

## Copeland™ ZX Outdoor Refrigeration Units for A2L Refrigerants

Copeland ZX outdoor refrigeration units combine efficient Copeland scroll technology with compact cabinet design and noise attenuation features, that enable legal compliance for applications with A2L refrigerants. The new range is specifically designed to cater for a wide range of refrigeration applications which request a low GWP and future-proof solution.

Copeland ZX units feature the most complete and unique equipment. The modified design, the innovative control logic and a selection of dedicated components enable legal compliance for applications with A2L refrigerants. The advanced electronic controller enables precise parameter control and displays the system status. Electronic protection functions, oil separator and suction accumulator guarantee optimum system safety. The range is completed by models with stepless digital capacity modulation which are well established in applications with multiple evaporators and precise temperature control.

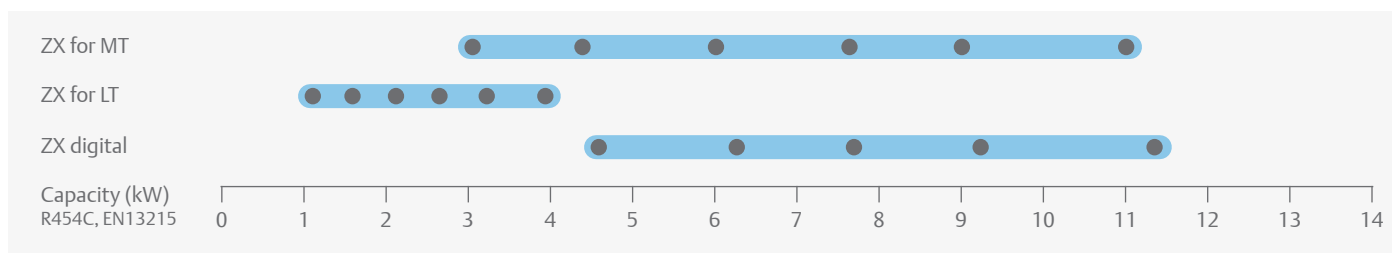
This series of Copeland outdoor refrigeration units is specifically designed to cater for a wide range of refrigeration applications which request a low GWP and future-proof solution:

- Convenience stores
- Cold rooms
- Fast food chains and restaurants
- Beverage coolers



Copeland ZX outdoor refrigeration units for A2L refrigerants

## ZX Refrigeration Unit Line-up



## Features and Benefits

- Standard equipment: Copeland scroll compressor, crankcase heater, electronic controller, liquid receiver, service valves, filter drier & sight glass, external main power switch, fan speed control
- Oil separator (ZX digital) and suction accumulator (ZX digital & low temperature models)
- Multiple refrigerant approvals incl. R404A, R407A, R407F, R448A, R449A, R134a, R450A, R513A, R454A, R454C, R455A, R1234yf
- ZX digital models allow for 10% to 100% continuous capacity modulation
- Electronic unit controller with intelligent protection and diagnostics capabilities
- Energy and operation cost saving due to excellent energy efficiency
- Quiet operation due to new fans with improved sound level, Copeland scroll compressor, and fan speed control
- Space saving due to compact dimensions
- Easy and quick installation

## Technical Overview

| Models                                   | Displacement (m <sup>3</sup> /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  |
|--|----------------------------------|-----------------------|----------------|---------------------------|------------------------------|-----------------------------|-------------------------|-----------------|--------------------|-------------------------------|--------------------------|-----------------|
|  |                                  |                       |                |                           |                              |                             |                         |                 | 3 Ph *             | 3 Ph *                        | 3 Ph *                   | @10m - d(BA) ** |
| <b>Medium Temperature Models</b>         |                                  |                       |                |                           |                              |                             |                         |                 |                    |                               |                          |                 |
| ZXMY-020E                                | 5.8                              | 4.1                   | 1              | 121                       | 3/4                          | 1/2                         | 446/1035/840            | 73              | TFM                | 4.1                           | 26                       | 37              |
| ZXMY-030E                                | 8.0                              | 4.1                   | 1              | 121                       | 3/4                          | 1/2                         | 446/1035/840            | 80              | TFM                | 5.2                           | 32                       | 38              |
| ZXMY-040E                                | 11.4                             | 4.1                   | 1              | 121                       | 7/8                          | 1/2                         | 446/1035/840            | 86              | TFM                | 7.3                           | 50                       | 38              |
| ZXMY-050E                                | 14.3                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 112             | TFM                | 10.3                          | 64                       | 41              |
| ZXMY-060E                                | 16.7                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 114             | TFM                | 11.8                          | 74                       | 41              |
| ZXMY-075E                                | 21.4                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 116             | TFM                | 15.9                          | 102                      | 41              |
| <b>Digital Medium Temperature Models</b> |                                  |                       |                |                           |                              |                             |                         |                 |                    |                               |                          |                 |
| ZXDY-030E                                | 8.8                              | 4.1                   | 1              | 121                       | 3/4                          | 1/2                         | 446/1035/840            | 85              | TFM                | 7.3                           | 40                       | 39              |
| ZXDY-040E                                | 11.4                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 106             | TFM                | 10.0                          | 48                       | 42              |
| ZXDY-050E                                | 14.4                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 118             | TFM                | 11.3                          | 64                       | 42              |
| ZXDY-060E                                | 17.1                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 120             | TFM                | 12.0                          | 74                       | 43              |
| ZXDY-075E                                | 21.4                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 122             | TFM                | 15.9                          | 102                      | 43              |
| <b>Low Temperature Models</b>            |                                  |                       |                |                           |                              |                             |                         |                 |                    |                               |                          |                 |
| ZXLY-020E                                | 5.9                              | 3.9                   | 1              | 121                       | 3/4                          | 1/2                         | 446/1035/840            | 78              | TFD                | 5.0                           | 24                       | 37              |
| ZXLY-030E                                | 8.0                              | 3.9                   | 1              | 121                       | 3/4                          | 1/2                         | 446/1035/840            | 81              | TFD                | 6.0                           | 36                       | 37              |
| ZXLY-040E                                | 11.8                             | 3.9                   | 1              | 121                       | 7/8                          | 1/2                         | 446/1035/840            | 93              | TFD                | 8.0                           | 46                       | 38              |
| ZXLY-050E                                | 14.4                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 110             | TFD                | 10.0                          | 58                       | 41              |
| ZXLY-060E                                | 17.1                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 114             | TFD                | 12.5                          | 67                       | 41              |
| ZXLY-075E                                | 21.4                             | 5.9                   | 2              | 242                       | 7/8                          | 1/2                         | 446/1035/1244           | 120             | TFD                | 16.0                          | 92                       | 42              |

\* 3ph: 380-420V/ 50Hz

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

# Capacity Data

| Ambient Temperature: 32°C         |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |       |
|-----------------------------------|------------------------------|------|------|------|-------|-------|-------|-----------|------------------------------|------|------|------|------|------|-------|
| R454A                             | Cooling Capacity (kW)        |      |      |      |       |       |       | R454A     | 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    |
| Medium Temperature Models         |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |       |
| ZXMY-020E                         |                              |      |      | 2.47 | 3.60  | 4.28  | 5.83  | ZXMY-020E |                              |      |      | 1.44 | 1.62 | 1.72 | 1.96  |
| ZXMY-030E                         |                              |      |      | 3.42 | 4.96  | 5.87  | 7.99  | ZXMY-030E |                              |      |      | 1.96 | 2.17 | 2.30 | 2.63  |
| ZXMY-040E                         |                              |      |      | 4.82 | 6.94  | 8.19  | 11.05 | ZXMY-040E |                              |      |      | 2.81 | 3.16 | 3.35 | 3.80  |
| ZXMY-050E                         |                              |      |      | 6.11 | 8.86  | 10.50 | 14.20 | ZXMY-050E |                              |      |      | 3.39 | 3.85 | 4.11 | 4.69  |
| ZXMY-060E                         |                              |      |      | 7.16 | 10.35 | 12.20 | 16.40 | ZXMY-060E |                              |      |      | 4.00 | 4.58 | 4.90 | 5.65  |
| ZXMY-075E                         |                              |      |      | 8.92 | 12.80 | 15.00 | 20.00 | ZXMY-075E |                              |      |      | 5.16 | 5.96 | 6.41 | 7.43  |
| Digital Medium Temperature Models |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |       |
| ZXDY-030E                         |                              |      |      | 3.70 | 5.31  | 6.26  | 8.41  | ZXDY-030E |                              |      |      | 2.22 | 2.47 | 2.64 | 3.05  |
| ZXDY-040E                         |                              |      |      | 4.93 | 7.17  | 8.52  | 11.70 | ZXDY-040E |                              |      |      | 2.83 | 3.13 | 3.29 | 3.66  |
| ZXDY-050E                         |                              |      |      | 6.14 | 8.90  | 10.50 | 14.25 | ZXDY-050E |                              |      |      | 3.42 | 3.89 | 4.15 | 4.75  |
| ZXDY-060E                         |                              |      |      | 7.28 | 10.50 | 12.40 | 16.60 | ZXDY-060E |                              |      |      | 4.10 | 4.70 | 5.04 | 5.83  |
| ZXDY-075E                         |                              |      |      | 8.98 | 12.90 | 15.20 | 20.40 | ZXDY-075E |                              |      |      | 5.11 | 5.88 | 6.31 | 7.30  |
| Low Temperature Models            |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |       |
| ZXLY-020E                         |                              | 1.33 | 1.63 | 2.34 | 3.23  | 3.73  | 4.85  | ZXLY-020E |                              | 1.27 | 1.39 | 1.63 | 1.86 | 1.96 | 2.11  |
| ZXLY-030E                         |                              | 1.77 | 2.15 | 3.07 | 4.18  | 4.79  | 6.12  | ZXLY-030E |                              | 1.73 | 1.92 | 2.32 | 2.79 | 3.04 | 3.60  |
| ZXLY-040E                         |                              | 2.39 | 2.88 | 3.95 | 5.05  | 5.56  | 6.30  | ZXLY-040E |                              | 3.01 | 3.39 | 4.35 | 5.76 | 6.71 | 9.33  |
| ZXLY-050E                         |                              | 3.20 | 3.89 | 5.54 | 7.51  | 8.58  | 10.84 | ZXLY-050E |                              | 2.99 | 3.30 | 4.03 | 4.99 | 5.59 | 7.09  |
| ZXLY-060E                         |                              | 3.76 | 4.55 | 6.42 | 8.61  | 9.78  | 12.15 | ZXLY-060E |                              | 3.57 | 3.95 | 4.89 | 6.18 | 6.99 | 9.10  |
| ZXLY-075E                         |                              | 4.73 | 5.72 | 8.05 | 10.76 | 12.21 | 15.17 | ZXLY-075E |                              | 4.27 | 4.71 | 5.81 | 7.27 | 8.19 | 10.52 |

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

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C         |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
|-----------------------------------|------------------------------|------|------|------|-------|-------|-------|-----------|------------------------------|------|------|------|------|------|------|
| R454C                             | Cooling Capacity (kW)        |      |      |      |       |       |       | R454C     | 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   |
| Medium Temperature Models         |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
| ZXMY-020E                         |                              |      |      | 2.09 | 3.05  | 3.62  | 4.95  | ZXMY-020E |                              |      |      | 1.24 | 1.39 | 1.47 | 1.66 |
| ZXMY-030E                         |                              |      |      | 2.91 | 4.23  | 5.01  | 6.83  | ZXMY-030E |                              |      |      | 1.68 | 1.84 | 1.94 | 2.20 |
| ZXMY-040E                         |                              |      |      | 4.12 | 5.94  | 7.03  | 9.53  | ZXMY-040E |                              |      |      | 2.38 | 2.64 | 2.80 | 3.15 |
| ZXMY-050E                         |                              |      |      | 5.20 | 7.53  | 8.90  | 12.10 | ZXMY-050E |                              |      |      | 2.90 | 3.26 | 3.46 | 3.93 |
| ZXMY-060E                         |                              |      |      | 6.08 | 8.77  | 10.35 | 13.95 | ZXMY-060E |                              |      |      | 3.39 | 3.85 | 4.10 | 4.70 |
| ZXMY-075E                         |                              |      |      | 7.60 | 10.90 | 12.80 | 17.10 | ZXMY-075E |                              |      |      | 4.38 | 4.99 | 5.34 | 6.17 |
| Digital Medium Temperature Models |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
| ZXDY-030E                         |                              |      |      | 3.16 | 4.55  | 5.37  | 7.24  | ZXDY-030E |                              |      |      | 1.88 | 2.08 | 2.20 | 2.53 |
| ZXDY-040E                         |                              |      |      | 4.19 | 6.10  | 7.25  | 9.94  | ZXDY-040E |                              |      |      | 2.43 | 2.67 | 2.80 | 3.11 |
| ZXDY-050E                         |                              |      |      | 5.23 | 7.56  | 8.94  | 12.10 | ZXDY-050E |                              |      |      | 2.92 | 3.29 | 3.50 | 3.98 |
| ZXDY-060E                         |                              |      |      | 6.19 | 8.92  | 10.50 | 14.15 | ZXDY-060E |                              |      |      | 3.47 | 3.94 | 4.21 | 4.84 |
| ZXDY-075E                         |                              |      |      | 7.66 | 11.00 | 13.00 | 17.45 | ZXDY-075E |                              |      |      | 4.33 | 4.92 | 5.25 | 6.04 |
| Low Temperature Models            |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
| ZXLY-020E                         |                              | 1.05 | 1.28 | 1.83 | 2.50  | 2.87  | 3.65  | ZXLY-020E |                              | 0.98 | 1.10 | 1.39 | 1.75 | 1.96 | 2.48 |
| ZXLY-030E                         |                              | 1.41 | 1.72 | 2.47 | 3.36  | 3.83  | 4.82  | ZXLY-030E |                              | 1.36 | 1.53 | 1.95 | 2.50 | 2.85 | 3.73 |
| ZXLY-040E                         |                              | 2.01 | 2.48 | 3.55 | 4.74  | 5.34  | 6.39  | ZXLY-040E |                              | 1.99 | 2.27 | 2.98 | 4.03 | 4.75 | 6.89 |
| ZXLY-050E                         |                              | 2.59 | 3.18 | 4.61 | 6.36  | 7.33  | 9.40  | ZXLY-050E |                              | 2.23 | 2.46 | 3.02 | 3.78 | 4.26 | 5.51 |
| ZXLY-060E                         |                              | 3.04 | 3.72 | 5.33 | 7.25  | 8.29  | 10.43 | ZXLY-060E |                              | 2.68 | 2.96 | 3.67 | 4.70 | 5.38 | 7.23 |
| ZXLY-075E                         |                              | 3.78 | 4.57 | 6.46 | 8.67  | 9.87  | 12.34 | ZXLY-075E |                              | 3.32 | 3.66 | 4.49 | 5.60 | 6.29 | 8.02 |

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

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C                |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
|--|------------------------------|------|------|------|-------|-------|-------|-----------|------------------------------|------|------|------|------|------|------|
| R455A                                    | Cooling Capacity (kW)        |      |      |      |       |       |       | R455A     | 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   |
| <b>Medium Temperature Models</b>         |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
| ZXMY-020E                                |                              |      |      | 2.14 | 3.10  | 3.67  | 4.98  | ZXMY-020E |                              |      |      | 1.35 | 1.54 | 1.65 | 1.87 |
| ZXMY-030E                                |                              |      |      | 3.01 | 4.33  | 5.11  | 6.89  | ZXMY-030E |                              |      |      | 1.83 | 2.05 | 2.19 | 2.52 |
| ZXMY-040E                                |                              |      |      | 4.26 | 6.06  | 7.12  | 9.58  | ZXMY-040E |                              |      |      | 2.60 | 2.96 | 3.15 | 3.60 |
| ZXMY-050E                                |                              |      |      | 5.37 | 7.69  | 9.06  | 12.20 | ZXMY-050E |                              |      |      | 3.16 | 3.63 | 3.90 | 4.48 |
| ZXMY-060E                                |                              |      |      | 6.29 | 8.99  | 10.55 | 14.20 | ZXMY-060E |                              |      |      | 3.69 | 4.29 | 4.61 | 5.36 |
| ZXMY-075E                                |                              |      |      | 7.87 | 11.15 | 13.10 | 17.40 | ZXMY-075E |                              |      |      | 4.77 | 5.57 | 6.01 | 7.00 |
| <b>Digital Medium Temperature Models</b> |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
| ZXDY-030E                                |                              |      |      | 3.26 | 4.67  | 5.48  | 7.31  | ZXDY-030E |                              |      |      | 2.05 | 2.32 | 2.48 | 2.88 |
| ZXDY-040E                                |                              |      |      | 4.33 | 6.24  | 7.32  | 9.95  | ZXDY-040E |                              |      |      | 2.65 | 2.94 | 3.16 | 3.56 |
| ZXDY-050E                                |                              |      |      | 5.40 | 7.73  | 9.10  | 12.25 | ZXDY-050E |                              |      |      | 3.18 | 3.67 | 3.94 | 4.53 |
| ZXDY-060E                                |                              |      |      | 6.40 | 9.15  | 10.75 | 14.40 | ZXDY-060E |                              |      |      | 3.78 | 4.39 | 4.74 | 5.51 |
| ZXDY-075E                                |                              |      |      | 7.93 | 11.30 | 13.25 | 17.70 | ZXDY-075E |                              |      |      | 4.72 | 5.49 | 5.91 | 6.86 |
| <b>Low Temperature Models</b>            |                              |      |      |      |       |       |       |           |                              |      |      |      |      |      |      |
| ZXLY-020E                                |                              | 1.17 | 1.44 | 2.11 | 2.92  | 3.38  | 4.35  | ZXLY-020E |                              | 1.10 | 1.23 | 1.56 | 2.05 | 2.39 | 3.36 |
| ZXLY-030E                                |                              | 1.62 | 2.01 | 2.99 | 4.23  | 4.95  | 6.56  | ZXLY-030E |                              | 1.33 | 1.45 | 1.74 | 2.11 | 2.34 | 2.94 |
| ZXLY-040E                                |                              | 2.14 | 2.61 | 3.71 | 4.97  | 5.65  | 7.04  | ZXLY-040E |                              | 2.20 | 2.45 | 3.00 | 3.67 | 4.05 | 4.91 |
| ZXLY-050E                                |                              | 2.77 | 3.41 | 4.95 | 6.79  | 7.80  | 9.92  | ZXLY-050E |                              | 2.59 | 2.87 | 3.55 | 4.46 | 5.04 | 6.54 |
| ZXLY-060E                                |                              | 3.24 | 3.97 | 5.70 | 7.73  | 8.83  | 11.09 | ZXLY-060E |                              | 3.17 | 3.52 | 4.37 | 5.49 | 6.19 | 7.96 |
| ZXLY-075E                                |                              | 3.95 | 4.82 | 6.84 | 9.15  | 10.37 | 12.84 | ZXLY-075E |                              | 4.10 | 4.57 | 5.69 | 7.09 | 7.92 | 9.92 |

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

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C                |                              |     |     |       |      |      |       |           |                              |     |     |       |      |      |      |
|--|------------------------------|-----|-----|-------|------|------|-------|-----------|------------------------------|-----|-----|-------|------|------|------|
| R1234yf                                  | Cooling Capacity (kW)        |     |     |       |      |      |       | R1234yf   | 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   |
| <b>Medium Temperature Models</b>         |                              |     |     |       |      |      |       |           |                              |     |     |       |      |      |      |
| ZXMY-020E                                |                              |     |     | 1.33* | 2.23 | 2.69 | 3.77  | ZXMY-020E |                              |     |     | 0.87* | 0.96 | 1.00 | 1.11 |
| ZXMY-030E                                |                              |     |     | 1.86* | 3.11 | 3.73 | 5.23  | ZXMY-030E |                              |     |     | 1.14* | 1.25 | 1.32 | 1.48 |
| ZXMY-040E                                |                              |     |     | 2.62* | 4.35 | 5.20 | 7.23  | ZXMY-040E |                              |     |     | 1.61* | 1.78 | 1.88 | 2.08 |
| ZXMY-050E                                |                              |     |     | 3.34* | 5.54 | 6.63 | 9.22  | ZXMY-050E |                              |     |     | 1.99* | 2.21 | 2.33 | 2.61 |
| ZXMY-060E                                |                              |     |     | 3.86* | 6.42 | 7.67 | 10.60 | ZXMY-060E |                              |     |     | 2.34* | 2.60 | 2.74 | 3.07 |
| ZXMY-075E                                |                              |     |     | 4.89* | 8.06 | 9.59 | 13.15 | ZXMY-075E |                              |     |     | 2.95* | 3.31 | 3.51 | 3.99 |
| <b>Digital Medium Temperature Models</b> |                              |     |     |       |      |      |       |           |                              |     |     |       |      |      |      |
| ZXDY-030E                                |                              |     |     | 2.02* | 3.37 | 4.03 | 5.62  | ZXDY-030E |                              |     |     | 1.25* | 1.39 | 1.47 | 1.66 |
| ZXDY-040E                                |                              |     |     | 2.69* | 4.49 | 5.40 | 7.62  | ZXDY-040E |                              |     |     | 1.69* | 1.84 | 1.92 | 2.08 |
| ZXDY-050E                                |                              |     |     | 3.37* | 5.60 | 6.70 | 9.34  | ZXDY-050E |                              |     |     | 2.01* | 2.22 | 2.34 | 2.61 |
| ZXDY-060E                                |                              |     |     | 3.95* | 6.58 | 7.86 | 10.90 | ZXDY-060E |                              |     |     | 2.38* | 2.64 | 2.78 | 3.12 |
| ZXDY-075E                                |                              |     |     | 4.94* | 8.16 | 9.74 | 13.45 | ZXDY-075E |                              |     |     | 2.92* | 3.26 | 3.45 | 3.91 |

Conditions: EN13215: Suction Superheat 10K  
Preliminary Data

For detailed capacity data please refer to Emerson's Select software

## Copeland™ ZX Outdoor Refrigeration Units with Scroll Compressors

Copeland compact outdoor refrigeration units are for medium-temperature and low-temperature applications.

With this new range of outdoor refrigeration units, Emerson offers a solution for refrigeration applications with space and noise constraints which responds to the increasing demand for energy-efficient refrigeration solutions units.

Copeland ZX outdoor refrigeration units feature the most complete and unique equipment. Their advanced electronic controller enables precise parameter control and displays the system status. Vapor injection and liquid injection technology significantly increase system efficiency and operation map. Electronic protection functions, oil separator and suction accumulator guarantee optimum system safety.

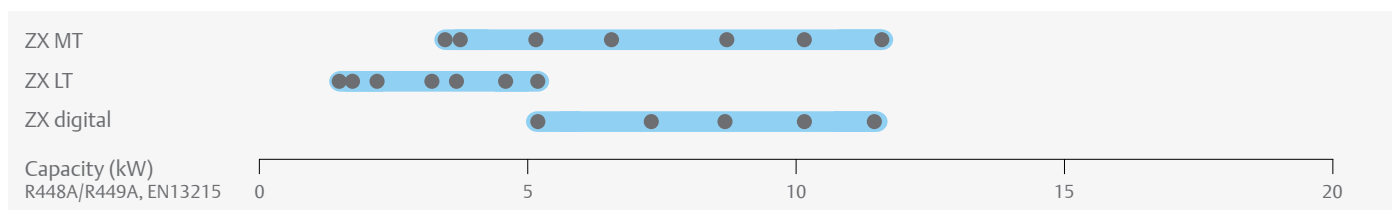
Lowest life cycle costs and comprehensive safety features make Copeland ZX a cost efficient and reliable choice for:

- Convenience stores
- Cold rooms
- Fast food stores, bars and restaurants
- Beverage coolers



Copeland ZX outdoor refrigeration units with scroll compressors

## Copeland ZX Line-up



## Features and Benefits

- Standard equipment: Copeland scroll compressor, crankcase heater, electronic controller, fan(s) with speed control, liquid receiver, safety switches, filter drier and sight glass, oil separator and suction accumulator (LT models only)
- Copeland ZX digital models allow for 10% to 100% continuous capacity modulation
- Diagnostic capabilities protect the unit from over-current, phase loss and phase imbalance
- LED display shows real time system status
- Precise electronic suction pressure control
- Energy and operation cost saving due to excellent energy efficiency
- Noise attenuation due to low speed fan motors with sickle blades, fan speed control and sound jacket
- High capacity vapor injection technology for LT models
- Space saving due to compact dimensions
- Easy and quick installation
- Multiple refrigerant approvals incl. R407A/F, R448A/R449A, R404A, R134a, R450A and R513A

## Maximum Allowable Pressures (PS)

- Low Side PS 22.5 bar (g)
- High Side PS 28.8 bar (g)

## Technical Overview

| Model                                    | Displacement (m <sup>3</sup> /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 - d(BA)*** |  |
|--|----------------------------------|-----------------------|----------------|---------------------------|------------------------------|-----------------------------|-------------------------|-----------------|--------------------|--------|-------------------------------|--------|--------------------------|--------|--------------------------------|--|
|  |                                  |                       |                |                           |                              |                             |                         |                 | 1 Ph*              | 3 Ph** | 1 Ph*                         | 3 Ph** | 1 Ph*                    | 3 Ph** |                                |  |
| <b>Medium Temperature Models</b>         |                                  |                       |                |                           |                              |                             |                         |                 |                    |        |                               |        |                          |        |                                |  |
| ZXME-020E                                | 5.9                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 76              | PFJ                | TFD    | 13                            | 5      | 58                       | 26     | 39                             |  |
| ZXME-025E                                | 6.8                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 79              | PFJ                | TFD    | 12                            | 5      | 61                       | 38     | 40                             |  |
| ZXME-030E                                | 8.6                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 79              | PFJ                | TFD    | 16                            | 7      | 82                       | 40     | 40                             |  |
| ZXME-040E                                | 11.4                             | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 91              | PFJ                | TFD    | 24                            | 10     | 114                      | 49     | 40                             |  |
| ZXME-050E                                | 17.1                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 108             |                    | TFD    |                               | 13     |                          | 66     | 41                             |  |
| ZXME-060E                                | 18.8                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 112             |                    | TFD    |                               | 13     |                          | 74     | 41                             |  |
| ZXME-075E                                | 11.9                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 118             |                    | TFD    |                               | 14     |                          | 101    | 42                             |  |
| <b>Digital Medium Temperature Models</b> |                                  |                       |                |                           |                              |                             |                         |                 |                    |        |                               |        |                          |        |                                |  |
| ZXDE-030E                                | 8.3                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 79              |                    | TFD    |                               | 7      |                          | 40     | 40                             |  |
| ZXDE-040E                                | 11.4                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 104             |                    | TFD    |                               | 8      |                          | 48     | 40                             |  |
| ZXDE-050E                                | 14.4                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 108             |                    | TFD    |                               | 11     |                          | 64     | 41                             |  |
| ZXDE-060E                                | 17.1                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 112             |                    | TFD    |                               | 11     |                          | 74     | 41                             |  |
| ZXDE-075E                                | 18.8                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 118             |                    | TFD    |                               | 14     |                          | 100    | 42                             |  |
| <b>Low Temperature Models</b>            |                                  |                       |                |                           |                              |                             |                         |                 |                    |        |                               |        |                          |        |                                |  |
| ZXLE-020E                                | 6.1                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 79              | PFJ                | TFD    | 14                            | 6      | 57                       | 39     | 39                             |  |
| ZXLE-025E                                | 7.1                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 79              | PFJ                |        | 16                            |        | 74                       |        | 39                             |  |
| ZXLE-030E                                | 8.0                              | 4.1                   | 1              | 116                       | 3/4                          | 1/2                         | 446/1035/840            | 81              | PFJ                | TFD    | 18                            | 7      | 82                       | 36     | 40                             |  |
| ZXLE-040E                                | 12.7                             | 4.1                   | 1              | 116                       | 7/8                          | 1/2                         | 446/1035/840            | 93              |                    | TFD    |                               | 9      |                          | 52     | 40                             |  |
| ZXLE-050E                                | 14.4                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 106             |                    | TFD    |                               | 12     |                          | 52     | 41                             |  |
| ZXLE-060E                                | 17.1                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 116             |                    | TFD    |                               | 14     |                          | 74     | 41                             |  |
| ZXLE-075E                                | 18.8                             | 5.9                   | 2              | 246                       | 7/8                          | 1/2                         | 447/1035/1244           | 121             |                    | TFD    |                               | 15     |                          | 101    | 41                             |  |

\* 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) |      |      |      |      |      |      |
|                                   | -45                          | -35  | -30  | -20  | -10   | -5    | +5    |             | -45                          | -35  | -30  | -20  | -10  | -5   | +5   |
| Medium Temperature Models         |                              |      |      |      |       |       |       |             |                              |      |      |      |      |      |      |
| ZXME-020E                         |                              |      |      |      | 3.48  | 4.13  | 5.60  | ZXME-020E   |                              |      |      |      | 1.67 | 1.68 | 1.73 |
| ZXME-025E                         |                              |      |      | 2.78 | 4.02  | 4.78  | 6.67  | ZXME-025E   |                              |      |      | 1.52 | 1.66 | 1.74 | 1.93 |
| ZXME-030E                         |                              |      |      |      | 4.92  | 5.93  | 8.30  | ZXME-030E   |                              |      |      |      | 2.27 | 2.38 | 2.57 |
| ZXME-040E                         |                              |      |      |      | 6.26  | 7.51  | 10.30 | ZXME-040E   |                              |      |      |      | 3.24 | 3.39 | 3.77 |
| ZXME-050E                         |                              |      |      |      | 8.65  | 10.35 | 14.40 | ZXME-050E   |                              |      |      |      | 3.73 | 3.90 | 4.26 |
| ZXME-060E                         |                              |      |      |      | 9.75  | 11.75 | 16.35 | ZXME-060E   |                              |      |      |      | 4.33 | 4.53 | 4.99 |
| ZXME-075E                         |                              |      |      |      | 11.25 | 13.55 | 18.85 | ZXME-075E   |                              |      |      |      | 4.85 | 5.07 | 5.59 |
| Low Temperature Models            |                              |      |      |      |       |       |       |             |                              |      |      |      |      |      |      |
| ZXLE-020E                         |                              | 1.39 | 1.82 | 2.87 | 4.16  | 4.90  | 6.53  | ZXLE-020E   |                              | 1.41 | 1.48 | 1.62 | 1.76 | 1.84 | 1.99 |
| ZXLE-025E**                       |                              | 1.63 | 2.13 | 3.36 | 4.91  | 5.79  | 7.77  | ZXLE-025E** |                              | 1.63 | 1.73 | 1.89 | 2.03 | 2.10 | 2.24 |
| ZXLE-030E                         |                              | 1.98 | 2.51 | 3.81 | 5.51  | 6.52  | 8.88  | ZXLE-030E   |                              | 1.82 | 1.93 | 2.11 | 2.28 | 2.36 | 2.55 |
| ZXLE-040E                         |                              | 3.04 | 3.83 | 5.67 | 7.87  | 9.08  |       | ZXLE-040E   |                              | 2.76 | 2.97 | 3.43 | 3.95 | 4.25 |      |
| ZXLE-050E                         |                              | 3.50 | 4.42 | 6.63 | 9.37  | 10.90 | 14.35 | ZXLE-050E   |                              | 3.08 | 3.27 | 3.69 | 4.15 | 4.41 | 5.01 |
| ZXLE-060E                         |                              | 4.16 | 5.18 | 7.64 | 10.70 | 12.45 | 16.40 | ZXLE-060E   |                              | 4.01 | 4.29 | 4.87 | 5.54 | 5.93 | 6.88 |
| ZXLE-075E                         |                              | 4.68 | 5.86 | 8.75 | 12.45 | 14.65 | 19.75 | ZXLE-075E   |                              | 4.18 | 4.43 | 4.92 | 5.46 | 5.77 | 6.52 |
| Digital Medium Temperature Models |                              |      |      |      |       |       |       |             |                              |      |      |      |      |      |      |
| ZXDE-030E                         |                              |      |      |      | 5.08  | 5.98  | 7.95  | ZXDE-030E   |                              |      |      |      | 2.13 | 2.23 | 2.41 |
| ZXDE-040E                         |                              |      |      | 4.72 | 7.28  | 8.84  | 12.50 | ZXDE-040E   |                              |      |      | 2.70 | 2.84 | 2.93 | 3.13 |
| ZXDE-050E                         |                              |      |      | 5.83 | 8.65  | 10.35 | 14.40 | ZXDE-050E   |                              |      |      | 3.47 | 3.73 | 3.90 | 4.26 |
| ZXDE-060E                         |                              |      |      | 6.38 | 9.75  | 11.75 | 16.35 | ZXDE-060E   |                              |      |      | 4.03 | 4.33 | 4.53 | 4.99 |
| ZXDE-075E                         |                              |      |      | 7.35 | 11.25 | 13.55 | 18.85 | ZXDE-075E   |                              |      |      | 4.51 | 4.85 | 5.07 | 5.59 |

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

\*\* Single Phase Only

Preliminary Data

For detailed capacity data please refer to Emerson's Select software

## Capacity Data

| Ambient Temperature: 32°C         |                              |      |      |       |       |       |       |             |                              |      |      |       |       |      |      |
|-----------------------------------|------------------------------|------|------|-------|-------|-------|-------|-------------|------------------------------|------|------|-------|-------|------|------|
| R407F                             | Cooling Capacity (kW)        |      |      |       |       |       |       | R407F       | Power Input (kW)             |      |      |       |       |      |      |
|                                   | Evaporating Temperature (°C) |      |      |       |       |       |       |             | Evaporating Temperature (°C) |      |      |       |       |      |      |
|                                   | -45                          | -35  | -30  | -20   | -10   | -5    | +5    |             | -45                          | -35  | -30  | -20   | -10   | -5   | +5   |
| Medium Temperature Models         |                              |      |      |       |       |       |       |             |                              |      |      |       |       |      |      |
| ZXME-020E                         |                              |      |      |       | 3.37  | 4.05  | 5.68  | ZXME-020E   |                              |      |      |       | 1.62  | 1.65 | 1.74 |
| ZXME-025E                         |                              |      |      | 2.91  | 4.20  | 4.99  | 6.95  | ZXME-025E   |                              |      |      | 1.60  | 1.75  | 1.84 | 2.05 |
| ZXME-030E                         |                              |      |      |       | 4.92  | 5.93  | 8.29  | ZXME-030E   |                              |      |      |       | 2.27  | 2.38 | 2.57 |
| ZXME-040E                         |                              |      |      |       | 6.52* | 7.95  | 10.85 | ZXME-040E   |                              |      |      |       | 3.33* | 3.54 | 3.99 |
| ZXME-050E                         |                              |      |      | 5.68* | 8.64  | 10.35 | 14.40 | ZXME-050E   |                              |      |      | 3.46* | 3.73  | 3.90 | 4.26 |
| ZXME-060E                         |                              |      |      | 6.17* | 9.74  | 11.75 | 16.35 | ZXME-060E   |                              |      |      | 4.01* | 4.33  | 4.53 | 4.99 |
| ZXME-075E                         |                              |      |      | 7.14* | 11.20 | 13.55 | 18.85 | ZXME-075E   |                              |      |      | 4.49* | 4.85  | 5.07 | 5.59 |
| Low Temperature Models            |                              |      |      |       |       |       |       |             |                              |      |      |       |       |      |      |
| ZXLE-020E                         |                              | 1.46 | 1.91 | 3.01  | 4.36  | 5.12  | 6.81  | ZXLE-020E   |                              | 1.48 | 1.56 | 1.71  | 1.88  | 1.96 | 2.14 |
| ZXLE-025E**                       |                              | 1.71 | 2.23 | 3.52  | 5.14  | 6.06  | 8.11  | ZXLE-025E** |                              | 1.72 | 1.83 | 2.01  | 2.16  | 2.24 | 2.40 |
| ZXLE-030E                         |                              | 2.08 | 2.64 | 4.00  | 5.76  | 6.81  | 9.26  | ZXLE-030E   |                              | 1.93 | 2.04 | 2.24  | 2.43  | 2.53 | 2.74 |
| ZXLE-040E                         |                              | 3.19 | 4.00 | 5.92  | 8.17  | 9.40  |       | ZXLE-040E   |                              | 2.93 | 3.16 | 3.67  | 4.26  | 4.59 |      |
| ZXLE-050E                         |                              | 3.67 | 4.63 | 6.94  | 9.77  | 11.35 | 14.90 | ZXLE-050E   |                              | 3.25 | 3.47 | 3.92  | 4.43  | 4.72 | 5.39 |
| ZXLE-060E                         |                              | 4.35 | 5.42 | 7.97  | 11.15 | 12.95 |       | ZXLE-060E   |                              | 4.24 | 4.55 | 5.19  | 5.94  | 6.38 |      |
| ZXLE-075E                         |                              | 4.91 | 6.14 | 9.16  | 13.00 | 15.30 | 20.50 | ZXLE-075E   |                              | 4.41 | 4.68 | 5.22  | 5.82  | 6.17 | 7.00 |
| Digital Medium Temperature Models |                              |      |      |       |       |       |       |             |                              |      |      |       |       |      |      |
| ZXDE-030E                         |                              |      |      |       | 4.94  | 5.97  | 8.29  | ZXDE-030E   |                              |      |      |       | 2.27  | 2.37 | 2.58 |
| ZXDE-040E                         |                              |      |      | 4.67  | 7.20  | 8.75  | 12.40 | ZXDE-040E   |                              |      |      | 2.77  | 2.92  | 3.01 | 3.22 |
| ZXDE-050E                         |                              |      |      | 5.65  | 8.64  | 10.45 | 14.55 | ZXDE-050E   |                              |      |      | 3.65  | 3.93  | 4.11 | 4.51 |
| ZXDE-060E                         |                              |      |      | 5.85  | 8.96  | 10.85 | 15.10 | ZXDE-060E   |                              |      |      | 3.94  | 4.22  | 4.40 | 4.82 |
| ZXDE-075E                         |                              |      |      | 6.65  | 10.20 | 12.30 | 17.20 | ZXDE-075E   |                              |      |      | 4.29  | 4.59  | 4.78 | 5.24 |

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

\* Conditions: EN13215: Suction Superheat 10K

\*\* Single Phase Only

Preliminary Data

For detailed capacity data please refer to Emerson's Select software



## Capacity Data

| Ambient Temperature: 32°C         |                              |      |      |      |       |       |       |                 |                              |      |      |      |      |      |      |
|-----------------------------------|------------------------------|------|------|------|-------|-------|-------|-----------------|------------------------------|------|------|------|------|------|------|
| R448A/<br>R449A                   | Cooling Capacity (kW)        |      |      |      |       |       |       | R448A/<br>R449A | Power Input (kW)             |      |      |      |      |      |      |
|                                   | Evaporating Temperature (°C) |      |      |      |       |       |       |                 | Evaporating Temperature (°C) |      |      |      |      |      |      |
|                                   | -45                          | -35  | -30  | -20  | -10   | -5    | +5    |                 | -45                          | -35  | -30  | -20  | -10  | -5   | +5   |
| Medium Temperature Models         |                              |      |      |      |       |       |       |                 |                              |      |      |      |      |      |      |
| ZXME-020E                         |                              |      |      | 2.22 | 3.42  | 4.14  | 5.82  | ZXME-020E       |                              |      |      | 1.56 | 1.58 | 1.62 | 1.75 |
| ZXME-025E                         |                              |      |      | 2.61 | 3.83  | 4.61  | 6.66  | ZXME-025E       |                              |      |      | 1.50 | 1.64 | 1.71 | 1.92 |
| ZXME-030E                         |                              |      |      | 3.36 | 5.05  | 6.06  | 8.42  | ZXME-030E       |                              |      |      | 2.12 | 2.28 | 2.37 | 2.58 |
| ZXME-040E                         |                              |      |      | 4.34 | 6.58  | 7.82  | 10.70 | ZXME-040E       |                              |      |      | 3.02 | 3.29 | 3.45 | 3.86 |
| ZXME-050E                         |                              |      |      | 5.75 | 8.77  | 10.50 | 14.60 | ZXME-050E       |                              |      |      | 3.58 | 3.79 | 3.92 | 4.27 |
| ZXME-060E                         |                              |      |      | 6.62 | 10.05 | 12.00 | 16.65 | ZXME-060E       |                              |      |      | 4.12 | 4.41 | 4.58 | 5.03 |
| ZXME-075E                         |                              |      |      | 7.60 | 11.55 | 13.85 | 19.15 | ZXME-075E       |                              |      |      | 4.74 | 5.07 | 5.27 | 5.79 |
| Low Temperature Models            |                              |      |      |      |       |       |       |                 |                              |      |      |      |      |      |      |
| ZXLE-020E                         |                              | 1.45 | 1.91 | 3.05 | 4.46  | 5.27  | 7.08  | ZXLE-020E       |                              | 1.38 | 1.48 | 1.64 | 1.77 | 1.82 | 1.91 |
| ZXLE-025E**                       |                              | 1.71 | 2.25 | 3.59 | 5.26  | 6.23  | 8.38  | ZXLE-025E**     |                              | 1.60 | 1.72 | 1.90 | 2.02 | 2.07 | 2.16 |
| ZXLE-030E                         |                              | 2.06 | 2.59 | 3.93 | 5.71  | 6.80  | 9.37  | ZXLE-030E       |                              | 1.74 | 1.85 | 2.02 | 2.17 | 2.23 | 2.37 |
| ZXLE-040E                         |                              | 3.16 | 3.97 | 5.92 | 8.31  | 9.66  |       | ZXLE-040E       |                              | 2.61 | 2.85 | 3.30 | 3.72 | 3.93 |      |
| ZXLE-050E                         |                              | 3.62 | 4.57 | 6.89 | 9.81  | 11.50 | 15.20 | ZXLE-050E       |                              | 2.94 | 3.18 | 3.61 | 4.00 | 4.18 | 4.56 |
| ZXLE-060E                         |                              | 4.56 | 5.69 | 8.43 | 11.90 | 13.85 |       | ZXLE-060E       |                              | 3.70 | 4.04 | 4.70 | 5.33 | 5.64 |      |
| ZXLE-075E                         |                              | 5.11 | 6.40 | 9.61 | 13.75 | 16.20 | 21.90 | ZXLE-075E       |                              | 3.85 | 4.18 | 4.77 | 5.31 | 5.59 | 6.16 |
| Digital Medium Temperature Models |                              |      |      |      |       |       |       |                 |                              |      |      |      |      |      |      |
| ZXDE-030E                         |                              |      |      | 3.43 | 5.13  | 6.14  | 8.47  | ZXDE-030E       |                              |      |      | 1.90 | 2.21 | 2.38 | 2.79 |
| ZXDE-040E                         |                              |      |      | 4.75 | 7.21  | 8.69  | 12.25 | ZXDE-040E       |                              |      |      | 2.48 | 2.72 | 2.82 | 3.07 |
| ZXDE-050E                         |                              |      |      | 5.83 | 8.65  | 10.35 | 14.40 | ZXDE-050E       |                              |      |      | 3.22 | 3.67 | 3.91 | 4.43 |
| ZXDE-060E                         |                              |      |      | 6.82 | 10.10 | 12.00 | 16.60 | ZXDE-060E       |                              |      |      | 3.88 | 4.46 | 4.78 | 5.47 |
| ZXDE-075E                         |                              |      |      | 7.70 | 11.40 | 13.60 | 18.80 | ZXDE-075E       |                              |      |      | 4.22 | 4.83 | 5.14 | 5.83 |

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

\*\* Single Phase Only

Preliminary Data

For detailed capacity data please refer to Emerson's Select software

# Capacity Data

| Ambient Temperature: 32°C         |                              |      |      |       |       |       |       |             |                              |      |      |      |      |      |      |
|-----------------------------------|------------------------------|------|------|-------|-------|-------|-------|-------------|------------------------------|------|------|------|------|------|------|
| R404A                             | Cooling Capacity (kW)        |      |      |       |       |       |       | R404A       | Power Input (kW)             |      |      |      |      |      |      |
|                                   | Evaporating Temperature (°C) |      |      |       |       |       |       |             | Evaporating Temperature (°C) |      |      |      |      |      |      |
|                                   | -45                          | -35  | -30  | -20   | -10   | -5    | +5    |             | -45                          | -35  | -30  | -20  | -10  | -5   | +5   |
| Medium Temperature Models         |                              |      |      |       |       |       |       |             |                              |      |      |      |      |      |      |
| ZXME-020E                         |                              |      |      | 2.44  | 3.58  | 4.24  | 5.70  | ZXME-020E   |                              |      |      | 1.75 | 1.77 | 1.77 | 1.82 |
| ZXME-025E                         |                              |      |      | 2.94  | 4.24  | 5.01  | 6.80  | ZXME-025E   |                              |      |      | 1.72 | 1.88 | 1.95 | 2.04 |
| ZXME-030E                         |                              |      |      | 3.69  | 5.24  | 6.15  | 8.19  | ZXME-030E   |                              |      |      | 2.38 | 2.50 | 2.57 | 2.72 |
| ZXME-040E                         |                              |      |      | 4.94  | 6.99  | 8.16  | 10.80 | ZXME-040E   |                              |      |      | 3.21 | 3.41 | 3.52 | 3.75 |
| ZXME-050E                         |                              |      |      | 6.39  | 9.12  | 10.70 | 14.35 | ZXME-050E   |                              |      |      | 3.96 | 4.15 | 4.26 | 4.49 |
| ZXME-060E                         |                              |      |      | 7.34  | 10.40 | 12.20 | 16.20 | ZXME-060E   |                              |      |      | 4.57 | 4.83 | 4.97 | 5.28 |
| ZXME-075E                         |                              |      |      | 8.37  | 11.90 | 13.90 | 18.50 | ZXME-075E   |                              |      |      | 5.11 | 5.40 | 5.55 | 5.89 |
| Low Temperature Models            |                              |      |      |       |       |       |       |             |                              |      |      |      |      |      |      |
| ZXLE-020E                         |                              | 1.79 | 2.30 | 3.51  | 4.93  | 5.71  | 7.33  | ZXLE-020E   |                              | 1.68 | 1.78 | 1.97 | 2.14 | 2.21 | 2.35 |
| ZXLE-025E**                       |                              | 2.11 | 2.70 | 4.13  | 5.83  | 6.76  | 8.71  | ZXLE-025E** |                              | 1.93 | 2.05 | 2.25 | 2.43 | 2.51 | 2.66 |
| ZXLE-030E                         |                              | 2.55 | 3.13 | 4.53  | 6.30  | 7.34  | 9.73  | ZXLE-030E   |                              | 2.12 | 2.21 | 2.41 | 2.61 | 2.71 | 2.94 |
| ZXLE-040E                         |                              | 3.96 | 4.86 | 6.95  | 9.40  | 10.75 | 13.50 | ZXLE-040E   |                              | 3.09 | 3.30 | 3.75 | 4.25 | 4.52 | 5.07 |
| ZXLE-050E                         |                              | 4.50 | 5.51 | 7.92  | 10.75 | 12.30 | 15.60 | ZXLE-050E   |                              | 3.57 | 3.79 | 4.27 | 4.80 | 5.08 | 5.67 |
| ZXLE-060E                         |                              | 5.65 | 6.85 | 9.60  | 12.85 | 14.60 | 18.45 | ZXLE-060E   |                              | 4.55 | 4.88 | 5.56 | 6.35 | 6.81 | 7.96 |
| ZXLE-075E                         |                              | 6.35 | 7.75 | 11.05 | 15.05 | 17.35 | 22.50 | ZXLE-075E   |                              | 4.74 | 5.05 | 5.68 | 6.36 | 6.74 | 7.68 |
| Digital Medium Temperature Models |                              |      |      |       |       |       |       |             |                              |      |      |      |      |      |      |
| ZXDE-030E                         |                              |      |      | 3.67  | 5.27  | 6.19  | 8.21  | ZXDE-030E   |                              |      |      | 2.07 | 2.29 | 2.40 | 2.61 |
| ZXDE-040E                         |                              |      |      | 5.29  | 7.58  | 8.94  | 12.15 | ZXDE-040E   |                              |      |      | 2.73 | 2.96 | 3.06 | 3.28 |
| ZXDE-050E                         |                              |      |      | 6.36  | 9.03  | 10.60 | 14.10 | ZXDE-050E   |                              |      |      | 3.58 | 4.02 | 4.25 | 4.70 |
| ZXDE-060E                         |                              |      |      | 7.42  | 10.45 | 12.20 | 16.05 | ZXDE-060E   |                              |      |      | 4.31 | 4.88 | 5.18 | 5.77 |
| ZXDE-075E                         |                              |      |      | 8.39  | 11.80 | 13.80 | 18.25 | ZXDE-075E   |                              |      |      | 4.69 | 5.31 | 5.62 | 6.26 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K  
 \*\* Single Phase Only  
 Preliminary Data

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C         |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
|-----------------------------------|------------------------------|-----|-----|------|------|------|-------|-----------|------------------------------|-----|-----|------|------|------|------|
| R134a                             | Cooling Capacity (kW)        |     |     |      |      |      |       | R134a     | Power Input (kW)             |     |     |      |      |      |      |
|                                   | Evaporating Temperature (°C) |     |     |      |      |      |       |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                                   | -45                          | -35 | -30 | -20  | -10  | -5   | +5    |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models         |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
| ZXME-020E                         |                              |     |     | 1.42 | 2.25 | 2.77 | 4.04  | ZXME-020E |                              |     |     | 0.97 | 1.01 | 1.03 | 1.10 |
| ZXME-025E                         |                              |     |     | 1.71 | 2.65 | 3.23 | 4.65  | ZXME-025E |                              |     |     | 1.01 | 1.12 | 1.17 | 1.27 |
| ZXME-030E                         |                              |     |     | 2.06 | 3.24 | 3.99 | 5.81  | ZXME-030E |                              |     |     | 1.33 | 1.39 | 1.43 | 1.53 |
| ZXME-040E                         |                              |     |     | 2.78 | 4.36 | 5.35 | 7.76  | ZXME-040E |                              |     |     | 1.74 | 1.83 | 1.89 | 2.04 |
| ZXME-050E                         |                              |     |     | 3.38 | 5.49 | 6.77 | 9.87  | ZXME-050E |                              |     |     | 2.15 | 2.29 | 2.36 | 2.51 |
| ZXME-060E                         |                              |     |     | 4.20 | 6.51 | 8.03 | 11.70 | ZXME-060E |                              |     |     | 2.51 | 2.65 | 2.74 | 2.95 |
| ZXME-075E                         |                              |     |     | 4.76 | 7.46 | 9.13 | 13.15 | ZXME-075E |                              |     |     | 3.06 | 3.19 | 3.31 | 3.57 |
| Digital Medium Temperature Models |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
| ZXDE-030E                         |                              |     |     | 2.16 | 3.33 | 4.02 | 5.70  | ZXDE-030E |                              |     |     | 1.27 | 1.43 | 1.51 | 1.70 |
| ZXDE-040E                         |                              |     |     |      | 4.29 | 5.34 | 7.97  | ZXDE-040E |                              |     |     |      | 1.82 | 1.86 | 1.95 |
| ZXDE-050E                         |                              |     |     |      | 5.26 | 6.53 | 9.68  | ZXDE-050E |                              |     |     |      | 2.31 | 2.38 | 2.53 |
| ZXDE-060E                         |                              |     |     |      | 6.34 | 7.88 | 11.65 | ZXDE-060E |                              |     |     |      | 2.72 | 2.81 | 3.03 |
| ZXDE-075E                         |                              |     |     |      | 7.21 | 8.82 | 12.70 | ZXDE-075E |                              |     |     |      | 2.96 | 3.04 | 3.26 |

Conditions: EN13215: Suction Gas Return 20°C, Subcooling 0K  
 \*\* Single Phase Only  
 Preliminary Data

For detailed capacity data please refer to Emerson's Select software

## Capacity Data

| Ambient Temperature: 32°C         |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
|-----------------------------------|------------------------------|-----|-----|------|------|------|-------|-----------|------------------------------|-----|-----|------|------|------|------|
| R450A                             | Cooling Capacity (kW)        |     |     |      |      |      |       | R450A     | Power Input (kW)             |     |     |      |      |      |      |
|                                   | Evaporating Temperature (°C) |     |     |      |      |      |       |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                                   | -45                          | -35 | -30 | -20  | -10  | -5   | +5    |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models         |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
| ZXME-020E                         |                              |     |     | 1.20 | 1.97 | 2.46 | 3.65  | ZXME-020E |                              |     |     | 0.89 | 0.88 | 0.87 | 0.90 |
| ZXME-025E                         |                              |     |     | 1.41 | 2.28 | 2.83 | 4.22  | ZXME-025E |                              |     |     | 1.00 | 1.01 | 1.02 | 1.07 |
| ZXME-030E                         |                              |     |     | 1.81 | 2.91 | 3.61 | 5.31  | ZXME-030E |                              |     |     | 1.19 | 1.21 | 1.23 | 1.30 |
| ZXME-040E                         |                              |     |     | 2.45 | 3.94 | 4.87 | 7.14  | ZXME-040E |                              |     |     | 1.58 | 1.61 | 1.63 | 1.72 |
| ZXME-050E                         |                              |     |     | 3.09 | 4.96 | 6.14 | 9.08  | ZXME-050E |                              |     |     | 2.05 | 2.08 | 2.11 | 2.21 |
| ZXME-060E                         |                              |     |     | 3.61 | 5.78 | 7.14 | 10.50 | ZXME-060E |                              |     |     | 2.34 | 2.38 | 2.41 | 2.54 |
| ZXME-075E                         |                              |     |     | 4.04 | 6.48 | 8.01 | 11.80 | ZXME-075E |                              |     |     | 2.62 | 2.67 | 2.71 | 2.86 |
| Digital Medium Temperature Models |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
| ZXDE-030E                         |                              |     |     | 1.83 | 2.93 | 3.60 | 5.22  | ZXDE-030E |                              |     |     | 1.07 | 1.15 | 1.18 | 1.25 |
| ZXDE-040E                         |                              |     |     |      | 3.99 | 4.86 | 7.04  | ZXDE-040E |                              |     |     |      | 1.42 | 1.48 | 1.62 |
| ZXDE-050E                         |                              |     |     |      | 4.88 | 5.91 | 8.47  | ZXDE-050E |                              |     |     |      | 1.86 | 1.98 | 2.22 |
| ZXDE-060E                         |                              |     |     |      | 5.74 | 6.95 | 9.91  | ZXDE-060E |                              |     |     |      | 2.20 | 2.35 | 2.66 |
| ZXDE-075E                         |                              |     |     |      | 6.47 | 7.84 | 11.20 | ZXDE-075E |                              |     |     |      | 2.39 | 2.55 | 2.89 |

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

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C         |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
|-----------------------------------|------------------------------|-----|-----|------|------|------|-------|-----------|------------------------------|-----|-----|------|------|------|------|
| R513A                             | Cooling Capacity (kW)        |     |     |      |      |      |       | R513A     | Power Input (kW)             |     |     |      |      |      |      |
|                                   | Evaporating Temperature (°C) |     |     |      |      |      |       |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                                   | -45                          | -35 | -30 | -20  | -10  | -5   | +5    |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models         |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
| ZXME-020E                         |                              |     |     | 1.47 | 2.34 | 2.87 | 4.17  | ZXME-020E |                              |     |     | 1.04 | 1.03 | 1.03 | 1.06 |
| ZXME-025E                         |                              |     |     | 1.72 | 2.71 | 3.33 | 4.86  | ZXME-025E |                              |     |     | 1.17 | 1.19 | 1.21 | 1.26 |
| ZXME-030E                         |                              |     |     | 2.20 | 3.44 | 4.20 | 6.04  | ZXME-030E |                              |     |     | 1.40 | 1.44 | 1.47 | 1.55 |
| ZXME-040E                         |                              |     |     | 2.97 | 4.63 | 5.68 | 8.19  | ZXME-040E |                              |     |     | 1.87 | 1.93 | 1.96 | 2.08 |
| ZXME-050E                         |                              |     |     | 3.77 | 5.89 | 7.23 | 10.45 | ZXME-050E |                              |     |     | 2.39 | 2.46 | 2.50 | 2.63 |
| ZXME-060E                         |                              |     |     | 4.39 | 6.84 | 8.37 | 12.05 | ZXME-060E |                              |     |     | 2.75 | 2.83 | 2.88 | 3.03 |
| ZXME-075E                         |                              |     |     | 4.91 | 7.65 | 9.36 | 13.50 | ZXME-075E |                              |     |     | 3.08 | 3.18 | 3.24 | 3.42 |
| Digital Medium Temperature Models |                              |     |     |      |      |      |       |           |                              |     |     |      |      |      |      |
| ZXDE-030E                         |                              |     |     | 2.22 | 3.47 | 4.21 | 5.99  | ZXDE-030E |                              |     |     | 1.25 | 1.35 | 1.39 | 1.49 |
| ZXDE-040E                         |                              |     |     |      | 4.78 | 5.77 | 8.22  | ZXDE-040E |                              |     |     |      | 1.70 | 1.77 | 1.93 |
| ZXDE-050E                         |                              |     |     |      | 5.81 | 6.98 | 9.81  | ZXDE-050E |                              |     |     |      | 2.26 | 2.40 | 2.68 |
| ZXDE-060E                         |                              |     |     |      | 6.83 | 8.19 | 11.40 | ZXDE-060E |                              |     |     |      | 2.69 | 2.87 | 3.24 |
| ZXDE-075E                         |                              |     |     |      | 7.70 | 9.23 | 12.90 | ZXDE-075E |                              |     |     |      | 2.92 | 3.12 | 3.51 |

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

For detailed capacity data please refer to Emerson's Select software



# Copeland™ Small ZX Outdoor Refrigeration Units with Scroll Compressors

Copeland small outdoor refrigeration units are for medium temperature and low temperature applications.

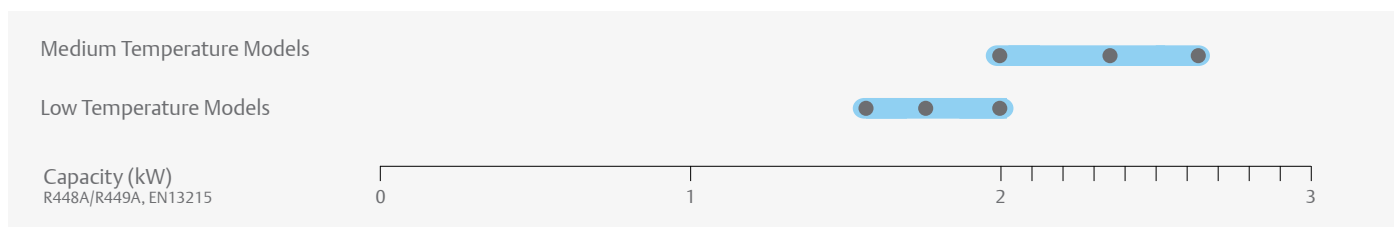
These small ZX units help save space and time thanks to their small footprint and plug & play installation. Thanks to their small size and light weight, they can easily be installed on walls or roofs.

Copeland small ZX outdoor refrigeration units feature a low-sound Copeland scroll compressor and a sickle blade fan for quiet operation, which is important in urban environments and residential areas.



Copeland small ZX outdoor refrigeration unit

## Copeland Small ZX Line-up



## Features and Benefits

- Standard equipment: Copeland scroll compressor, crankcase heater, liquid receiver, service valves, double pressure switch, filter drier, sight glass, fan speed control, external main power switch
- Energy and operation cost saving due to excellent energy efficiency
- Noise attenuation thanks to fan motor with sickle blades and fan speed control
- Increased reliability ensured by advanced factory tests
- Space saving thanks to small smallest footprint in its class
- Easy and quick "plug & play" installation
- Multiple refrigerant approvals incl. R407A/F, R448A/R449A, R404A, R134a, R450A and R513A

## Maximum Allowable Pressures (PS)

- Low Side PS 21 bar (g)
- High Side PS 28.8 bar (g)

## Technical Overview

| Model                            | Displacement (m <sup>3</sup> /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 |
|----------------------------------|----------------------------------|-----------------------|----------------|---------------------------|------------------------------|-----------------------------|-------------------------|-----------------|--------------------|-------------------------------|--------------------------|----------------|
|                                  |                                  |                       |                |                           |                              |                             |                         |                 | 1 Ph*              | 1 Ph*                         | 1 Ph*                    | @10m - d(BA)** |
| <b>Medium Temperature Models</b> |                                  |                       |                |                           |                              |                             |                         |                 |                    |                               |                          |                |
| ZXME-013E                        | 3.7                              | 1.8                   | 1              | 54                        | 1/2                          | 3/8                         | 900/350/600             | 51              | PFJ                | 7.2                           | 45                       | 37             |
| ZXME-015E                        | 4.4                              | 1.8                   | 1              | 54                        | 1/2                          | 3/8                         | 900/350/600             | 51              | PFJ                | 8.7                           | 45                       | 37             |
| ZXME-018E                        | 5.0                              | 1.8                   | 1              | 54                        | 1/2                          | 3/8                         | 900/350/600             | 51              | PFJ                | 9.9                           | 54                       | 38             |
| <b>Low Temperature Models</b>    |                                  |                       |                |                           |                              |                             |                         |                 |                    |                               |                          |                |
| ZXLE-018E                        | 6.1                              | 1.8                   | 1              | 54                        | 1/2                          | 3/8                         | 900/350/600             | 54              | PFJ                | 13.6                          | 57                       | 37             |
| ZXLE-023E                        | 7.1                              | 1.8                   | 1              | 54                        | 1/2                          | 3/8                         | 900/350/600             | 54              | PFJ                | 15.6                          | 74                       | 37             |
| ZXLE-028E                        | 8.0                              | 1.8                   | 1              | 54                        | 1/2                          | 3/8                         | 900/350/600             | 55              | PFJ                | 17.8                          | 82                       | 38             |

\* 1ph: 230V/ 50Hz

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

# Capacity Data

| Ambient Temperature: 32°C |                              |      |      |      |      |      |      |                 |                              |      |      |      |      |      |      |
|---------------------------|------------------------------|------|------|------|------|------|------|-----------------|------------------------------|------|------|------|------|------|------|
| R448A/<br>R449A           | Cooling Capacity (kW)        |      |      |      |      |      |      | R448A/<br>R449A | Power Input (kW)             |      |      |      |      |      |      |
|                           | Evaporating Temperature (°C) |      |      |      |      |      |      |                 | Evaporating Temperature (°C) |      |      |      |      |      |      |
|                           | -45                          | -35  | -30  | -20  | -10  | -5   | +5   |                 | -45                          | -35  | -30  | -20  | -10  | -5   | +5   |
| Medium Temperature Models |                              |      |      |      |      |      |      |                 |                              |      |      |      |      |      |      |
| ZXME-013E                 |                              |      |      | 1.39 | 2.00 | 2.36 | 3.32 | ZXME-013E       |                              |      |      | 0.96 | 1.06 | 1.12 | 1.27 |
| ZXME-015E                 |                              |      |      | 1.66 | 2.35 | 2.76 | 3.85 | ZXME-015E       |                              |      |      | 1.10 | 1.23 | 1.30 | 1.49 |
| ZXME-018E                 |                              |      |      | 1.87 | 2.62 | 3.07 | 4.25 | ZXME-018E       |                              |      |      | 1.29 | 1.46 | 1.55 | 1.78 |
| Low Temperature Models    |                              |      |      |      |      |      |      |                 |                              |      |      |      |      |      |      |
| ZXLE-018E                 |                              | 1.59 | 2.07 | 2.97 |      |      |      | ZXLE-018E       |                              | 1.65 | 1.75 | 1.98 |      |      |      |
| ZXLE-023E                 |                              | 1.75 | 2.08 | 2.98 |      |      |      | ZXLE-023E       |                              | 1.77 | 1.79 | 1.89 |      |      |      |
| ZXLE-028E                 |                              | 2.00 | 2.51 | 3.84 |      |      |      | ZXLE-028E       |                              | 2.06 | 2.18 | 2.43 |      |      |      |

Suction Gas Return 20°C / Subcooling 0K  
Preliminary data

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
|---------------------------|------------------------------|-----|-----|------|------|------|------|-----------|------------------------------|-----|-----|------|------|------|------|
| R404A                     | Cooling Capacity (kW)        |     |     |      |      |      |      | R404A     | Power Input (kW)             |     |     |      |      |      |      |
|                           | Evaporating Temperature (°C) |     |     |      |      |      |      |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
| ZXME-013E                 |                              |     |     | 1.54 | 2.22 | 2.62 | 3.52 | ZXME-013E |                              |     |     | 1.03 | 1.14 | 1.18 | 1.26 |
| ZXME-015E                 |                              |     |     | 1.80 | 2.56 | 3.00 | 4.00 | ZXME-015E |                              |     |     | 1.23 | 1.37 | 1.43 | 1.52 |
| ZXME-018E                 |                              |     |     | 2.00 | 2.83 | 3.31 | 4.43 | ZXME-018E |                              |     |     | 1.44 | 1.62 | 1.70 | 1.83 |

Suction Gas Return 20°C / Subcooling 0K

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
|---------------------------|------------------------------|-----|-----|------|------|------|------|-----------|------------------------------|-----|-----|------|------|------|------|
| R134a                     | Cooling Capacity (kW)        |     |     |      |      |      |      | R134a     | Power Input (kW)             |     |     |      |      |      |      |
|                           | Evaporating Temperature (°C) |     |     |      |      |      |      |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
| ZXME-013E                 |                              |     |     | 0.91 | 1.40 | 1.70 | 2.43 | ZXME-013E |                              |     |     | 0.62 | 0.69 | 0.72 | 0.79 |
| ZXME-015E                 |                              |     |     | 1.08 | 1.64 | 1.99 | 2.82 | ZXME-015E |                              |     |     | 0.73 | 0.82 | 0.87 | 0.97 |
| ZXME-018E                 |                              |     |     | 1.82 | 2.19 | 3.07 |      | ZXME-018E |                              |     |     | 0.97 | 1.03 | 1.17 |      |

Suction Gas Return 20°C / Subcooling 0K

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
|---------------------------|------------------------------|-----|-----|------|------|------|------|-----------|------------------------------|-----|-----|------|------|------|------|
| R450A                     | Cooling Capacity (kW)        |     |     |      |      |      |      | R450A     | Power Input (kW)             |     |     |      |      |      |      |
|                           | Evaporating Temperature (°C) |     |     |      |      |      |      |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
| ZXME-013E                 |                              |     |     | 0.76 | 1.26 | 1.51 | 2.10 | ZXME-013E |                              |     |     | 0.56 | 0.62 | 0.65 | 0.71 |
| ZXME-015E                 |                              |     |     | 0.84 | 1.43 | 1.68 | 2.44 | ZXME-015E |                              |     |     | 0.65 | 0.73 | 0.78 | 0.87 |
| ZXME-018E                 |                              |     |     | 0.92 | 1.60 | 1.85 | 2.60 | ZXME-018E |                              |     |     | 0.73 | 0.87 | 0.92 | 1.05 |

Suction Gas Return 20°C / Subcooling 0K  
Preliminary data

For detailed capacity data please refer to Emerson's Select software

| Ambient Temperature: 32°C |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
|---------------------------|------------------------------|-----|-----|------|------|------|------|-----------|------------------------------|-----|-----|------|------|------|------|
| R513A                     | Cooling Capacity (kW)        |     |     |      |      |      |      | R513A     | Power Input (kW)             |     |     |      |      |      |      |
|                           | Evaporating Temperature (°C) |     |     |      |      |      |      |           | Evaporating Temperature (°C) |     |     |      |      |      |      |
|                           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |           | -45                          | -35 | -30 | -20  | -10  | -5   | +5   |
| Medium Temperature Models |                              |     |     |      |      |      |      |           |                              |     |     |      |      |      |      |
| ZXME-013E                 |                              |     |     | 0.90 | 1.50 | 1.80 | 2.50 | ZXME-013E |                              |     |     | 0.69 | 0.77 | 0.81 | 0.88 |
| ZXME-015E                 |                              |     |     | 1.00 | 1.70 | 2.00 | 2.90 | ZXME-015E |                              |     |     | 0.82 | 0.92 | 0.97 | 1.09 |
| ZXME-018E                 |                              |     |     | 1.10 | 1.90 | 2.20 | 3.10 | ZXME-018E |                              |     |     | 0.90 | 1.09 | 1.15 | 1.31 |

Suction Gas Return 20°C / Subcooling 0K  
Preliminary data

For detailed capacity data please refer to Emerson's Select software

# Copeland™ ZX Indoor Refrigeration Units With Scroll Compressors

The Copeland ZX indoor range is the ideal solution for urban installations with space and noise constraints and also suits applications in areas with extreme weather conditions.

Copeland refrigeration units have brought innovation to refrigeration by providing solutions for quick and easy installation. Regular communication between Emerson and its customers has resulted in the latest indoor refrigeration unit design, taking this concept one step further. The adoption of the popular ZX condensing unit design to the needs of urban applications exactly meets customer needs.

Copeland ZX indoor refrigeration units feature the most complete and unique equipment. Their advanced electronic controller enables precise parameter control and displays the system status. Vapor injection and liquid injection technology significantly increase system efficiency and operation map. Electronic protection functions and oil separator guarantee optimum system safety.

The units are prepared for standard air ducts, resulting in easy installation and lower installation costs because they do not require:

- remote condenser
- additional E-box
- additional wiring and tubing

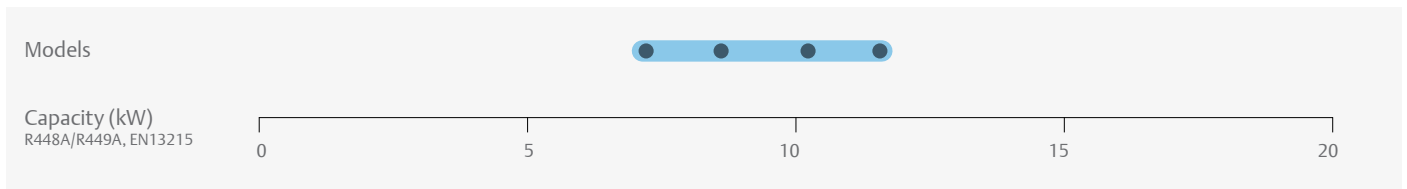
Lowest life cycle costs and comprehensive safety features make Copeland ZX a cost efficient and reliable choice for:

- convenience stores
- cold rooms
- fast food stores, bars and restaurants
- service stations



Copeland ZX indoor refrigeration units

## Copeland ZX Indoor Line-up



## Features and Benefits

- Standard equipment: Copeland scroll compressor, crankcase heater, electronic controller, fan(s) with speed control, liquid receiver, safety switches, filter drier, sight glass, and oil separator
- Copeland ZX digital models allow for 10% to 100% continuous capacity modulation
- Diagnostic capabilities protect the unit from over-current, phase loss and phase imbalance
- LED display shows real time system status
- Precise electronic suction pressure control
- Energy and operation cost saving due to excellent energy efficiency
- Prepared for standard air ducts
- Operation in urban environments or extreme weather conditions
- Noise attenuation due to low speed fan motors with sickle blades, fan speed control and sound jacket
- Space saving due to compact dimensions
- Easy and quick installation
- Multiple refrigerant approvals incl. R407A/F, R448A/R449A, R404A, R134a, R450A and R513A

## Maximum Allowable Pressures (PS)

- Low Side PS 22.5 bar (g)
- High Side PS 28.8 bar (g)

## Technical Overview

| Model  | Displacement (m <sup>3</sup> /h)* | Max. Operating Current (A) | Number of Fans | Total Fan Motor Power (W) | Connection Lines Diameter (inch) |        | Width/Depth/Height (mm) | Weight (kg) | Max Sound Power dB(A)** |
|--|-----------------------------------|----------------------------|----------------|---------------------------|----------------------------------|--------|-------------------------|-------------|-------------------------|
|  |                                   |                            |                |                           | Suction                          | Liquid |                         |             |                         |
| <b>Medium Temperature 380-420V   50Hz   3~</b> |                                   |                            |                |                           |                                  |        |                         |             |                         |
| ZXDI-040E-TFD-554                              | 11.4                              | 7.7                        | 2              | 750                       | 7/8                              | 1/2    | 1029/ 424/ 1242         | 138         | 86                      |
| ZXDI-050E-TFD-554                              | 14.4                              | 10.4                       | 2              | 750                       | 7/8                              | 1/2    | 1029/ 424/ 1242         | 142         | 86                      |
| ZXDI-060E-TFD-554                              | 17.1                              | 11.6                       | 2              | 750                       | 7/8                              | 1/2    | 1029/ 424/ 1242         | 146         | 86                      |
| ZXDI-075E-TFD-554                              | 18.8                              | 12.4                       | 2              | 750                       | 7/8                              | 1/2    | 1029/ 424/ 1242         | 152         | 86                      |

Conditions: EN13215: Evaporating -10°C, Ambient = 32°C, Suction Gas Return 20°C, Subcooling 0K

\*\* Sound pressure depends on individual installation type

## Capacity Data

| Models            | Capacity (kW) |       |       |       |       |       |       |       |
|-------------------|---------------|-------|-------|-------|-------|-------|-------|-------|
|                   | R134a         | R404A | R407A | R407F | R448A | R449A | R450A | R513A |
| ZXDI-040E-TFD-554 | 4.31          | 7.72  | 7.22  | 7.15  | 7.14  | 7.14  | 3.99  | 4.80  |
| ZXDI-050E-TFD-554 | 5.35          | 9.42  | 8.69  | 8.70  | 8.68  | 8.68  | 4.92  | 5.90  |
| ZXDI-060E-TFD-554 | 6.48          | 11.00 | 9.81  | 9.03  | 10.10 | 10.10 | 5.70  | 6.96  |
| ZXDI-075E-TFD-554 | 7.35          | 12.50 | 11.40 | 10.35 | 11.55 | 11.55 | 6.55  | 7.86  |

\* Conditions: EN13215: Evaporating -10°C, Ambient = 32°C, Suction Gas Return 20°C, Subcooling 0K

For detailed capacity data please refer to Emerson's Select software