 FPI - 230 V | |
|----------------|-----------------|--------------------------------------|-------------------|
| No. of Fans | | 230 V | |
| | Model No. R454A | Model No. R454C, R455A | List Price (\$US) |
| | RAL6E042DDATPM | RAL6E042DDAVPM | 6,518 |
| 1 | RAL6E051DDATPM | RAL6E051DDAVPM | 7,100 |
| | RAL6E058DDATPM | RAL6E058DDAVPM | 7,678 |
| | RAL6E079DDATPM | RAL6E079DDAVPM | 9,328 |
| 2 | RAL6E092DDATPM | RAL6E092DDAVPM | 9,743 |
| Z | RAL6E110DDATPM | RAL6E110DDAVPM | 9,990 |
| | RAL6E129DDATPM | RAL6E129DDAVPM | 11,477 |
| 3 | RAL6E148DDATPM | RAL6E148DDAVPM | 12,675 |
| 3 | RAL6E173DDATPM | RAL6E173DDAVPM | 14,272 |
| 4 | RAL6E194DDATPM | RAL6E194DDAVPM | 16,510 |
| 4 | RAL6E218DDATPM | RAL6E218DDAVPM | 18,080 |
| 5 | RAL6E237DDATPM | RAL6E237DDAVPM | 20,164 |
| 6 | RAL6E290DDATPM | RAL6E290DDAVPM | 24,101 |
| J | RAL6E343DDATPM | RAL6E343DDAVPM | 26,469 |

¹ Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

² Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and -20°FSST/10°FTD (Electric Defrost).

ELECTRIC DEFROST // REVERSE CONNECTION No Configuration Allowed

| No. of | DUAL SPEED EC | MOTORS - 6 FPI |
|--------|---------------|-------------------|
| Fans | 208-230 V | List Price (\$US) |
| | RAU6E042DDA | 5,182 |
| 1 | RAU6E051DDA | 5,764 |
| | RAU6E058DDA | 6,342 |
| | RAU6E079DDA | 7,992 |
| 2 | RAU6E092DDA | 8,407 |
| Ζ | RAU6E110DDA | 8,654 |
| | RAU6E129DDA | 10,141 |
| 2 | RAU6E148DDA | 11,339 |
| 3 | RAU6E173DDA | 12,936 |
| 4 | RAU6E194DDA | 15,174 |
| 4 | RAU6E218DDA | 16,744 |
| 5 | RAU6E237DDA | 18,828 |
| , | RAU6E290DDA | 22,088 |
| 6 | RAU6E343DDA | 24,456 |

Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local Russell sales representative.

Models with Pre-configured Mechanical Components (TXV and Mechanical or Electronic Thermostat) are rated for +25°FSST/10°FTD (Air Defrost) and -20°FSST/10°FTD (Electric Defrost).

Shipped Loose Accessories

CONTROLS & THERMOSTATS

| Option Name | Option Description | List Price (\$US) |
|-----------------------|---|-------------------|
| EcoNet Command Center | EcoNet Command Center for EcoNet Enabled Unit Coolers | 1,635 |
| Mechanical Thermostat | Mechanical Thermostat: -30°F to + 100°F | 533 |
| Electronic Thermostat | Electronic Thermostat: -30°F to + 100°F | 688 |

VALVES

| Option Name | Range | List Price (\$US) |
|------------------------------------|---------------|-------------------|
| | 1 to 15 Tons | 1,907 |
| Electronic Expansion Valve (EEV) | 16 to 25 Tons | 2,738 |
| | 1/4 to 3 Tons | 625 |
| Thermostatic Expansion Valve (TXV) | 4 to 9 Tons | 890 |
| | 10 to 30 Tons | 1,566 |

SHUT-OFF VALVES

| | List Price (\$US) | | | | |
|-----------|-----------------------------------|--------------------------------|--|--|--|
| # of Fans | Solenoid Shut-Off Valve (SSOV) | Check Shut-Off Valve (CSOV) | | | |
| 1 | 825 | 217 | | | |
| 2 | 825 | 217 | | | |
| 3 | 825 | 217 | | | |
| 4 | 825 | 217 | | | |
| 5 | 861 | 315 | | | |
| 6 | 861 | 315 | | | |

 $\ensuremath{\mathsf{A2L}}$ SSOV and CSOV Mitigation Valves must ship loose for field install

CENTER MOUNT LOW HEIGHT

Small to Medium Walk-Ins Cooler and Freezer Applications





Air Defrost

Electric Defrost

c(UL)us (NSF)

5,100 - 31,600

4,500 - 33,700

| | MODEL NOMENCLATURE | | | | | | | |
|-------------|----------------------|------------------|------------------------|---------------------------------------|----------------|------------------------------|-------------------|---------|
| R | Α | E | 6 | Α | 041 | Α | D | Α |
| Brand | Refrigerant Class | Style | Fins Per Inch (FPI) | Defrost Type | Capacity | Voltage | Motor Type | Vintage |
| R - Russell | A2L | E - Center Mount | 6 FPI 4 FPI | A - Air E - Electric (Low Temp) | # x 100 = BTUH | A - 115/1/60 D - 230/1/60 | D - Dual Speed EC | |

STANDARD FEATURES

- Dual Speed EC Motors
- Extra low height mounts flush to ceiling
- Two-way air flow for even air circulation and consistent temperature
- Electric Defrost models feature independently defrosted coils for optimal defrost performance
- High efficiency fan guard design and deep draw venturi provide optimal air flow
- Sloped housing for efficient condensate draining
- Unique design allows for service in confined spaces
- Lightweight and durable embossed aluminum housing

OPTIONS

- Coated aluminum fins
- EcoNet® Enabled Unit Cooler controller
- **EcoNet Command Center**
- Coated housing
- Adjustable termination/fan delay control
- Insulated drain pan



DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

CENTER MOUNT • LOW HEIGHT

AIR DEFROST CONFIGURABLE BASE MODELS

| | | DUAL SPEED EC | MOTORS - 6 FPI | | |
|----------------|-------------|-------------------|----------------|-------------------|--|
| No. of Fans | 11 | 5 V | 230 V | | |
| | Model No. | List Price (\$US) | Model No. | List Price (\$US) | |
| 1 | RAE6A051ADA | 5,024 | RAE6A051DDA | 5,279 | |
| 2 | RAE6A085ADA | 7,294 | RAE6A085DDA | 7,615 | |
| 2 | RAE6A103ADA | 7,998 | RAE6A103DDA | 8,328 | |
| 2 | RAE6A128ADA | 8,731 | RAE6A128DDA | 9,128 | |
| 3 | RAE6A157ADA | 10,912 | RAE6A157DDA | 11,328 | |
| 4 | RAE6A173ADA | 12,030 | RAE6A173DDA | 12,511 | |
| 4 | RAE6A207ADA | 13,852 | RAE6A207DDA | 14,352 | |
| _ | RAE6A249ADA | 15,113 | RAE6A249DDA | 15,688 | |
| 5 | RAE6A316ADA | 18,286 | RAE6A316DDA | 20,766 | |

AIR DEFROST CONFIGURABLE OPTIONS

EcoNet 1.0 & EcoNet 2.0 Control Package w/Sporlan OEV Control Package no longer available

| FANS | | FACTORY | MOUNTED OPTIONS | // LIST PRICE ADI | DER (\$US) | |
|---------|-----|---------|--|--------------------------|--------------------------|------------------------|
| # OF F/ | TXV | EEV¹ | EcoNet 2.0 Control Package w/Sporlan SER | Mechanical Thermostat | Electronic Thermostat | Insulated Drain Pan |
| 1 | 769 | 2,472 | 3,180 | 567 | 850 | 259 |
| 2 | 769 | 2,472 | 3,180 | 567 | 850 | 326 |
| 3 | 769 | 2,472 | 3,180 | 567 | 850 | 395 |
| 4 | 769 | 2,472 | 3,180 | 567 | 850 | 463 |
| 5 | 769 | 2,472 | 3,180 | 567 | 850 | 533 |

AIR DEFROST CONFIGURABLE BASE MODELS

EC motors are rated for 50Hz operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

AIR DEFROST CONFIGURABLE OPTIONS

1 Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Shipped-Loose Accessories are found on page 24 · Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.

CENTER MOUNT • LOW HEIGHT

ELECTRIC DEFROST CONFIGURABLE BASE MODELS

| \ | DUAL SPEED EC 1 | MOTORS - 4 FPI |
|-----------|-----------------|-------------------|
| No. of | 230 | ٧ |
| Fans | Model No. | List Price (\$US) |
| 1 | RAE4E043DDA | 7,915 |
| 2 | RAE4E087DDA | 11,006 |
| 3 | RAE4E127DDA | 14,891 |
| 4 | RAE4E183DDA | 18,744 |
| 5 | RAE4E222DDA | 21,205 |
| Э | RAE4E283DDA | 24,386 |

EC motors are rated for 50Hz operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

| | DUAL SPEED EC | MOTORS - 6 FPI |
|-----------|---------------|-------------------|
| No. of | 230 | o v |
| Fans | Model No. | List Price (\$US) |
| 1 | RAE6E045DDA | 7,915 |
| 1 | RAE6E054DDA | 10,656 |
| 2 | RAE6E090DDA | 11,006 |
| Ζ | RAE6E107DDA | 13,847 |
| 3 | RAE6E129DDA | 15,030 |
| 3 | RAE6E149DDA | 15,210 |
| 4 | RAE6E160DDA | 18,277 |
| 4 | RAE6E217DDA | 19,340 |
| 5 - | RAE6E265DDA | 23,038 |
| J | RAE6E337DDA | 25,860 |

ELECTRIC DEFROST CONFIGURABLE OPTIONS

EcoNet 1.0 & EcoNet 2.0 Control Package w/Sporlan OEV Control Package no longer available

| FANS | FACTORY MOUNTED OPTIONS // LIST PRICE ADDER (\$US) | | | | | | | |
|---------|--|-------|--|--------------------------|--------------------------|------------------------|--|--|
| # OF FA | TXV | EEV¹ | EcoNet 2.0 Control Package w/Sporlan SER | Mechanical Thermostat | Electronic Thermostat | Insulated Drain Pan | | |
| 1 | 769 | 2,472 | 3,180 | 567 | 850 | 259 | | |
| 2 | 769 | 2,472 | 3,180 | 567 | 850 | 326 | | |
| 3 | 769 | 2,472 | 3,180 | 567 | 850 | 395 | | |
| 4 | 769 | 2,472 | 3,180 | 567 | 850 | 463 | | |
| 5 | 769 | 2,472 | 3,180 | 567 | 850 | 533 | | |

¹ Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Shipped-Loose Accessories are found on next page 24 • Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.

CENTER MOUNT . LOW HEIGHT

Shipped Loose Accessories

CONTROLS & THERMOSTATS

| Option Name | Option Description | List Price (\$US) |
|-----------------------|---|-------------------|
| EcoNet Command Center | EcoNet Command Center for EcoNet Enabled Unit Coolers | 1,635 |
| Mechanical Thermostat | Mechanical Thermostat: -30°F to + 100°F | 533 |
| Electronic Thermostat | Electronic Thermostat: -30°F to + 100°F | 688 |

VALVES

| Option Name | Range | List Price (\$US) |
|------------------------------------|---------------|-------------------|
| Floring Francisco Valua (FFVA | 1 to 15 Tons | 1,907 |
| Electronic Expansion Valve (EEV) | 16 to 25 Tons | 2,738 |
| | 1/4 to 3 Tons | 625 |
| Thermostatic Expansion Valve (TXV) | 4 to 9 Tons | 890 |
| | 10 to 30 Tons | 1,566 |

SHUT-OFF VALVES

| | List Price (\$US) | | | |
|-----------|-----------------------------------|--------------------------------|--|--|
| # of Fans | Solenoid Shut-Off Valve (SSOV) | Check Shut-Off Valve (CSOV) | | |
| 1 | 825 | 217 | | |
| 2 | 825 | 217 | | |
| 3 | 825 | 217 | | |
| 4 | 825 | 217 | | |
| 5 | 861 | 315 | | |

A2L SSOV and CSOV Mitigation Valves must ship loose for field install

CENTER MOUNT LOW VELOCITY

Small to Medium Walk-Ins Cooler Applications



c(UL)us (NSF)



Air Defrost

Electric Defrost

Electric Dellos

5,300 - 33,800 5,300 - 33,800

| MODEL NOMENCLATURE | | | | | | | | | |
|--------------------|----------------------|----------------------------------|------------------------|---------------------------------------|----------------|------------------------------|-------------------|---------|--|
| R | Α | ٧ | 6 | Α | 043 | Α | D | Α | |
| Brand | Refrigerant Class | Style | Fins Per Inch (FPI) | Defrost Type | Capacity | Voltage | Motor Type | Vintage | |
| R - Russell | A2L | V - Low Velocity Center Mount | 6 FPI | A - Air E - Electric (Low Temp) | # x 100 = BTUH | A - 115/1/60 D - 230/1/60 | D - Dual Speed EC | | |

STANDARD FEATURES

- Dual Speed EC Motors
- Extra low height mounts flush to ceiling
- Two-way air flow for even air circulation and consistent temperature
- Electric Defrost models feature independently defrosted coils for optimal defrost performance
- High efficiency fan guard design and deep draw venturi provide optimal air flow
- Sloped housing for efficient condensate draining
- Unique design allows for service in confined spaces
- Lightweight and durable embossed aluminum housing

OPTIONS

- EcoNet® Enabled Unit Cooler Controller
- EcoNet® Command Center
- Thermostatic expansion valve (mounted or loose)
- Thermostat (mechanical or electronic mounted or loose)



DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

CENTER MOUNT . LOW VELOCITY

CONFIGURABLE BASE MODELS

| | | | DUAL SPEED EC | MOTORS - 6 FPI | | | |
|------------|-------------|-------------------|---------------|-------------------|-------------|-------------------|--|
| No. | | Air De | Electric | Defrost | | | |
| of Fans | 11 | 5 V | 23 | 0 V | 230 V | | |
| | Model No. | List Price (\$US) | Model No. | List Price (\$US) | Model No. | List Price (\$US) | |
| 4 | RAV6A053ADA | 7,931 | RAV6A053DDA | 8,245 | RAV6E053DDA | 9,130 | |
| ı | RAV6A066ADA | 8,213 | RAV6A066DDA | 8,542 | RAV6E066DDA | 9,583 | |
| | RAV6A105ADA | 9,565 | RAV6A105DDA | 9,949 | RAV6E105DDA | 11,210 | |
| 2 | RAV6A131ADA | 11,731 | RAV6A131DDA | 12,202 | RAV6E131DDA | 13,559 | |
| 2 | RAV6A159ADA | 13,616 | RAV6A159DDA | 14,162 | RAV6E159DDA | 15,916 | |
| 3 | RAV6A196ADA | 15,277 | RAV6A196DDA | 15,893 | RAV6E196EDA | 17,779 | |
| 4 | RAV6A216ADA | 18,619 | RAV6A216DDA | 19,364 | RAV6E216EDA | 21,775 | |
| 4 | RAV6A270ADA | 21,055 | RAV6A270DDA | 21,898 | RAV6E270DDA | 24,485 | |
| 5 | RAV6A338ADA | 23,089 | RAV6A338DDA | 24,014 | RAV6E338DDA | 27,275 | |

CONFIGURABLE OPTIONS

EcoNet 1.0 & EcoNet 2.0 Control Package w/Sporlan OEV Control Package no longer available

| FANS | FACTORY MOUNTED OPTIONS // LIST PRICE ADDER (\$US) | | | | | | | |
|---------|--|-------|--|--------------------------|--------------------------|------------------------|--|--|
| # OF FA | TXV | EEV¹ | EcoNet 2.0 Control Package w/Sporlan SER | Mechanical Thermostat | Electronic Thermostat | Insulated Drain Pan | | |
| 1 | 769 | 2,472 | 3,180 | 567 | 850 | 259 | | |
| 2 | 769 | 2,472 | 3,180 | 567 | 850 | 326 | | |
| 3 | 769 | 2,472 | 3,180 | 567 | 850 | 395 | | |
| 4 | 769 | 2,472 | 3,180 | 567 | 850 | 463 | | |
| 5 | 769 | 2,472 | 3,180 | 567 | 850 | 533 | | |

CONFIGURABLE BASE MODELS

EC motors are rated for 50Hz operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

CONFIGURABLE OPTIONS

1 Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Shipped-Loose Accessories are found on next page · Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.

CENTER MOUNT . LOW VELOCITY

Shipped Loose Accessories

CONTROLS & THERMOSTATS

| Option Name | Option Description | List Price (\$US) | |
|-----------------------|---|-------------------|--|
| EcoNet Command Center | EcoNet Command Center for EcoNet Enabled Unit Coolers | 1,635 | |
| Mechanical Thermostat | Mechanical Thermostat: -30°F to + 100°F | 533 | |
| Electronic Thermostat | Electronic Thermostat: -30°F to + 100°F | 688 | |

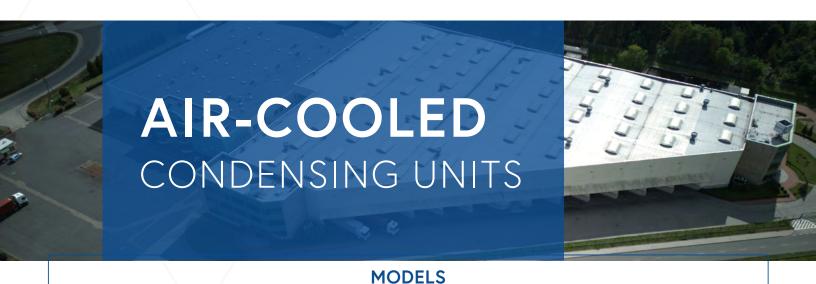
VALVES

| Option Name | Range | List Price (\$US) |
|------------------------------------|---------------|-------------------|
| | 1 to 15 Tons | 1,907 |
| Electronic Expansion Valve (EEV) | 16 to 25 Tons | 2,738 |
| | 1/4 to 3 Tons | 625 |
| Thermostatic Expansion Valve (TXV) | 4 to 9 Tons | 890 |
| | 10 to 30 Tons | 1,566 |

SHUT-OFF VALVES

| | List Price (\$US) | | | | |
|-----------|-----------------------------------|--------------------------------|--|--|--|
| # of Fans | Solenoid Shut-Off Valve (SSOV) | Check Shut-Off Valve (CSOV) | | | |
| 1 | 825 | 217 | | | |
| 2 | 825 | 217 | | | |
| 3 | 825 | 217 | | | |
| 4 | 825 | 217 | | | |
| 5 | 861 | 315 | | | |

A2L SSOV and CSOV Mitigation Valves must ship loose for field install





DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

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NEXT-GEN MINICON

1/2 TO 6 HP

c UL us





DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

MODEL NOMENCLATURE

| R | F | 0 | N | 150 | E | 4A | D | Α |
|-------------|--------------------------------|------------|----------------------------------|--------------|---|-----------------------------|--|---------|
| Brand | Style | Compressor | Compressor Configuration | Horsepower | Temperature | Refrigerant | Voltage | Vintage |
| R - Russell | F - Flooded B - Non-Flooded | O - Scroll | N - Single Horizontal (Small) | 150 = 1.5 HP | E - Extended Medium L - Low M - Medium | 4A - R454A, R454C, R455A | D - 208-230/1/60 E - 208-230/3/60 G - 460/3/60 M - 200-220/1/50 N - 200-220/3/50 Q - 380/3/50 | А |

PRE-CONFIGURATION CODE¹

NT

Pre-Assembly Code

 $\ensuremath{\mathsf{NT}}$ - No Defrost Timer $\ensuremath{\mathsf{/Kit}}^2$

50 Hz available. Contact Factory for additional information.

- 1 Pre-Configuration Codes are used to show common Factory Mounted options and are not available for every model.
- 2 "NT" pre-configuration code is available on Flooded Models with 230/1/60 or 208-230/3/60 voltage.

c UL us





DOE AWEF values for specific models in a given application can be found in the Product Brochure on our website.

STANDARD FEATURES

- Scroll Compressors
- All-weather Galvanized steel painted housing
- Generously sized high efficiency condenser, enhanced copper tubes/aluminum fins
- Integral Liquid Sub-cooling Circuit provides subcooled liquid to the expansion device
- Base mounted shut-off valves placed external to cabinet for easy access
- Liquid line kit with filter/drier and sight glass with moisture indicator
- Suction line piping
- Larger electrical panel with hinged/removable door
- Color coded point-to-point wiring
- Crankcase heater

- Refrigerant receiver with isolation valve and pressure relief plug
- High Efficiency Motors
- Encapsulated high pressure (auto reset) and adjustable low pressure control
- Electronic defrost timer with defrost contactor/ relay on low temperature standard models (2 evaps. maximum)
- Electronic air defrost timer (Medium temperature standard models only)
- Flooded models include flooded head pressure control
- Non-flooded models include pressure fan cycle control

OPTIONS

- Suction Accumulator
- Oil separator (may not be available with mounted accumulator)
- Thru-the door fused disconnect for cabinet sizes FM1 through FM4
- External fused or non-fused disconnect loose or mounted
- Heated and insulated receiver
- Oversized receiver
- Adjustable high/low pressure control
- ► Hose option for adjustable pressure control
- High ambient components: suction desuperheating TRE valve, dual pressure control, and insulated suction line components and piping

FLOODED // SCROLL COMPRESSOR // CONFIGURABLE BASE MODELS Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

| | Cabinet | Nom. | Compressor | 208-230/1/60 | | | 4 Yr Compressor |
|-----------------------------|---------|------|------------|--------------|----------------------------------|-------------------|---|
| | Size | | Model No. | Model No. | Standard Defrost Provision(s) | List Price (\$US) | Protection Plan (Net Price Adder \$US) |
| <u></u> ∠ | | 0.5 | YB06KAE | RFON060M4ADA | Air Defrost Timer | 14,133 | 446 |
| MED TEMP | EN44 | 0.75 | YB07KAE | RFON080M4ADA | Air Defrost Timer | 14,925 | 446 |
| \mathbb{X} | FM1 | 1.0 | YB08KAE | RFON100M4ADA | Air Defrost Timer | 15,203 | 446 |
| | | 1.0 | YS09KAE | RFON130E4ADA | Air Defrost Timer | 16,097 | 446 |
| ш | EN40 | 1.25 | YS11KAE | RFON150E4ADA | Air Defrost Timer | 16,205 | 446 |
| TUR | FM2 | 1.5 | YS12KAE | RFON180E4ADA | Air Defrost Timer | 17,926 | 446 |
| EXTENDED MEDIUM TEMPERATURE | EN40 | 2.0 | YS14KAE | RFON200E4ADA | Air Defrost Timer | 17,943 | 446 |
| TEM | FM3 | 2.5 | YS16KAE | RFON250E4ADA | Air Defrost Timer | 18,286 | 446 |
| ΜΩ | | 2.8 | YS19KAE | RFON280E4ADA | Air Defrost Timer | 19,305 | 585 |
| MED | | 3.0 | YS21KAE | RFON300E4ADA | Air Defrost Timer | 19,569 | 585 |
| DED | | 3.5 | YS24KAE | RFON350E4ADA | Air Defrost Timer | 21,496 | 585 |
| XTEN | FM4 | 4.0 | YS26KAE | RFON400E4ADA | Air Defrost Timer | 21,791 | 607 |
| Ω | | 4.5 | YS30KAE | RFON450E4ADA | Air Defrost Timer | 23,515 | 607 |
| | | 5.0 | YS33KAE | RFON500E4ADA | Air Defrost Timer | 24,602 | 628 |
| | | 1.0 | YF03KAE | RFON100L4ADA | ED-5 | 16,290 | 446 |
| | FM1 | 1.3 | YF04KAE | RFON130L4ADA | ED-5 | 16,997 | 446 |
| RE | | 1.5 | YF05KAE | RFON160L4ADA | ED-5 | 17,761 | 446 |
| RATU | FM2 | 2.3 | YF07KAE | RFON230L4ADA | ED-7 | 18,844 | 446 |
| MPEF | | 2.5 | YF06KSE | RFON250L4ADA | ED-7 | 20,350 | 446 |
| LOW TEMPERATURE | FM3 | 3.0 | YF07KSE | RFON300L4ADA | ED-7 | 21,078 | 585 |
| 0 | | 3.5 | YF09KSE | RFON350L4ADA | ED-10 | 23,288 | 585 |
| | E).(1 | 4.0 | YF10KAE | RFON400L4ADA | ED-10 | 26,241 | 607 |
| | FM4 | 5.0 | YF13KAE | RFON500L4ADA | ED-10 | 27,115 | 628 |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

[·] An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

NON-FLOODED // SCROLL COMPRESSOR // CONFIGURABLE BASE MODELS Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

| | Cabinet Size | Nom. | Compressor | | 208-230/1/60 | | 4 Yr Compressor |
|-----------------------------|-----------------|------|------------|--------------|----------------------------------|-------------------|---|
| | | H.P. | Model No. | Model No. | Standard Defrost Provision(s) | List Price (\$US) | Protection Plan (Net Price Adder \$US) |
| Δ | | 0.5 | YB06KAE | RBON060M4ADA | Air Defrost Timer | 13,430 | 446 |
| MED TEMP | | 0.75 | YB07KAE | RBON080M4ADA | Air Defrost Timer | 14,221 | 446 |
| Σ | FM1 | 1.0 | YB08KAE | RBON100M4ADA | Air Defrost Timer | 14,493 | 446 |
| • • • • • • • | | 1.0 | YS09KAE | RBON130E4ADA | Air Defrost Timer | 15,303 | 446 |
| Ш | F140 | 1.25 | YS11KAE | RBON150E4ADA | Air Defrost Timer | 15,421 | 446 |
| TUR | FM2 | 1.5 | YS12KAE | RBON180E4ADA | Air Defrost Timer | 16,786 | 446 |
| EXTENDED MEDIUM TEMPERATURE | | 2.0 | YS14KAE | RBON200E4ADA | Air Defrost Timer | 17,086 | 446 |
| TEM | FM3 | 2.5 | YS16KAE | RBON250E4ADA | Air Defrost Timer | 17,416 | 446 |
| ΜÜ | FM4 | 2.8 | YS19KAE | RBON280E4ADA | Air Defrost Timer | 18,491 | 585 |
| ME | | 3.0 | YS21KAE | RBON300E4ADA | Air Defrost Timer | 18,841 | 585 |
| IDED | | 3.5 | YS24KAE | RBON350E4ADA | Air Defrost Timer | 20,639 | 585 |
| XTEN | | 4.0 | YS26KAE | RBON400E4ADA | Air Defrost Timer | 20,957 | 607 |
| ω | | 4.5 | YS30KAE | RBON450E4ADA | Air Defrost Timer | 22,721 | 607 |
| | | 5.0 | YS33KAE | RBON500E4ADA | Air Defrost Timer | 23,870 | 628 |
| • • • • • • • | | 1.0 | YF03KAE | RBON100L4ADA | ED-5 | 15,408 | 446 |
| | FM1 | 1.3 | YF04KAE | RBON130L4ADA | ED-5 | 16,175 | 446 |
| R E | | 1.5 | YF05KAE | RBON160L4ADA | ED-5 | 16,979 | 446 |
| SATU | FM2 | 2.3 | YF07KAE | RBON230L4ADA | ED-7 | 18,107 | 446 |
| MPE | | 2.5 | YF06KSE | RBON250L4ADA | ED-7 | 19,644 | 446 |
| LOW TEMPERATURE | FM3 | 3.0 | YF07KSE | RBON300L4ADA | ED-7 | 20,843 | 585 |
| Ó | | 3.5 | YF09KSE | RBON350L4ADA | ED-10 | 22,513 | 585 |
| | EM4 | 4.0 | YF10KAE | RBON400L4ADA | ED-10 | 25,533 | 607 |
| | FM4 | 5.0 | YF13KAE | RBON500L4ADA | ED-10 | 26,289 | 628 |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

FLOODED // SCROLL COMPRESSOR // NO DEFROST PROVISIONS PRE-CONFIGURED MODELS Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and No Defrost Provisions

| | Cabinet | Nom. | Compressor | 208-230 | 0/1/60 | 4 Yr Compressor Protection Plan |
|-----------------------------|---------|-----------|------------|----------------|-------------------|------------------------------------|
| | Size | Size H.P. | Model No. | Model No. | List Price (\$US) | (Net Price Adder \$US) |
| Σ | | 0.5 | YB06KAE | RFON060M4ADANT | 13,231 | 446 |
| MED TEMP | | 0.75 | YB07KAE | RFON080M4ADANT | 14,023 | 446 |
| Σ | FM1 | 1 | YB08KAE | RFON100M4ADANT | 14,301 | 446 |
| | | 1 | YS09KAE | RFON130E4ADANT | 15,195 | 446 |
| ш | FM2 | 1.25 | YS11KAE | RFON150E4ADANT | 15,303 | 446 |
| \TUR | FI¥IZ | 1.5 | YS12KAE | RFON180E4ADANT | 17,024 | 446 |
| EXTENDED MEDIUM TEMPERATURE | EMO | 2 | YS14KAE | RFON200E4ADANT | 17,041 | 446 |
| TEM | FM3 | 2.5 | YS16KAE | RFON250E4ADANT | 17,384 | 446 |
| MOIC | FM4 | 2.8 | YS19KAE | RFON280E4ADANT | 18,403 | 585 |
| ME | | 3 | YS21KAE | RFON300E4ADANT | 18,667 | 585 |
| IDED | | 3.5 | YS24KAE | RFON350E4ADANT | 20,594 | 585 |
| XTEN | | 4 | YS26KAE | RFON400E4ADANT | 20,889 | 607 |
| ш | | 4.5 | YS30KAE | RFON450E4ADANT | 22,613 | 607 |
| | | 5 | YS33KAE | RFON500E4ADANT | 23,700 | 628 |
| | | 1 | YF03KAE | RFON100L4ADANT | 15,204 | 446 |
| | FM1 | 1.3 | YF04KAE | RFON130L4ADANT | 15,911 | 446 |
| IRE | | 1.5 | YF05KAE | RFON160L4ADANT | 16,675 | 446 |
| SATL | FM2 | 2.3 | YF07KAE | RFON230L4ADANT | 17,758 | 446 |
| LOW TEMPERATURE | | 2.5 | YF06KSE | RFON250L4ADANT | 19,264 | 446 |
| W TE | FM3 | 3 | YF07KSE | RFON300L4ADANT | 19,992 | 585 |
| Ó | | 3.5 | YF09KSE | RFON350L4ADANT | 22,202 | 585 |
| | EN44 | 4 | YF10KAE | RFON400L4ADANT | 25,155 | 607 |
| | FM4 | 5 | YF13KAE | RFON500L4ADANT | 26,029 | 628 |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

FLOODED // SCROLL COMPRESSOR // CONFIGURABLE BASE MODELS Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

| | Cabinet | Nom. | Compressor | | 208-230/3/60 | | 4 Yr Compressor |
|-----------------------------|---------|------|------------|--------------|----------------------------------|-------------------|---|
| | Size | H.P. | Model No. | Model No. | Standard Defrost Provision(s) | List Price (\$US) | Protection Plan (Net Price Adder \$US) |
| Δ | | 0.5 | YB06KAE | RFON060M4AEA | Air Defrost Timer | 14,301 | 446 |
| MED TEMP | | 0.75 | YB07KAE | RFON080M4AEA | Air Defrost Timer | 15,317 | 446 |
| Σ | FM1 | 1.0 | YB08KAE | RFON100M4AEA | Air Defrost Timer | 15,499 | 446 |
| | | 1.0 | YS09KAE | RFON130E4AEA | Air Defrost Timer | 16,049 | 446 |
| | EMO. | 1.25 | YS11KAE | RFON150E4AEA | Air Defrost Timer | 16,314 | 446 |
| JRE | FM2 | 1.5 | YS12KAE | RFON180E4AEA | Air Defrost Timer | 17,630 | 446 |
| EXTENDED MEDIUM TEMPERATURE | EMO | 2.0 | YS14KAE | RFON200E4AEA | Air Defrost Timer | 18,067 | 446 |
| MPE | FM3 | 2.5 | YS16KAE | RFON250E4AEA | Air Defrost Timer | 18,521 | 446 |
| Μ | FM4 | 2.8 | YS19KAE | RFON280E4AEA | Air Defrost Timer | 19,599 | 585 |
| EDIL | | 3.0 | YS21KAE | RFON300E4AEA | Air Defrost Timer | 19,909 | 585 |
| Σ | | 3.5 | YS24KAE | RFON350E4AEA | Air Defrost Timer | 21,833 | 585 |
| ENDI | | 4.0 | YS26KAE | RFON400E4AEA | Air Defrost Timer | 22,441 | 607 |
| EXT | | 4.5 | YS30KAE | RFON450E4AEA | Air Defrost Timer | 23,048 | 607 |
| | | 5.0 | YS33KAE | RFON500E4AEA | Air Defrost Timer | 24,876 | 628 |
| | | 6.0 | YS40KAE | RFON600E4AEA | Air Defrost Timer | 27,601 | 628 |
| | | 1.0 | YF03KAE | RFON100L4AEA | ED-5 | 16,506 | 446 |
| | FM1 | 1.3 | YF04KAE | RFON130L4AEA | ED-5 | 17,227 | 446 |
| | | 1.5 | YF05KAE | RFON160L4AEA | ED-5 | 18,000 | 446 |
| TEMPERATURE | FM2 | 2.3 | YF07KAE | RFON230L4AEA | ED-5 | 19,102 | 446 |
| PERA | | 2.5 | YF06KSE | RFON250L4AEA | ED-6 | 20,714 | 446 |
| TEM | FM3 | 3.0 | YF07KSE | RFON300L4AEA | ED-6 | 21,469 | 585 |
| MO | | 3.5 | YF09KSE | RFON350L4AEA | ED-7 | 23,553 | 585 |
| _ | | 4.0 | YF10KAE | RFON400L4AEA | ED-7 | 26,504 | 607 |
| | FM4 | 5.0 | YF13KAE | RFON500L4AEA | ED-11 | 27,262 | 628 |
| | | 6.0 | YF15KAE | RFON600L4AEA | ED-11 | 28,845 | 628 |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

[·] An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

NON-FLOODED // SCROLL COMPRESSOR // CONFIGURABLE BASE MODELS Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

| | Cabinet Size | Nom. | Compressor | | 208-230/3/60 | | 4 Yr Compressor |
|-----------------------------|-----------------|------|------------|--------------|----------------------------------|-------------------|---|
| | | H.P. | Model No. | Model No. | Standard Defrost Provision(s) | List Price (\$US) | Protection Plan (Net Price Adder \$US) |
| Δ | | 0.5 | YB06KAE | RBON060M4AEA | Air Defrost Timer | 13,591 | 446 |
| MED TEMP | | 0.75 | YB07KAE | RBON080M4AEA | Air Defrost Timer | 14,613 | 446 |
| Σ | FM1 | 1.0 | YB08KAE | RBON100M4AEA | Air Defrost Timer | 14,795 | 446 |
| | | 1.0 | YS09KAE | RBON130E4AEA | Air Defrost Timer | 15,324 | 446 |
| | E1 10 | 1.25 | YS11KAE | RBON150E4AEA | Air Defrost Timer | 15,581 | 446 |
| JRE | FM2 | 1.5 | YS12KAE | RBON180E4AEA | Air Defrost Timer | 16,732 | 446 |
| EXTENDED MEDIUM TEMPERATURE | EN40 | 2.0 | YS14KAE | RBON200E4AEA | Air Defrost Timer | 17,204 | 446 |
| MPE | FM3 | 2.5 | YS16KAE | RBON250E4AEA | Air Defrost Timer | 17,675 | 446 |
| Μ | FM4 | 2.8 | YS19KAE | RBON280E4AEA | Air Defrost Timer | 18,786 | 585 |
| EDIU | | 3.0 | YS21KAE | RBON300E4AEA | Air Defrost Timer | 19,159 | 585 |
| Μ | | 3.5 | YS24KAE | RBON350E4AEA | Air Defrost Timer | 20,983 | 585 |
| ENDE | | 4.0 | YS26KAE | RBON400E4AEA | Air Defrost Timer | 21,606 | 607 |
| EXT | | 4.5 | YS30KAE | RBON450E4AEA | Air Defrost Timer | 22,227 | 607 |
| | | 5.0 | YS33KAE | RBON500E4AEA | Air Defrost Timer | 24,147 | 628 |
| | | 6.0 | YS40KAE | RBON600E4AEA | Air Defrost Timer | 26,649 | 628 |
| | | 1.0 | YF03KAE | RBON100L4AEA | ED-5 | 15,414 | 446 |
| | FM1 | 1.3 | YF04KAE | RBON130L4AEA | ED-5 | 16,257 | 446 |
| | | 1.5 | YF05KAE | RBON160L4AEA | ED-5 | 17,120 | 446 |
| TURE | FM2 | 2.3 | YF07KAE | RBON230L4AEA | ED-5 | 18,354 | 446 |
| ERA- | | 2.5 | YF06KSE | RBON250L4AEA | ED-6 | 20,012 | 446 |
| TEMPERATURE | FM3 | 3.0 | YF07KSE | RBON300L4AEA | ED-6 | 20,765 | 585 |
| LOW | | 3.5 | YF09KSE | RBON350L4AEA | ED-7 | 22,846 | 585 |
| <u>ت</u> | | 4.0 | YF10KAE | RBON400L4AEA | ED-7 | 25,800 | 607 |
| | FM4 | 5.0 | YF13KAE | RBON500L4AEA | ED-11 | 26,557 | 628 |
| | | 6.0 | YF15KAE | RBON600L4AEA | ED-11 | 28,141 | 628 |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

FLOODED // SCROLL COMPRESSOR // NO DEFROST PROVISIONS PRE-CONFIGURED MODELS

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and No Defrost Provisions

| | Cabinet | Nom. | Compressor | 208-230 | 208-230/3/60 | | |
|-----------------------------|---------|------|------------|----------------|-------------------|---|--|
| | Size | H.P. | Model No. | Model No. | List Price (\$US) | Protection Plan (Net Price Adder \$US) | |
| Δ | \ | 0.5 | YB06KAE | RFON060M4AEANT | 13,399 | 446 | |
| MED TEMP | EN 41 | 0.75 | YB07KAE | RFON080M4AEANT | 14,415 | 446 | |
| Σ | FM1 | 1.0 | YB08KAE | RFON100M4AEANT | 14,597 | 446 | |
| | | 1.0 | YS09KAE | RFON130E4AEANT | 15,147 | 446 | |
| | EMO | 1.25 | YS11KAE | RFON150E4AEANT | 15,412 | 446 | |
| JRE | FM2 | 1.5 | YS12KAE | RFON180E4AEANT | 16,728 | 446 | |
| RATI | FM3 | 2.0 | YS14KAE | RFON200E4AEANT | 17,165 | 446 | |
| EXTENDED MEDIUM TEMPERATURE | FIMI3 | 2.5 | YS16KAE | RFON250E4AEANT | 17,619 | 446 | |
| Σ | | 2.8 | YS19KAE | RFON280E4AEANT | 18,697 | 585 | |
| EDIL | | 3.0 | YS21KAE | RFON300E4AEANT | 19,007 | 585 | |
| EDM | | 3.5 | YS24KAE | RFON350E4AEANT | 20,931 | 585 | |
| END | FM4 | 4.0 | YS26KAE | RFON400E4AEANT | 21,539 | 607 | |
| EXT | | 4.5 | YS30KAE | RFON450E4AEANT | 22,146 | 607 | |
| | | 5.0 | YS33KAE | RFON500E4AEANT | 23,974 | 628 | |
| | | 6.0 | YS40KAE | RFON600E4AEANT | 26,699 | 628 | |
| | | 1.0 | YF03KAE | RFON100L4AEANT | 15,420 | 446 | |
| | FM1 | 1.3 | YF04KAE | RFON130L4AEANT | 16,141 | 446 | |
| | | 1.5 | YF05KAE | RFON160L4AEANT | 16,914 | 446 | |
| TURE | FM2 | 2.3 | YF07KAE | RFON230L4AEANT | 18,016 | 446 | |
| PERA | | 2.5 | YF06KSE | RFON250L4AEANT | 19,628 | 446 | |
| TEMI | FM3 | 3.0 | YF07KSE | RFON300L4AEANT | 20,383 | 585 | |
| LOW TEMPERATURE | | 3.5 | YF09KSE | RFON350L4AEANT | 22,467 | 585 | |
| _ | | 4.0 | YF10KAE | RFON400L4AEANT | 25,418 | 607 | |
| | FM4 | 5.0 | YF13KAE | RFON500L4AEANT | 26,176 | 628 | |
| | | 6.0 | YF15KAE | RFON600L4AEANT | 27,759 | 628 | |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

FLOODED - SCROLL COMPRESSOR // CONFIGURABLE BASE MODELS

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

| | Cabinet | Nom. | Compressor | | 460/3/60 | | 4 Yr Compressor |
|-----------------------------|---------|------|------------|--------------|----------------------------------|-------------------|---|
| | Size | : : | | Model No. | Standard Defrost Provision(s) | List Price (\$US) | Protection Plan (Net Price Adder \$US) |
| | FM1 | 1.0 | YS09KAE | RFON130E4AGA | Air Defrost Timer | 17,664 | 446 |
| | EN 40 | 1.25 | YS11KAE | RFON150E4AGA | Air Defrost Timer | 18,095 | 446 |
| JRE | FM2 | 1.5 | YS12KAE | RFON180E4AGA | Air Defrost Timer | 18,964 | 446 |
| EXTENDED MEDIUM TEMPERATURE | EM2 | 2.0 | YS14KAE | RFON200E4AGA | Air Defrost Timer | 19,179 | 446 |
| MPE | FM3 | 2.5 | YS16KAE | RFON250E4AGA | Air Defrost Timer | 19,450 | 446 |
| Σ | FM4 | 2.8 | YS19KAE | RFON280E4AGA | Air Defrost Timer | 20,498 | 585 |
| EDIU | | 3.0 | YS21KAE | RFON300E4AGA | Air Defrost Timer | 20,743 | 585 |
| Σ | | 3.5 | YS24KAE | RFON350E4AGA | Air Defrost Timer | 22,609 | 585 |
| ENDI | | 4.0 | YS26KAE | RFON400E4AGA | Air Defrost Timer | 23,499 | 607 |
| EXT | | 4.5 | YS30KAE | RFON450E4AGA | Air Defrost Timer | 25,369 | 607 |
| | | 5.0 | YS33KAE | RFON500E4AGA | Air Defrost Timer | 25,644 | 628 |
| | | 6.0 | YS40KAE | RFON600E4AGA | Air Defrost Timer | 28,380 | 628 |
| | FM2 | 2.3 | YF07KAE | RFON230L4AGA | ED-17 | 20,719 | 446 |
| JRE | | 2.5 | YF06KSE | RFON250L4AGA | ED-17 | 22,335 | 446 |
| RATL | FM3 | 3.0 | YF07KSE | RFON300L4AGA | ED-17 | 22,717 | 585 |
| MPE | | 3.5 | YF09KSE | RFON350L4AGA | ED-17 | 24,325 | 585 |
| LOW TEMPERATURE | | 4.0 | YF10KAE | RFON400L4AGA | ED-17 | 26,877 | 607 |
| Ó | FM4 | 5.0 | YF13KAE | RFON500L4AGA | ED-17 | 27,712 | 628 |
| | | 6.0 | YF15KAE | RFON600L4AGA | ED-17 | 29,309 | 628 |

[•] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

[•] An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

NON-FLOODED // SCROLL COMPRESSOR // CONFIGURABLE BASE MODELS Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

| | Cabinet Size | Nom. | Compressor | | 460/3/60 | | 4 Yr Compressor |
|--------------------|-----------------|------|------------|--------------|----------------------------------|-------------------|---|
| | | H.P. | Model No. | Model No. | Standard Defrost Provision(s) | List Price (\$US) | Protection Plan (Net Price Adder \$US) |
| | EMO | 1.25 | YS11KAE | RBON150E4AGA | Air Defrost Timer | 17,362 | 446 |
| ш | FM2 | 1.5 | YS12KAE | RBON180E4AGA | Air Defrost Timer | 18,152 | 446 |
| TUR | EN40 | 2.0 | YS14KAE | RBON200E4AGA | Air Defrost Timer | 18,366 | 446 |
| MEDIUM TEMPERATURE | FM3 | 2.5 | YS16KAE | RBON250E4AGA | Air Defrost Timer | 18,638 | 446 |
| TEM | | 2.8 | YS19KAE | RBON280E4AGA | Air Defrost Timer | 19,723 | 585 |
| MOIC | FM4 | 3.0 | YS21KAE | RBON300E4AGA | Air Defrost Timer | 20,037 | 585 |
| | | 3.5 | YS24KAE | RBON350E4AGA | Air Defrost Timer | 21,789 | 585 |
| IDED | | 4.0 | YS26KAE | RBON400E4AGA | Air Defrost Timer | 22,741 | 607 |
| EXTENDED | | 4.5 | YS30KAE | RBON450E4AGA | Air Defrost Timer | 24,368 | 607 |
| Ш | | 5.0 | YS33KAE | RBON500E4AGA | Air Defrost Timer | 24,865 | 628 |
| | | 6.0 | YS40KAE | RBON600E4AGA | Air Defrost Timer | 27,558 | 628 |
| | FM2 | 2.3 | YF07KAE | RBON230L4AGA | ED-17 | 19,562 | 446 |
| J. | | 2.5 | YF06KSE | RBON250L4AGA | ED-17 | 21,218 | 446 |
| RATL | FM3 | 3.0 | YF07KSE | RBON300L4AGA | ED-17 | 21,911 | 585 |
| MPE | | 3.5 | YF09KSE | RBON350L4AGA | ED-17 | 23,621 | 585 |
| LOW TEMPERATURE | | 4.0 | YF10KAE | RBON400L4AGA | ED-17 | 26,173 | 607 |
| Ó | FM4 | 5.0 | YF13KAE | RBON500L4AGA | ED-17 | 27,005 | 628 |
| | | 6.0 | YF15KAE | RBON600L4AGA | ED-17 | 28,603 | 628 |

[·] Factory Mounted Options are found on page 39 & Shipped-Loose Accessories are found on page 40.

An Electric Defrost Kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature models are used for low temperature applications.

FACTORY INSTALLED OPTIONS // GENERAL

39

| o 5 | | List Price Adder (\$US) | | |
|---|--------------|-------------------------|----------|--|
| Option Description | Cabinet Size | Medium Temp | Low Temp | |
| Crankcase Heater | ALL | STAND | ARD | |
| Fixed High/Adjustable Low Pressure Control | ALL | STAND | ARD | |
| Adjustable High/Adjustable Low Pressure Control | ALL | 633 | 3 | |
| Adjustable Head Pressure Control Valve | FM1-FM3 | 565 |) | |
| Liquid Line With Components: Sealed Filter | ALL | STAND | ARD | |
| Liquid Line Without Components Dine Only | FM1 | (483 | 3) | |
| Liquid Line Without Components: Pipe Only | FM2 - FM4 | (573 | 3) | |
| Liquid Line with Premium Components: Replaceable Core Filter/ Drier | FM4 | 933 | 3 | |
| Suction Line Components: Sealed Filter | FM1 | 605 | 5 | |
| Suction Line Components: Sedied Filter | FM2 - FM4 | 721 | | |
| Suction Line Components: Replaceable Core Filter | FM4 | 2,122 | | |
| Suction Line Accumulator | FM1 | 934 | | |
| Suction Line Accumulator | FM2 - FM4 | 1,441 | | |
| High Ambient Components: TREV, dual pressure control, and insulated suction line components and piping For units at ambient conditions above 105°F, medium temperature models also require suction accumulator to be ordered when selecting this option. | FM1 - FM4 | 2,286 | 1,687 | |
| Oil Separator | FM4 | 2,29 | 2 | |
| | FM1 | 922 | 2 | |
| | FM2 | 2,09 | 21 | |
| Over-Sized Receiver | FM3 | 2,20 | 5 | |
| | FM4 | 2,262 | | |
| Compressor Pump-down Switch | ALL | 597 | 7 | |
| Heated & Insulated Receiver (temperature controlled with low pressure bypass timer) | ALL | 1,26 | 4 | |
| Phase Loss Monitor^ | ALL | 2,072 | | |
| Copper Fins Or Electro Fin Coated Coil | ALL | CONTACT F | ACTORY | |
| Thru The Deer New Fused Discourse Coult-b | FM1 - FM2 | 888 | | |
| Thru The Door - Non - Fused - Disconnect Switch | FM3 - FM4 | 1,181 | | |
| External Fused Disconnect (Mounted) | FM1 - FM2 | 999 | > | |
| External rasea disconnect (Mounted) | FM3 - FM4 | 1,84 | 1 | |

40 AIR-COOLED CONDENSING UNITS

NEXT-GEN MINI-CON • 1/2 TO 6 HP

FACTORY INSTALLED OPTIONS // GENERAL

| Option Description | Cabinet Size | List Price Adder (\$US) |
|---------------------------------------|--------------|-------------------------|
| | FM1 | 1,965 |
| V : II C IFOM : 0 C : II | FM2 | 2,674 |
| Variable Speed EC Motors & Controller | FM3 | 2,984 |
| | FM4 | 2,171 |

FACTORY INSTALLED OPTIONS // COMMON DEFROST COMPONENTS

| | Cabinet | List Price Adder (\$US) | | |
|---|---------|-------------------------|----------|--|
| Option Description | Size | Medium Temp | Low Temp | |
| Standard (Electronic) Air Defrost Timer* | ALL | STANDARD | - | |
| Remove Standard Air Defrost Timer | ALL | (902) | - | |
| Standard Defrost Kit (ED5 - ED11) | ALL | - | STANDARD | |
| Substitute Standard Air Defrost Timer For Standard Defrost Kit (ED5-ED11) | ALL | 184 | - | |
| Remove Standard Defrost Kit | ALL | - | (1,086) | |

Negative numbers (in parentheses) represent the price to be deducted from base price if a standard feature is removed.

Defrost Kit Descriptions & Additional Defrost Kit Options available on 41.

SHIPPED-LOOSE ACCESSORIES

| Option Description | Cabinet Size | List Price Adder (\$US) |
|-------------------------------------|--------------|-------------------------|
| Crankcase Pressure Regulating Valve | ALL | CONTACT FACTORY |
| External Fused Disconnect | FM4 | 1,688 |
| Two-Tiered Stacking Rack | ALL | CONTACT FACTORY |
| | FM1 | 691 |
| Con /IIIIC only | FM2 | 763 |
| Snow / Hail Guards | FM3 | 827 |
| | FM4 | 1,012 |
| Snow Legs | ALL | 460 |

[^] Only available on units that are 3 Phase.

^{*} Standard Electronic Air Defrost Timer can be substituted with Mechanical Air Defrost Timer at no charge.

41 AIR-COOLED CONDENSING UNITS

NEXT-GEN MINI-CON • 1/2 TO 6 HP

| ELECTRIC DEFROST KITS - DEFROST KIT NOMENCLATURE | | | | | | | | |
|--|-------------------------|------------------------|---|--|------------------------|--|--|--|
| ED | 1 | 2 | - | M | 48 | | | |
| Kit Designator | Unit Coolers per System | Defrost Kit Identifier | | Defrost Heater Phase | Defrost Heater Voltag | | | |
| | 1, 2, or 3 | | | A - 1 Phase Fan Motor(s), 1 Phase Heater(s) B - 1 Phase Fan Motor(s), 3 Phase Heaters(s) C - 3 Phase Fan Motor(s), 3 Phase Heater(s) | 2 - 208-230 4 - 460 | | | |

ELECTRIC DEFROST KITS - DESCRIPTIONS

The MiniCon Electric Defrost System provides unique features that other defrost systems lack. These energy saving features are as follows:

- The auxiliary switch on 3 phase systems and block-out relays on 1 phase systems prevents the defrost heaters from energizing when the compressor is in operation. This features holds the maximum amp draw to the largest single load that the system will draw, and therefore reduces the electrical service requirement to the condensing unit.
- On multiple evaporator systems, individual defrost contactors are used in conjunction with sequencing relays* to allow each evaporator to terminate defrost independently. This efficient method of defrost saves electricity, and reduces the potential of overheating and steaming the evaporators. In addition, the amount of heat added to the room is kept to a minimum, reducing the run time of the condensing unit.

ELECTRIC DEFROST KITS - DEFINITIONS

- **Timer** Initiates the defrost cycle. Also used as override protection for defrost termination.
- Auxiliary Switch Mounted on the compressor contactor, it prevents the defrost contactor from operating whenever the compressor is energized.
- **Block-out Relay** Serves the same function as auxiliary switch, except used when defrost contactor is not required (single phase only).
- Fan Contactor Used with 460 V motors or when 230 V motors are wired for 3 phase power.
- **Defrost Contactor** Carries amperage load for heaters. Contactor selection is based on the maximum resistive load rating of the contactor.
- **Relays** Provides interconnection of multiple unit coolers on a single system so that each unit cooler is allowed to individually terminate defrost on temperature.

42 AIR-COOLED CONDENSING UNITS

NEXT-GEN MINI-CON • 1/2 TO 6 HP

ELECTRIC DEFROST KITS // KIT NUMBERS

| Kit No. | Timer | Auxiliary Relays | Block-out Relays | † Defrost Heater Contactor (1) | ‡ Fan Contactor | Sequencing Relay |
|---------|-------|---------------------|---------------------|-----------------------------------|--------------------|---------------------|
| ED-5 | 1 | - / | 1-15A | - | - | - |
| ED-6 | 1 | -/ | 1-20A | - | - | - |
| ED-7 | 1 | / - | 1-25A | - | - | - |
| ED-10 | 1 | / - | 1-30A | - | - | - |
| ED-20 | 1 | / - | 1-30A | - | - | 2 |
| ED-210 | 1 | _ | 1-30A | - | - | - |
| ED-17 | 1 | 1 | - | 1-15A | 1-25A | - |
| ED-11 | 1 | 1 | - | 1-30A | - | - |
| ED-12 | 1 | 1 | - | 1-30A | 1-25A | - |
| ED-14 | 1 | 1 | - | 1-50A | 1-25A | - |
| ED-211 | 1 | 1 | - | 1-30A | - | - |
| ED-213 | 1 | 1 | - | 1-50A | - | - |
| ED-21 | 1 | 1 | - | 2-15A | - | 2 |
| ED-22 | 1 | 1 | - | 2-15A | 1-25A | 2 |
| ED-23 | 1 | 1 | - | 2-25A | - | 2 |
| ED-24 | 1 | 1 | - | 2-25A | 1-25A | 2 |

POWER CONNECTION

Factory installed components on the condensing unit to allow for powering EcoNet enabled evaporators.

| Max Amps | List Price (\$US) |
|----------|-------------------|
| 30A | 650 |
| 60A | 851 |

^{*} Except for ED-210, ED-211, ED-213

 $[\]ensuremath{\uparrow}$ Heater contactor amperage is based on its resistive rating.

[‡] Fan motor contactor amperage is based on its inductive rating.

ELECTRIC DEFROST KITS // PRICING

| | | | List Price | | | |
|-----------------------------|---------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------|
| Quantity of Unit Coolers | Description | | | 230 V | 460 V | Adder (Only |
| Per System | | 1 PH. FANS 1 PH. HTRS | 1 PH. FANS 3 PH. HTRS | 3 PH. FANS 3 PH. HTRS | 3 PH. FANS 3 PH. HTRS | Available Mounted) |
| | DEFROST KITS WHEN THE EVA | PORATOR FAN M | OTORS ARE WIR | RED FOR 230/1 | | |
| | Up to 15 Amps Heater (w/ relay) | ED5-A2 | - | - | - | 1,087 |
| | 20 Amps Heater (w/ relay) | ED6-A2 | - | - | - | 1,087 |
| 1 | 25 Amps Heater (w/ relay) | ED7-A2 | - | - | - | 1,087 |
| | Up to 30 Amps Heater (w/ relay) | ED10-A2 | - | - | - | 1,087 |
| | 30 Amps - Heater (w/ contactors) | - | ED11-B2 | - | - | 1,087 |
| | Up to 30 Amps Heater (w/ relay) | ED210-A2 | - | - | - | 1,184 |
| | 30 Amps Heater | ED211-A2 | ED211-B2 | - | - | 1,184 |
| | 50 Amps Heater | ED213-A2 | ED213-B2 | - | - | 2,377 |
| 2 | Up to 15 Amps Heaters each (w/relays) | ED20-A2 | - | - | - | 3,392 |
| | 15 Amps Heaters each | ED21-A2 | ED21-B2 | - | - | 3,392 |
| | 25 Amps Heaters each (w/relays) | ED23-A2 | - | - | - | 3,487 |
| | 25 Amps Heaters each (w/contactors) | - - | ED23-B2 | - | - | 3,487 |
| | DEFROST KITS WHEN THE EVAPORATOR | FAN MOTORS A | RE WIRED FOR 2 | 30/3, 460/3, OF | R 460/1. | |
| | Up to 25 Amps Heater | ED17-A4 | - | - | - | 1,087 |
| 1 | 30 Amps Heater | ED12-A4 | ED12-BX | ED12-C2 | ED12-C4 | 2,476 |
| | 50 Amps Heater | <u>-</u> | ED14-BX | ED14-C2 | ED14-C4 | 2,898 |
| 2 | Up to 15 Amps Heaters per Unit Cooler | - - | ED22-BX | ED22-C2 | ED22-C4 | 4,166 |
| 2 | 25 Amps Heaters per Unit Cooler | <u> </u> | ED24-BX | ED24-C2 | ED24-C4 | 4,166 |



ALL-IN-ONE with available Leak Mitigation Package



втин

Medium Temp

Low Temp

4,790 - 15,830

3,790 - 15,130

MODEL NOMENCLATURE

| Н | Р | 0 | 100 | М | 4C | D | Α |
|-------|-------------------------------------|------------|------------|---|-------------|----------------------------------|---------|
| Brand | Product | Compressor | Horsepower | Temperature | Refrigerant | Voltage | Vintage |
| HTPG | Packaged Refrigeration System | O - Scroll | 100 = 1 HP | M - Medium L - Low D - Medium Electric Defrost | 4C - R454C | A - 115/1/60 D - 208-230/1/60 | |

PRE-CONFIGURATION CODE

LD

Pre-Configuration Code

LD - Leak Mitigation Package

STANDARD FEATURES

- ► EcoNet Enabled to maximize energy efficiency with less compressor runtime
- EcoNet optimizes defrost by using adaptive defrost or managing compressor runtime
- EcoNet improves product quality by reducing temperature fluctuation
- Factory pre-charged with R-454C
- One electrical wiring point with the ability to add a plug on select models
- Standard boil-out pan with an option to mount a drain line
- Lift-off panels & large electrical box

OPTIONS

- Roof Kit
- Hail Guard
- Power cords

MEDIUM TEMPERATURE // AIR DEFROST // R-454C

| Model with Leak Mitigation | List Price (\$US) | Compressor Type | Compressor HP | Voltage | Cabinet Size | Extended Compressor Warranty Net Price |
|-------------------------------|----------------------|--------------------|---------------|--------------|-----------------|---|
| HPO080M4CAALD | 25,909 | Scroll | 0.75 | 115/1/60 | Small | 446 |
| HPO100M4CAALD | 27,244 | Scroll | 1 | 115/1/60 | Small | 446 |
| HPO120M4CAALD | 32,084 | Scroll | 1.25 | 115/1/60 | Large | 446 |
| HPO080M4CDALD | 27,141 | Scroll | 0.75 | 208-230/1/60 | Small | 446 |
| HPO100M4CDALD | 29,619 | Scroll | 1 | 208-230/1/60 | Small | 446 |
| HPO120M4CDALD | 31,835 | Scroll | 1.25 | 208-230/1/60 | Large | 446 |
| HPO150M4CDALD | 35,997 | Scroll | 1.5 | 208-230/1/60 | Large | 446 |

MEDIUM TEMPERATURE // ELECTRIC DEFROST // R-454C

| Model with Leak Mitigation | List Price (\$US) | Compressor Type | Compressor HP | Voltage | Cabinet Size | Extended Compressor Warranty Net Price |
|-------------------------------|----------------------|--------------------|---------------|--------------|-----------------|---|
| HPO080D4CDALD | 27,553 | Scroll | 0.75 | 208-230/1/60 | Small | 446 |
| HPO100D4CDALD | 29,980 | Scroll | 1 | 208-230/1/60 | Small | 446 |
| HPO120D4CDALD | 33,552 | Scroll | 1.25 | 208-230/1/60 | Large | 446 |
| HPO150D4CDALD | 38,556 | Scroll | 1.5 | 208-230/1/60 | Large | 446 |

LOW TEMPERATURE // ELECTRIC DEFROST // R-454CA

| Model with Leak Mitigation | List Price (\$US) | Compressor Type | Compressor HP | Voltage | Cabinet Size | Extended Compressor Warranty Net Price |
|-------------------------------|----------------------|--------------------|---------------|--------------|-----------------|---|
| HPO150L4CDALD | 40,874 | Scroll | 1.5 | 208-230/1/60 | Small | 446 |
| HPO250L4CDALD | 44,847 | Scroll | 2.5 | 208-230/1/60 | Small | 446 |
| HPO300L4CDALD | 52,516 | Scroll | 3 | 208-230/1/60 | Large | 585 |
| HPO350L4CDALD | 61,079 | Scroll | 3.5 | 208-230/1/60 | Large | 585 |

ROOF KITS

| Part # | Cabinet Size | List Price (\$US) |
|----------|--------------|-------------------|
| 08537719 | Small | 2.070 |
| 08537720 | Large | 2,878 |

HAIL GUARDS

| Part # | Cabinet Size | List Price (\$US) |
|----------|--------------|-------------------|
| 08537721 | Small | 1 974 |
| 08537722 | Large | 1,974 |

POWER CORDS

| | Model | Part # | NEMA Receptacle | List Price (\$US) | |
|---------------------------|-------------|----------|-----------------|-------------------|--|
| MEDIUM TEMP AIR | HPO080M4CAA | 08538541 | 5-20R | 215 | |
| | HPO100M4CAA | - | - | - | |
| | HPO120M4CAA | - | - | - | |
| | HPO080M4CDA | 08238542 | 6-15R | 215 | |
| | HPO100M4CDA | 08238542 | 6-15R | | |
| | HPO120M4CDA | 08238542 | 6-15R | 215 | |
| | HPO150M4CDA | 08538543 | 6-20R | | |
| | | | | | |
| | HPO080D4CDA | 08238542 | 6-15R | | |
| MEDIUM TEMP | HPO100D4CDA | 08238542 | 6-15R | 215 | |
| ELECTRIC | HPO120D4CDA | 08238542 | 6-15R | 213 | |
| | HPO150D4CDA | 08538543 | 6-20R | | |
| | | | | | |
| LOW TEMP ELECTRIC | HPO150L4CDA | 08238542 | 6-15R | 215 | |
| | HPO250L4CDA | 08538543 | 6-20R | 215 | |
| | HPO300L4CDA | - | - | - | |
| | HPO350L4CDA | - | - | - | |

PRINCIPAL TERMS AND CONDITIONS OF SALE

- 1 Applicable Law and Terms of Sale: All orders shall be subject to the following terms and conditions notwithstanding any additional or contrary printed terms and conditions of Buyer. Such additional or contrary terms shall not bind Seller unless accepted in writing even though such terms do not materially alter the terms hereof. No oral statements, warranties, stipulations, representations or terms shall have any binding effect or be any part of the contract whatsoever.
- 2 Orders: All orders must be in writing and will be binding when our order acknowledgment is mailed. Orders are accepted subject to strikes, fires, accidents, and other causes beyond our reasonable control. Acceptance of your order is conditioned upon an agreement to hold us harmless by reason of delivery delays.
- 3 Prices: Subject to change without notice, and all quotations, unless otherwise specified, are binding only for immediate acceptance. Prices are based on material made to Seller's standard tolerances, unless otherwise specified.
- Freight: All products are shipped FOB Point of Shipment with full freight allowed on single orders with a net price value of \$10,000.00 or more, except surface coils and parts, within the continental USA (excluding Alaska and Hawaii). Shipments to destinations outside the continental USA, that meet freight allowance requirements, will incur charges for the additional transport beyond the USA border. Seller reserves the choice of transportation mode, carrier, and shipping point. If special routing (dedicated/contract haul, flatbed delivery, appointment to meet a crane, etc.) is required/requested for a purchase order of \$10,000.00 or greater, Buyer will be assessed a special delivery charge per truck. Charges of \$80 per hour resulting from excessive unloading time, beyond the allotted "free time" (two hours per stop on partial loads and/or full truck loads), as defined by the carrier, is subject to being passed on to the customer. The responsibility of the Seller shall cease upon delivery of product in good condition to a common carrier (TL, LTL, FLATBED, ETC. Since all goods are shipped at Buyer's risk, they should be examined carefully before signing delivery receipt. If common carrier tenders delivery of goods in damaged condition or if packages delivered do not correspond with the number called for on the freight bill, Buyer should insist on common carrier's agent (DRIVER) making notation of the condition of shortages or damage on delivery receipt. The Buyer should never refuse freight from the common carrier. Filing freight claims are under the responsibility of the Buyer, and this will enable them to secure prompt payment of claim for damaged or lost material. Sometimes damage or loss is not readily apparent, so it is suggested that Buyer thoroughly inspect each shipment as soon as it is received for concealed loss or damage. Refer to HTPG's 2019 Freight Policy for further information.
- 5 Taxes: Any sales, use, excise, or similar tax payable by Seller which is or may be imposed by any taxing authority upon manufacture, sale or delivery of goods covered by any order or any increase in rate of any such tax now in force, shall be added to the sales price; if not collected at the time of payment of sales price, Buyer will hold Seller harmless.
- 6 Limited Warranty: Seller warrants against defect in materials and workmanship in products which it manufactures for (1) year from date of installation or up to (18) eighteen months from the date of shipment, whichever event occurs first, when properly installed and operated under normal use. This guarantee does not include any labor or other charges made outside of the Seller's factory for replacement or repair of defective parts unless specifically stated in the body of the Sellers invoice. On parts not manufactured by Seller, such as motors, controls, valves and compressors we extend to the Buyer the same warranties made to us by the manufacturer. Sellers only liability under this warranty or otherwise shall be the repair or replacement (at Seller's option) of non-conforming goods or parts. Seller assumes no liability for incidental or consequential damages such as injury to person or property, or lost profits.
- 7 THIS GUARANTEE SUPERSEDES AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES BY LAW OR CUSTOM, EITHER EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED BY THIS ENUMERATION, ANY GUARANTEE AS TO QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE, EXCEPT AS SET FORTH ABOVE. NO PERSON, AGENT, OR DEALER IS AUTHORIZED TO GIVE ANY WARRANTIES ON BEHALF OF SELLER NOR TO ASSUME FOR SELLER ANY OTHER LIABILITY IN CONNECTION WITH ANY OF THE SELLER'S PRODUCTS.
- 8 Delivery: Seller shall not be liable for any delays in or failure of delivery due to acts of God or public authority, labor disputes, accidents, fires, floods, extreme weather conditions, failure of and delays by carriers, shortages of material, delays of a supplier, and any other cause beyond Seller's control. In no event shall Seller be liable for consequential or special damages arising out of a delay in or failure of delivery. Failure to meet estimated ship dates will not be considered sufficient cause of cancellation of orders.
- 9 Cancellations and Returned Goods: Permission to return any part or product must be obtained from Seller and may be subject to a restocking charge. Credits for new material accepted for return will be at the original sales price or current market price, whichever is lower, less handling and restocking charges. Buyer must prepay all transportation charges. Any costs for putting material in condition for resale will be charged to the Buyer. Shipment of material returned without factory authorization or not properly tagged with a Return Material Authorization Number or not freight prepaid cannot be received by Seller. Obsolete products or material made to special order are not returnable.
- 10 Catalog Materials and Drawings: Seller is not responsible for typographical errors or other errors of omission in Seller's catalogs or drawings.
- 11 Late Charge Provision: Buyer agrees to pay a late charge of 1-1/2% per month (18% per year) for any invoice or bill not paid within (30) thirty days of the date of the billing invoice.
- 12 Choices of law, Disputes: This agreement and the performance of the parties hereunder shall be construed in accordance with and governed by the laws of the State of Georgia and shall be deemed made in the state. Buyer irrevocably consents to the exclusive jurisdiction of the courts of Fulton County, on all matters arising out of or relating to this sale and Buyer further irrevocably consents to service of process by certified mail, return receipt requested, at Buyers address set forth in the order acknowledgment.





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