



Outdoor Package



Indoor Package



Controls & Systems



Turn to the Experts."



Commercial Split



Air Terminals





Miscellaneous



Generators



## **Outdoor Package Units**

- > Small Constant Volume (1.5 to 25 tons):
  - Gas Package Units
  - Electric Cooling Units
  - Heat Pump Units
  - Dual Fuel Units
- > Large Constant Volume, VAV (20 to 105 tons)
- > 100% Outdoor Air Equip & Energy Recovery



#### **Select a Product:**

- > 1.5 to 5 ton Residential/Light Commercial
- ➤ 2 to 25 ton Commercial Rooftops Units w/ Puron®
- ➤ 2 to 25 ton Commercial Rooftops Units w/ R-22



|             | Residential/Light Commercial (1.5 to 5 tons)  |               |  |
|-------------|---|---------------|--|
| Model       | Description   | Size          |  |
| <u>48XL</u> | Infinity <sup>™</sup> 15 SEER Package Gas Heating/Electric Cooling Units w/ Puron® (1-phase only) | 2 to 5 tons   |  |
|             | Service & Installation Manual   |               |  |
| <u>48VL</u> | Performance™ 14 SEER Package Gas Heating/Electric Cooling Units w/ Puron® (1 & 3-phase)           | 1.5 to 5 tons |  |
|             | Service & Installation Manual   |               |  |
| <u>48XP</u> | Performance™ 13 SEER Package Gas Heating/Electric Cooling Units w/ Puron® (1 & 3-phase)           | 2 to 5 tons   |  |
|             | Service & Installation Manual   |               |  |
| <u>48ES</u> | Comfort™ 13 SEER Package Gas Heating/Electric Cooling Units w/ Puron® (1 & 3-phase)               | 1.5 to 5 tons |  |
|             | Service & Installation Manual   |               |  |



| Commercial Rooftop Units w/ Puron® |  |               |
|------------------------------------|--|---------------|
| Model                              | Description  | Size          |
| <u>48TC</u>                        | Gas Heat Package Rooftop w/ Puron®   | 3 to 10 tons  |
|                                    | Service & Installation Manual (Sizes 04 to 07) Service & Installation Manual (Sizes 08 to 12)  |               |
| <u>48PD</u>                        | Displacement Ventilation or Single-Zone Variable Airflow Rooftop Units Single Package, Electric Cooling, Gas or Optional Electric Heating with Puron®  | 4 to 5 tons   |
|                                    | Service & Installation Manual  |               |
| <u>48PG</u>                        | Ultra-High Efficiency Commercial RTU with Puron®   | 2 to 25 tons  |
|                                    | Service & Installation Manual (Sizes 03 to 07) Service & Installation Manual (Sizes 08 to 14) Service & Installation Manual (Size 16) Service & Installation Manual (Sizes 20 to 28) Controls Operation and Trouble Shooting |               |
| <u>48PM</u>                        | Ultra-High Efficiency Commercial RTU with Puron®   | 18 to 25 tons |
|                                    | Service & Installation Manual (Electromechanical Controls) Service & Installation Manual (ComfortLINK Controls) Controls Operation and Trouble Shooting  |               |



|                            | Commercial Rooftop Units w/ R-22   |                                 |
|----------------------------|--|---------------------------------|
| Model                      | Description  | Size                            |
| <u>48TF</u><br><u>48TJ</u> | Standard-Efficiency Package Gas Heating/Electric Cooling Rooftop Units   | 3 to 12-½ tons<br>15 to 25 tons |
| <del>3010</del>            | Service & Installation Manual (Sizes 004 to 007) Service & Installation Manual (Sizes 008 to 014) Service & Installation Manual (Sizes 016 to 028)   | 10 to 20 tone                   |
| <u>48TM</u>                | Medium-Efficiency Package Gas Heating/Electric Cooling Rooftop Units   | 3 to 25 tons                    |
|                            | Service & Installation Manual (Sizes 004 to 007) Service & Installation Manual (Sizes 008 to 014) Service & Installation Manual (Sizes 016 to 028)   |                                 |
| <u>48HE</u><br><u>48HJ</u> | High-Efficiency Package Gas Heating/Electric Cooling Rooftop Units w/ optional Cobra™ Energy Recovery Unit and Humidi-MiZer™ Dehumidification  | 2 to 5 tons<br>3 to 25 tons     |
|                            | Service & Installation Manual (48HE, 48HJ Sizes 004 to 007)  Service & Installation Manual (48HJ Sizes 008 to 014)  Service & Installation Manual (48HJ Sizes 015, 017)  Service & Installation Manual (48HJ Sizes 020 to 028)  Service & Installation Manual I (Cobra <sup>TM</sup> ) |                                 |
| <u>48HG</u>                | Single Package Rooftop Units with <i>Comfort</i> Link™ Control  Service & Installation Manual  | 13 to 25 tons                   |
|                            | Controls Operation & Troubleshooting   |                                 |



#### **Select a Product:**

- > 1.5 to 5 ton Residential/Light Commercial
- ➤ 2 to 25 ton Commercial Rooftops Units w/ Puron®
- ➤ 2 to 25 ton Commercial Rooftops Units w/ R-22



|              | Residential/Light Commercial (1.5 to 5 tons)  |               |  |
|--------------|---|---------------|--|
| Model        | Description   | Size          |  |
| <u>50XL</u>  | Infinity <sup>™</sup> 15 SEER Package Electric Cooling Unit w/ Puron® (1 –phase only) | 2 to 5 tons   |  |
|              | Service & Installation Manual   |               |  |
| <u>50VL</u>  | Performance™ 14 SEER Package Electric Cooling Unit w/ Puron® (1 & 3-phase)            | 1.5 to 5 tons |  |
|              | Service & Installation Manual   |               |  |
| <u>50XP</u>  | Performance™ 13 SEER Package Electric Cooling Unit w/ Puron® (1 & 3-phase)            | 2 to 5 tons   |  |
|              | Service & Installation Manual   |               |  |
| <u>50ES</u>  | Comfort™ 13 SEER Package Electric Cooling Unit w/ Puron® (1 & 3-phase)                | 1.5 to 5 tons |  |
|              | Service & Installation Manual   |               |  |
| <u>50ZPA</u> | Base <sup>™</sup> 13 SEER Package Electric Cooling Unit w/ R-22 (1 & 3-phase)         | 2 to 5 tons   |  |
|              | Service & Installation Manual   |               |  |



|             | Commercial Rooftop Units   |               |
|-------------|--|---------------|
| Model       | Description  | Size          |
| <u>50TC</u> | Single Package Rooftop Cooling Unit w/ Puron®  | 3 to 10 tons  |
|             | Service & Installation Manual (Sizes 04 to 07) Service & Installation Manual (Sizes 08 to 12)  |               |
| <u>50PD</u> | Displacement Ventilation or Single-Zone Variable Airflow Rooftop Units Single Package, Electric Cooling, Gas or Optional Electric Heating with Puron®  | 4 to 5 tons   |
|             | Service & Installation Manual  |               |
| <u>50PG</u> | Ultra-High Efficiency Commercial RTU with Puron®   | 2 to 25 tons  |
|             | Service & Installation Manual (Sizes 03 to 07) Service & Installation Manual (Sizes 08 to 14) Service & Installation Manual (Size 16) Service & Installation Manual (Sizes 20 to 28) Controls Operation and Trouble Shooting |               |
| <u>50PM</u> | Ultra-High Efficiency Commercial RTU with Puron®   | 18 to 25 tons |
|             | Service & Installation Manual (Electromechanical Controls)  Service & Installation Manual (ComfortLINK Controls)  Controls Operation and Trouble Shooting  |               |



|                            | Commercial Rooftop Units   |                                 |
|----------------------------|--|---------------------------------|
| Model                      | Description  | Size                            |
| <u>50TF</u><br><u>50TJ</u> | Standard-Efficiency Package Electric Heating/Electric Cooling Rooftop Units  | 3 to 12-½ tons<br>15 to 25 tons |
| 30.0                       | Service & Installation Manual (Sizes 004 to 007) Service & Installation Manual (Sizes 008 to 014) Service & Installation Manual (Sizes 016 to 028)   | To to 20 tone                   |
| <u>50TM</u>                | Medium-Efficiency Package Electric Heating/Electric Cooling Rooftop Units  | 3 to 25 tons                    |
|                            | Service & Installation Manual (Sizes 004 to 007) Service & Installation Manual (Sizes 008 to 014) Service & Installation Manual (Sizes 016 to 028)   |                                 |
| <u>50HE</u><br><u>50HJ</u> | High-Efficiency Package Electric Heating/Electric Cooling<br>Rooftop Units w/ optional <u>Cobra™</u> Energy Recovery Unit and<br><u>Humidi-MiZer™</u> Dehumidification   | 2 to 5 tons<br>3 to 25 tons     |
|                            | Service & Installation Manual (50HE, 50HJ Sizes 004 to 007)  Service & Installation Manual (50HJ Sizes 008 to 014)  Service & Installation Manual (50HJ Sizes 015, 017)  Service & Installation Manual (50HJ Sizes 020 to 028)  Service & Installation Manual (Cobra <sup>TM</sup> ) |                                 |
| <u>50HG</u>                | Single Package Rooftop Units with ComfortLink™ Control  Service & Installation Manual Controls Operation & Troubleshooting   | 13 to 25 tons                   |



## **Small Outdoor Electric Package Heat Pumps**

#### **Select a Product:**

- > 1.5 to 5 ton Residential / Light Commercial
- ➤ 2 to 25 ton Commercial Rooftops



# **Small Outdoor Electric Package Heat Pumps**

| Residential/Light Commercial (1.5 to 5 tons) |  |             |
|--|--|-------------|
| Model  | Description  | Size        |
| <u>50XT</u>                                  | Infinity <sup>™</sup> 15 SEER Package Heat Pump w/ Puron® (1-phase only) | 2 to 5 tons |
|  | Service & Installation Manual  |             |
| <u>50VT</u>                                  | Performance™ 14 SEER Package Heat Pump w/ Puron® (1 & 3-phase)           | 2 to 5 tons |
|  | Service & Installation Manual  |             |
| <u>50XZ</u>                                  | Performance™ 13 SEER Package Heat Pump w/ Puron® (1 & 3-phase)           | 2 to 5 tons |
|  | Service & Installation Manual  |             |
| <u>50EZ</u>                                  | Comfort™ 13 SEER Package Heat Pump System w/ Puron® (1 & 3-phase)        | 2 to 5 tons |
|  | Service & Installation Manual  |             |
| <u>50ZHA</u>                                 | Base <sup>™</sup> 13 SEER Package Heat Pump System w/ R-22 (1 & 3-phase) | 2 to 5 tons |
|  | Service & Installation Manual  |             |



# **Small Outdoor Electric Package Heat Pumps**

| Commercial Rooftops (2 to 25 tons) |   |              |
|------------------------------------|---|--------------|
| Model                              | Description   | Size         |
| 50TFQ                              | Standard-Efficiency Package Heat Pump Rooftop Units   | 3 to 10 tons |
|                                    | SI Manual (Sizes 004 to 007) SI Manual (Sizes 008 to 012)   |              |
| 50HEQ                              | High-Efficiency Package Heat Pump Rooftop Units   | 2 to 5 tons  |
| <u>50HJQ</u>                       | SI Manual (50HEQ, 50HJQ Sizes 004 to 007) SI Manual (Sizes 008 to 012) SI Manual (Sizes 014, 016) | 3 to 15 tons |
| 50EJQ,                             | High-Efficiency Electric Heat Pump Rooftop Units  | 20 & 25 tons |
| <u>EWQ</u>                         | SI Manual   |              |



# **Small Outdoor Dual-Fuel Heat Pumps**

|             | Residential/Light Commercial (2 to 5 tons)  |             |  |
|-------------|---|-------------|--|
| Model       | Description   | Size        |  |
| <u>48XT</u> | Infinity 15 <sup>™</sup> Package Hybrid Heat <sup>™</sup> System w/ Puron® (1-phase only) | 2 to 5 tons |  |
|             | Service & Installation Manual   |             |  |
| <u>48VT</u> | Performance™ 14 Package Hybrid Heat™ System w/ Puron® (1 & 3 phase)                       | 2 to 5 tons |  |
|             | Service & Installation Manual   |             |  |
| 48XZ        | Performance™ 13 Package Hybrid Heat™ System w/ Puron® (1 & 3 phase)                       | 2 to 5 tons |  |
|             | Service & Installation Manual   |             |  |
| 48EZ        | Comfort™ 13 Package Hybrid Heat™ System w/ Puron® (1 & 3 phase)                           | 2 to 5 tons |  |
|             | Service & Installation Manual   |             |  |



# **Large Outdoor Package Rooftop Units**

|                          | Gas/Electric, Elec/Elec Package Rooftops (20 to 105 tons)  |                |  |
|--------------------------|--|----------------|--|
| Model                    | Description  | Size           |  |
| 48/50A<br><u>Series</u>  | Single-Package Rooftop Gas Heating/Electric Cooling and Electric Cooling Units With Optional Electric Heat, Downshot & Horizontal (CV & VAV)   | 20 to 60 tons  |  |
|                          | SI Manual (48A Series)   SI Manual (50A Series)  |                |  |
|                          | Controls Operation and Trouble Shooting  |                |  |
| 48/50A2<br><u>Series</u> | Single-Package Gas Heating/Electric Cooling Rooftop Units and Electric Cooling Rooftop Units with Optional Electric Heat with and Puron® Refrigerant, Downshot & Horizontal (CV & VAV) | 25 to 60 tons  |  |
|                          | SI Manual (48A2 Series)   SI Manual (50A2 Series)  |                |  |
|                          | Controls Operation and Trouble Shooting  |                |  |
| 48/50Z<br>Series         | Single-Package Rooftop Units Gas Heating/Electric Cooling and Electric Heating/Electric Cooling Units, Downshot & Horizontal (CV & VAV)  | 30 to 105 tons |  |
|                          | SI Manual (48Z Series); SI Manual (50Z Series)   |                |  |
|                          | Controls Operation and Trouble Shooting  |                |  |



# **62 Series Outdoor Air Equipment**

| 100% Outdoor Air RTU |   |              |
|----------------------|---|--------------|
| Model                | Description   | Size         |
| <u>62D</u>           | Dedicated Vertical or Horizontal 100% Outdoor Air Unit with Optional Energy Wheel | 6 to 35 tons |
|                      | SI Manual   |              |

| RTU Energy Recovery Accessories |   |                         |
|---------------------------------|---|-------------------------|
| Model                           | Description   | Size                    |
| <u>62AQ</u>                     | Energy\$Recycler Energy Recovery Accessory for 3 to 12.5 ton RTUs | 600 to 3000<br>nom. CFM |
|                                 | SI Manual   |                         |
| <u>62M</u>                      | Energy Recovery Ventilator  | 400 to 9500             |
|                                 | SI Manual   | nom. CFM                |
| <u>62E</u>                      | Package Energy Recovery Ventilator                                | 350 to 25,000<br>CFM    |
|                                 | SI Manual   | CFIVI                   |



# Indoor Package Units (Scroll down to view all units)

| Residential/Light Commercial |  |             |
|------------------------------|--|-------------|
| Model                        | Description  | Size        |
| <u>50AH</u>                  | ROOMTOP® Horizontal Indoor Air-Cooled Package Cooling Unit | 2 to 5 tons |
|                              | SI Manual  |             |

|               | Commercial (5 to 100 tons)   |                |
|---------------|--|----------------|
| Model         | Description  | Size           |
| 50BRN,<br>BZN | OMNIZONE™ Water-Cooled and Remote Air-Cooled Vertical Packaged Cooling Units   | 5 to 20 tons   |
|               | SI Manual  |                |
| <u>50BYN</u>  | OMNIZONE™ Vertical Indoor Package Cooling Units (features integral air-cooled condenser)                             | 5 to 20 tons   |
|               | SI Manual  |                |
| <u>50BV</u>   | OMNIZONE™ Remote Air-Cooled and Water-Cooled Vertical Packaged Cooling Units and Water-Cooled Heat Pumps (CV or VAV) | 18 to 60 tons  |
|               | SI Manual   Controls, Operation, Troubleshooting   |                |
| <u>50XJ</u>   | OMNIZONE™ Variable Air Volume Vertical Water-Cooled Units  | 60 to 100 tons |
|               | SI Manual   Controls, Operation, Troubleshooting   |                |



## **Commercial Split Systems**

- Condensing Unit Systems (2.5 to 130 tons)
- Heat Pump Systems (6 to 25 tons)
- <u>Duct-Free Split Systems</u> (0.75 to 5 tons)
- > Application Guide: Split System Primer



# Outdoor Air-Cooled Condensing Units (Scroll down to view all units)

|                     | Commercial (2.5 to 130 tons)   |                 |
|---------------------|--|-----------------|
| Model               | Description  | Size            |
| <u>38CKG</u>        | 10 SEER Air Conditioner for Light Commercial Applications                                    | 2.5 to 5 tons   |
|                     | SI Manual  |                 |
| 38AR<br>Series      | Commercial Air-Cooled Condensing Units matched with<br>28CB,LA Evaporator Coil and 40RM AHUs | 6 to 10 tons    |
|                     | SI Manual  |                 |
| 38ARD,<br>AKS       | Commercial Air-Cooled Condensing Units matched with 40RM AHUs                                | 12.5 to 20 tons |
|                     | SI Manual  |                 |
| 38AKS,<br><u>AH</u> | Commercial Air-Cooled Condensing Units matched with 40RM AHUs                                | 20 to 40 tons   |
|                     | SI Manual (38AKS Sizes 028 to 044)   |                 |
|                     | SI Manual (38AH Sizes 024 to 034)  |                 |
| <u>38AH</u>         | Commercial Air-Cooled Dual Circuited Condensing Units  | 40 to 130 tons  |
|                     | SI Manual (Sizes 044 to 134)   |                 |
|                     | SI Manual (ModuPanel™ Variable Air Volume Split System Controller Accessory)                 |                 |



# **Outdoor Air-Cooled Heat Pumps**

| 2.5 to 15 tons |   |               |
|----------------|---|---------------|
| Model          | Description   | Size          |
| <u>38YCG</u>   | 10 SEER Heat Pump for Light Commercial Applications   | 2.5 to 5 tons |
|                | SI Manual   |               |
| 38AQ,          | Commercial Air-Cooled Heat Pump matched w/ 40RMQ AHUs | 6 to 15 tons  |
| ARQ,<br>AQS    | SI Manual   |               |



# **Commercial Water Source Heat Pumps (WSHP)**

|                               | Indoor (1/2 to 25 tons)                                   |                                    |
|-------------------------------|---|------------------------------------|
| Model                         | Description   | Size                               |
| 50KQL                         | Console WSHP   SI Manual                                  | 1/2 to 1-1/2 tons                  |
| 50PEC                         | Console WSHP with PURON®   SI Manual                      | 3/4 to 1-1/2 tons                  |
| <u>50RHC,</u><br><u>50RVC</u> | Standard Efficiency Horizontal and Vertical WSHP          | 1.5 to 5 tons                      |
| <u>50RHR,</u><br><u>50RVR</u> | High Efficiency Horizontal and Vertical WSHP              | (H) ½ to 5 tons<br>(V) ¾ to 5 tons |
| 50RDS,                        | Premium Efficiency Horizontal, Vertical and Downshot WSHP | 1.5 to 6 tons                      |
| <u>50RHS,</u><br><u>50RVS</u> | SI Manual (for above 50R models)                          |                                    |
| 50PSH,                        | Single-Stage Water Source Heat Pumps with PURON®          | 1.5 to 6 tons                      |
| <u>50PSV,</u><br><u>50PSD</u> | SI Manual   |                                    |
| <u>50PTH,</u><br>50PTV,       | Two-Stage Water Source Heat Pumps with PURON®             | 2.5 to 5.5 tons                    |
| <u>50PTV,</u>                 | SI Manual   |                                    |
| 50HQL,                        | Horizontal and Vertical Standard and Low Temperature WSHP | (H) 6 to 10 tons                   |
| <u>50VQL</u>                  | SI Manual   | (V) 6½ to 25<br>tons               |
| 50RWS                         | Water-to-Water Source Heat Pumps                          | 3,5, 10 tons                       |
|                               | SI Manual   |                                    |
| <u>50PSW</u>                  | Water-to-Water Source Heat Pump w/ PURON®                 | 28 tons                            |
|                               | SI Manual   |                                    |
|                               | Outdoor   |                                    |
| 50RTG                         | Rooftop Water Source Heat Pump                            | 3 to 20 tons                       |
|                               | SI Manual   |                                    |
|                               | Control   |                                    |
| <u>50RLP</u>                  | WSHP System Control Panel                                 |                                    |



# **Chillers & Built-up Systems**

- Air-Cooled Packaged
- Fluid-Cooled Package
- Fluid-Cooled Applied
- Condenserless
- Built-Up Systems



# Package Air-Cooled Chillers (Scroll down to view available models)

| Scroll      |   |                |
|-------------|---|----------------|
| Model       | Description   | Size           |
| <u>30RA</u> | AquaSnap™ Package Air-Cooled Chiller                      | 9 to 53 tons   |
|             | SI Manual; Controls, Operation, Service & Troubleshooting |                |
| <u>30RB</u> | AquaSnap™ Package Air-Cooled Chiller with Puron®          | 60 to 390 tons |
|             | SI Manual; Controls, Operation, Service & Troubleshooting |                |

| Screw       |  |                |
|-------------|--|----------------|
| Model       | Description  | Size           |
| <u>30XA</u> | AQUAFORCE™ Air-Cooled Screw Liquid Chillers                  | 80 to 500 tons |
|             | SI Manual; Controls, Operation, Service, and Troubleshooting |                |



# Fluid-Cooled - Package Chillers

(Scroll down to view available models)

| Recip       |   |               |
|-------------|---|---------------|
| Model       | Description   | Size          |
| <u>30HW</u> | Indoor Liquid Chiller w/ Brazed Plate Cooler              | 15 to 40 tons |
|             | SI Manual; Controls, Operation, Service & Troubleshooting |               |
| <u>30HK</u> | Fluid-Cooled Reciprocating Liquid Chiller                 | 40 to 60 tons |
|             | SI Manual; Controls, Operation, Service & Troubleshooting |               |

| Screw        |  |                |
|--------------|--|----------------|
| Model        | Description  | Size           |
| <u>30HXC</u> | Package Fluid-Cooled Screw Liquid Chiller w/ R134A Refrigerant | 70 to 265 tons |
|              | SI Manual; Controls, Operation, Service, and Troubleshooting   |                |



# Fluid-Cooled –Applied Chillers (Scroll down to view available models)

| Rotary       |  |                  |
|--------------|--|------------------|
| Model        | Description  | Size             |
| <u>23XRV</u> | High-Efficiency Hermetic Screw Liquid Chiller                    | 300 to 550 tons  |
|              | SI Manual; Startup, Operation & Maintenance Instructions         |                  |
| <u>19XR,</u> | High-Efficiency Hermetic Centrifugal Liquid Chiller              | 200 to 1500 tons |
| <u>XRV</u>   | 19XR: SI Manual   Startup, Operation & Maintenance Instructions  |                  |
|              | 19XRV: SI Manual   Startup, Operation & Maintenance Instructions |                  |

| Model       | Description  | Size             |
|-------------|--|------------------|
| <u>16LJ</u> | Low Temp Hot Water, Single Effect, Hermetic Absorption Liquid Chiller  | 75 to 525 tons   |
|             | <u>SI Manual</u>   |                  |
| <u>16TJ</u> | Steam, Single-Effect Hermetic Absorption Liquid Chiller                | 100 to 700 tons  |
|             | <u>SI Manual</u>   |                  |
| <u>16DJ</u> | Direct-Fired, Double Effect, Hermetic Absorption Liquid Chiller/Heater | 135 to 1000 tons |
|             | SI Manual  |                  |
| <u>16NK</u> | Steam, Double Effect, Hermetic Absorption Liquid Chiller/Heater        | 135 to 1000 tons |
|             | SI Manual  |                  |



# Package Condenserless Chillers (Scroll down to view available models)

| Recip       |  |               |
|-------------|--|---------------|
| Model       | Description  | Size          |
| 30HWA       | Indoor Liquid Chiller w/ Brazed Plate Cooler <sup>††</sup> | 15 to 40 tons |
|             | SI Manual; Controls, Operation, Service & Troubleshooting  |               |
| <u>30HL</u> | Condenserless Reciprocating Liquid Chiller <sup>††</sup>   | 50, 60 tons   |
|             | SI Manual; Controls, Operation, Service & Troubleshooting  |               |

| Screw        |  |                |  |  |  |  |
|--------------|--|----------------|--|--|--|--|
| Model        | Description  | Size           |  |  |  |  |
| <u>30HXA</u> | Package Fluid-Cooled Screw Liquid Chiller w/ R134A Refrigerant <sup>††</sup> | 70 to 265 tons |  |  |  |  |
|              | SI Manual; Controls, Operation, Service, and Troubleshooting                 |                |  |  |  |  |

<sup>†† -</sup> for use with Carrier <u>09D Series</u> remote condensers



(Scroll down to view available models)

| Compressor Units                                |   |                 |  |  |  |  |
|---|---|-----------------|--|--|--|--|
| Model   | Description   | Size            |  |  |  |  |
| <u>06D, 06E</u>                                 | Compressor Units  | 3 to 40 tons    |  |  |  |  |
|   | SI Manual (06D Units); SI Manual (06E Units)                    |                 |  |  |  |  |
| <u>07D, 07E</u>                                 | Water-Cooled Cooled Condensing Units                            | 5 to 20 tons    |  |  |  |  |
|   | SI Manual (07D Units); SI Manual (07E Units)                    |                 |  |  |  |  |
| <u>5F,H</u><br><u>05FY,HY</u><br><u>07FY,HY</u> | Compressors, Compressor Units, Condensing Units, and Condensers | 5 to 105 tons   |  |  |  |  |
| <u>P701</u>                                     | Application Guide   |                 |  |  |  |  |
|   | Coolers   |                 |  |  |  |  |
| <u>10RT</u>                                     | Direct-expansion liquid coolers                                 | 7.5 to 350 tons |  |  |  |  |
|   | Remote Air-Cooled Condensers                                    |                 |  |  |  |  |
| Model   | Description   | Size            |  |  |  |  |
| <u>09AW,</u>                                    | Air-Cooled Condensers   | 1 to 20 tons    |  |  |  |  |
| <u>AZ</u>                                       | SI Manual   |                 |  |  |  |  |
| <u>09BY</u>                                     | Ducted, Indoor/Outdoor Air Cooled Condensers                    | 5 to 20 tons    |  |  |  |  |
|   | SI Manual   |                 |  |  |  |  |
| <u>09DE,</u>                                    | Air-Cooled Condensers   | 15 to 90 tons   |  |  |  |  |
| <u>DK</u>                                       | SI Manual (Sizes 020 to 044)                                    |                 |  |  |  |  |
|   | SI Manual (Sizes 054 to 094)                                    |                 |  |  |  |  |
| <u>09AZ</u>                                     | Air-Cooled Condensers   | 90 to 200 tons  |  |  |  |  |
| 1   |   | 1               |  |  |  |  |



# **Air Handling Units**

(Scroll down to view available models)

| Model                | Description  | Size         |
|----------------------|--|--------------|
| 40RM,<br>RMQ,<br>RMS | Packaged Air Handling Unit (for DX Cooling, Heat Pump & Chill Water Application) | 6 to 30 tons |
|                      | SI Manual (40RM)   |              |
|                      | SI Manual (Integrated Economizer)  |              |

| Model      | Description                                     | Size             |  |  |  |
|------------|---|------------------|--|--|--|
| <u>39S</u> | Indoor and Outdoor Air Handlers                 | 400 to 8,500 cfm |  |  |  |
|            | <u>SI Manual</u>                                |                  |  |  |  |
| <u>39L</u> | Indoor Central Station Air Handling Units       | 1,800 to 15,000  |  |  |  |
|            | SI Manual                                       | cfm              |  |  |  |
| 39MN,      | Aero™ Indoor/Outdoor Modular Air Handling Units | 1,500 to 30,500  |  |  |  |
| <u>MW</u>  | SI Manual                                       | - cfm            |  |  |  |
| <u>39R</u> | Aero™ Indoor/Outdoor Modular Air Handling Units | 36,000 to 55,000 |  |  |  |
|            | SI Manual                                       | cfm              |  |  |  |

#### Application Guides:

- 39M,R Series Air Handlers Energy Recovery Section
- Comfort System Air Manager Central Station Air Handler Controls



- Air Terminals & VAV Diffusers
- Fan Powered Mixing Boxes
- VAV Air Terminal Selection Application Guide



|              | Air Terminals   |                |  |  |  |  |  |
|--------------|---|----------------|--|--|--|--|--|
| Model        | Description   | Size           |  |  |  |  |  |
| <u>35K</u>   | Bypass Terminal   | 45 to 4400 cfm |  |  |  |  |  |
|              | Service & Installation Manual                                     |                |  |  |  |  |  |
| <u>35J</u>   | Round Tube Single Duct Terminal Units for VAV Systems             | 45 to 4000 cfm |  |  |  |  |  |
| <u>35E</u>   | Single Duct Terminal Units for VAV Systems                        | 45 to 7100 cfm |  |  |  |  |  |
|              | Service & Installation Manual                                     |                |  |  |  |  |  |
| <u>35L,N</u> | Dual Duct, Variable Air Volume Terminal Units                     | 0 to 500 cfm   |  |  |  |  |  |
|              | Service & Installation Manual                                     |                |  |  |  |  |  |
|              | VAV Diffusers & Diffuser Terminals                                |                |  |  |  |  |  |
| <u>35BD</u>  | Boot Diffusers for VAV Systems                                    | 0 to 500 cfm   |  |  |  |  |  |
| <u>36CB</u>  | 36CBAC,AE,AF,AN, PB,PD,PS Series Active and Passive Chilled Beams | 11 to 190 cfm  |  |  |  |  |  |
|              | Service & Installation Manual   Application Data                  |                |  |  |  |  |  |
| <u>37HS</u>  | Moduline Modular Integral Diffuser Terminals                      | 100 to 400 cfm |  |  |  |  |  |
|              | Service & Installation Manual                                     |                |  |  |  |  |  |



| Fan Powered Mixing Boxes |  |                |  |  |  |  |  |
|--------------------------|--|----------------|--|--|--|--|--|
| Model                    | odel Description   |                |  |  |  |  |  |
| <u>45J,M</u>             | Fan Powered Variable Air Volume Terminals                  | 90 to 3700 cfm |  |  |  |  |  |
| <u>45K,N</u>             | Quiet Fan Terminal Units for Variable Air Volume Systems   |                |  |  |  |  |  |
| <u>45Q,R</u>             | Low Profile Fan Powered Variable Air Volume Terminal Units |                |  |  |  |  |  |
|                          | Service & Installation Manual                              |                |  |  |  |  |  |
| <u>45X</u>               | Axis™ Access Under Floor Terminal Units for VAV Systems    |                |  |  |  |  |  |
|                          | Service & Installation Manual                              |                |  |  |  |  |  |



# **Fan Coil Units**

(Scroll down to view all available models)

|               | Fan Coil Units                                      |                   |  |  |  |  |  |  |
|---------------|---|-------------------|--|--|--|--|--|--|
| Model         | <b>Description</b> Siz                              |                   |  |  |  |  |  |  |
| <u>42BHC</u>  | Ducted, Belt Driven Fan Coil Unit                   | 800 to 4,000 cfm  |  |  |  |  |  |  |
|               | SI Manual   |                   |  |  |  |  |  |  |
| 42C,V         | Horizontal and Vertical, Direct Drive Fan Coil Unit | 150 to 1,200 cfm  |  |  |  |  |  |  |
|               | SI Manual   |                   |  |  |  |  |  |  |
| <u>42D</u>    | Ducted, Direct Drive Fan Coil Unit                  | 600 to 2,000 cfm  |  |  |  |  |  |  |
|               | SI Manual   |                   |  |  |  |  |  |  |
| <u>42S</u>    | Stacked Fan Coil Unit                               | 300 to 1,200 cfm  |  |  |  |  |  |  |
|               | SI Manual   |                   |  |  |  |  |  |  |
| <u>42WKN</u>  | In-ceiling Fan Coil Unit                            | 3/4 to 2-1/2 tons |  |  |  |  |  |  |
|               | SI Manual   |                   |  |  |  |  |  |  |
| 33ZC          | Fan Coil Unit Controller                            |                   |  |  |  |  |  |  |
| <u>FANCOL</u> | SI Manual   |                   |  |  |  |  |  |  |
| Application   | Guide: 42 Series FCU Control Selection              |                   |  |  |  |  |  |  |

| Unit Ventilators |                              |                 |  |  |  |  |
|------------------|------------------------------|-----------------|--|--|--|--|
| Model            | Description                  | Size            |  |  |  |  |
| <u>40UV,</u>     | AirStream™ Unit Ventilators  | 500 to 2000 cfm |  |  |  |  |
| <u>UH</u>        | SI Manual; Application Guide |                 |  |  |  |  |



# **Miscellaneous Equipment**

- > Energy and Heat Recovery Devices
- > Commercial Coils
- > PTAC, PTHP, and RAC's
- ➤ <u>UV-C Lighting</u>



# **Energy and Heat Recovery Devices**

| Energy and Heat Recovery Devices |                                    |               |  |  |  |  |  |
|----------------------------------|------------------------------------|---------------|--|--|--|--|--|
| Model                            | Model Description                  |               |  |  |  |  |  |
| <u>62AB</u>                      | Energy Recovery Ventilator         | 1 to 20 tons  |  |  |  |  |  |
|                                  | SI Manual                          |               |  |  |  |  |  |
| <u>62AA</u>                      | Heat Recovery Ventilator           | 5 to 20 tons  |  |  |  |  |  |
|                                  | SI Manual                          |               |  |  |  |  |  |
| <u>62E</u>                       | Package Energy Recovery Ventilator | 350 to 25,000 |  |  |  |  |  |
|                                  | SI Manual                          | CFM           |  |  |  |  |  |



| Model      | Description  | Size            |
|------------|--|-----------------|
| <u>28B</u> | Separate Sale Plate Fin Water, Direct Expansion and Non-Freeze Steam Coils |                 |
| 28CB,LA    | Direct-Expansion Evaporator Coils  | 7.5 and 10 tons |



| Model      | Description  | Size                 |  |  |
|------------|--|----------------------|--|--|
| <u>52C</u> | Standard Efficiency Package Terminal Air Conditioners (PTAC) and Heat Pumps (PTHP)                             | 7,000-15,000<br>Btuh |  |  |
|            | <u>SI Manual</u>   |                      |  |  |
| <u>52M</u> | High Efficiency Package Terminal Air Conditioners (PTAC) and Heat Pumps (PTHP)                                 | 7,000-15,000<br>Btuh |  |  |
|            | <u>SI Manual</u>   |                      |  |  |
| <u>52V</u> | Vertical Packaged Terminal Air Conditioners Cooling Only,<br>Electric Heat, Heat Pump, or Hot Water Heat Units | 9,000-24,000<br>Btuh |  |  |
|            | <u>SI Manual</u>   |                      |  |  |
|            | Residental Room Air Conditioners and Heat Pumps  | 0.5 to 2 Tons        |  |  |



## **Controls & Control Systems**

- > Commercial Thermostats
- Zoning Systems
- > CCN Controllers
- > CCN System Options & Accessories
- > CCN Sensors



#### **Select a Product:**

- > Thermostats
- > Fan Coil Thermostats
- > PTAC Thermostats
- > Communicating Thermostats
- > Thermostat Accessories



|  |               |               |               |           |           |               |           |          | Itotairi                                    |
|--|---------------|---------------|---------------|-----------|-----------|---------------|-----------|----------|---|
| Style  |               | 2             |               | Ď (       | 0,74      |               | e         | Page 1   |   |
|  |               | Slimline      |               | Debo      | nair2     | Flat          | Stat      | Wireless | Corporate                                   |
| Model Number                                 | <u>400-01</u> | <u>420-01</u> | <u>450-01</u> | SP2-WC    | SN2-WC    | <u>250-FS</u> | 220-FS    | 250-RC   | PTN-02                                      |
| Installation<br>Manual                       | <u>SI</u>     | <u>SI</u>     | <u>SI</u>     | <u>SI</u> | <u>SI</u> | <u>SI</u>     | <u>SI</u> | RC   RE  | <u>SI</u>                                   |
| Programmable                                 | yes           | yes           | yes           | yes       | no        | yes           | yes       | yes      | yes   |
| Number of Days                               | 7             | 7             | -             | 5-1-1     | -         | 7             | 7         | 7        | 7   |
| Number of<br>Periods                         | 4             | 4             | -             | 4         | -         | 4             | 4         | 4        | 4   |
| Light Activation available                   | yes           | -             | -             |           |           |               |           |          |   |
| Holiday<br>Programming                       | yes           | yes           | -             | -         | -         | yes           | yes       | -        | -   |
| Copy Day<br>Command                          | yes           | yes           | -             | -         | -         | yes           | yes       | yes      | yes   |
| Unoccupancy<br>Override                      | yes           | yes           | yes           | yes       | -         | yes           | yes       | -        | -   |
| Three levels of security                     | yes           | yes           | yes           | -         | -         | yes           | yes       | yes      | -   |
| Pre-occupancy<br>Purge                       | yes           | -             | -             | -         | -         | yes           | -         | -        | -   |
| Remote Room<br>Sensor Ready                  | yes           | -             | yes           | -         | -         | yes           | -         | -        | yes   |
| Economizer output                            | yes           | -             | -             | -         | -         | yes           | -         | -        | -   |
| Dry Contacts                                 | yes           | -             | yes           | -         | -         | yes           | -         | -        | -   |
| ExactFit Locking Cover                       | -             | -             | -             | yes       | yes       | yes           | yes       | -        | -   |
| Two stages of<br>Heat and Cool               | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes (3/2)                                   |
| Large<br>Thermoglow™<br>Display              | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | Backlit<br>Display                          |
| Bi-colored LED for<br>heat/cool<br>operation | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes<br>Equipment<br>Operating<br>Indicators |
| NEVERLOST™<br>Memory                         | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes   |
| Energy Saving<br>Smart Fan                   | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | -   |
| Auto-Changeover                              | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes   |
| Keypad Lockout                               | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes   |
| Built-in Time<br>Guards                      | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes   |
| Adjustable<br>Service Filter<br>Warning      | yes           | -             | yes           | yes       | yes       | yes           | yes       | yes      | yes   |
| Temperature in F° or C°                      | yes           | yes           | yes           | yes       | yes       | yes           | yes       | yes      | yes   |



## <u>Return ↑</u>

| Fan Coil Thermostats |   |
|----------------------|---|
| Model                | Description                                       |
| 33CSSN2-FC           | Non-Programmable Fan Coil Thermostat <sup>†</sup> |
| 33CSSP2-FC           | Programmable Fan Coil Thermostat <sup>†</sup>     |

† - use with the Fan Coil Relay Board

| PTAC Thermostat |  |  |
|-----------------|--|--|
| Model           | Description  |  |
| 33CSSN2-MH      | Non-Programmable Thermostat for the Lodging Industry |  |



# **Communicating Thermostats**

| Communicating |  |  |  |
|---------------|--|--|--|
| Model         | Description  |  |  |
| TEMP System   | TEMP System Communicating Thermostats  |  |  |
|               | 365-day scheduling allows for holiday programming, daylight savings compensation, and 8 daily program periods.   |  |  |
|               | Wiring for start-up is easy and quick. As many as 4 remote rooms sensors may be added.   |  |  |
|               | System control capability.   |  |  |
|               | New adjustable alarm limit capability for sensor inputs.   |  |  |
|               | • Indoor air quality high limit CO <sub>2</sub> sensor is available.   |  |  |
|               | Enhanced equipment coordination.   |  |  |
|               | SI Manual  |  |  |
| 33CSKITLST-01 | Linkage Thermostat. The linkage thermostat is a communicating device capable of performing standard CCN linkage with up to 8 air source elements on the communication bus. The communication bus is a simple, 3-wire, shielded cable installed between all communicating devices. The linkage thermostat is equipped with an electronic timeclock that can broadcast time to all devices on the communication bus. The linkage thermostat can be programmed to provide occupied and unoccupied time schedules. |  |  |



| Accessories               |  |  |  |
|---------------------------|--|--|--|
| Model                     | Description  |  |  |
| 33CSSEN-01                | Debonair® Commercial Thermostat Outdoor Air Sensor and Remote Room Sensor  |  |  |
| 33CSSEN-DS                | Debonair® Commercial Thermostat Remote Duct Sensor   |  |  |
| 33CSRFS-RC,<br>33CSRFS-RE | Debonair® Wireless Remote Room Sensor and Receiver- can use up to 16 in any combination - provides sensor averaging capability |  |  |
| 33CSSEN-WB,<br>33CSSEN-LA | Debonair® Thermostat Accessory Remote Temperature Sensor with Override Button and/or Light Activation                          |  |  |
| 33CSIRRCVR-01             | Debonair® Remote Control and Receiver Accessory for 400, 420, and 450 Thermostats  |  |  |
| 33CSPGMR-01               | Debonair® EZ Programmer Accessory for 400, 420, and 450 Thermostats  |  |  |
| 33CSHUMID-01              | Debonair® Humidity Control Accessory for 400, 420, and 450 Series Thermostats  |  |  |



| Light Commercial |   |  |
|------------------|---|--|
| Model            | Description   |  |
| ZONECC()KIT01    | Comfort Zone II Zoning System; 2, 4, and 8 zone systems   |  |
|                  | SI Manual   Zoning Design Guide   |  |
| SYSTXCCUIZ01     | Infinity™ Zone Control  |  |
|                  | SI Manual   |  |
| 33CSACC-AZ       | Add-A-Subzone: The Add-A-Subzone system is used to create a subzone within a larger conditioned area. |  |
| <u>DAMP</u>      | Zoning Dampers (For use w/ CZII, Infinity™, and Add-A-Subzone)  |  |

| Commercial        |  |  |
|-------------------|--|--|
| Model             | Description  |  |
| <u>3V™ System</u> | Variable Volume and Variable Temperature VVT® System |  |
|                   | New, easy-to-use System Pilot interface              |  |
|                   | Flexible architecture                                |  |
|                   | Simplified installation and commissioning            |  |
|                   | System Pilot (User Interface)                        |  |
|                   | Zone Controller   SI Manual                          |  |
|                   | Bypass Controller   SI Manual                        |  |
|                   | <u>Universal Controller</u>                          |  |



(Scroll Down to view all Controllers)

|                                     | General Purpose  |  |  |
|-------------------------------------|--|--|--|
| Model                               | Description  |  |  |
| <u>Comfort</u><br><u>Controller</u> | The Comfort Controller is a microcontroller-based module that provides general purpose HVAC control and monitoring capability in a standalone or network environment using closed-loop, direct digital control.  |  |  |
|                                     | Air Handling Units   |  |  |
| <u>33AM</u>                         | The Carrier Comfort System <i>AirManager</i> is a simple-to-install, affordable, pre-engineered package that will dramatically improve control and performance in both constant volume and variable air volume air handlers.                           |  |  |
|                                     | SI Manual   Application Manual   |  |  |
| VAV and Fan Power Mixing Boxes      |  |  |  |
| 33ZCVAVTRM                          | The Single Duct Air Terminal Zone Controller provides dedicated control functions for single duct terminals.   |  |  |
| 33ZCFANTRM                          | The VAV Fan Terminal Zone Controller provides dedicated control functions for series fan or parallel fan powered terminals, single duct terminals with 3 stages of heat, or as a primary controller for dual duct or zone pressurization applications. |  |  |
|                                     | SI Manual for above part nos.  |  |  |
|                                     | Fan Coils  |  |  |
| 33ZCFANCOL                          | The Fan Coil Zone Controller is a field applied, CCN (Carrier ComfortNetwork) compatible communicating control for fan coils (specifically de-signed for applications under 2,000 cfm).  |  |  |
|                                     | Fan Coil Relay Board (Use with Fan Coil Zone Controller)   |  |  |
|                                     | SI Manual   Application Guide  |  |  |
|                                     | Rooftop Units  |  |  |
| 33CSPREMLK                          | The <i>Premier</i> Link Retrofit Rooftop Controller is an intelligent control that continuously monitors and regulates rooftop operation with reliability and precision that minimizes downtime to ensure maximum occupant comfort.                    |  |  |
|                                     | SI Manual  |  |  |



| Temperature, CO2, Enthalpy Sensors |  |  |
|------------------------------------|--|--|
| Model                              | Description  |  |
| <u>T55</u>                         | Room Temperature Sensor                                      |  |
| <u>T56</u>                         | Room Temperature Sensor w/ Setpoint Adjustment               |  |
| <u>33ZCT58SPT</u>                  | Communicating Room Sensor   SI Manual                        |  |
| 33ZCT55CO2,<br>33ZCT56CO2          | Combination CO2 and Space Temperature Sensor                 |  |
| 33ZCSENCO2,<br>33ZCASPCO2          | Indoor Air Quality CO2 Sensor and Duct-Mounted Aspirator Box |  |
| 33CSENTHSW<br>33CSENTSEN           | Accessory Enthalpy and Differential Enthalpy Sensors         |  |



## **Generators**

| Air-Cooled                                   |  |                     |
|--|--|---------------------|
| Model  | Description  | Size                |
| ASPCS1CCA008<br>ASPCS1CCA010<br>ASPCS1CCA014 | Pre-Packaged Home Standby Generator (steel enclosure)                    | 8kW<br>10kW<br>14kW |
| ASPCS1CCA017<br>ASPCA1CCA017                 | Pre-Packaged Home Standby Generator (steel or aluminum enclosure)        | 17 KW               |
| ASPCX1CCA017<br>ASPBY1CCA017                 | Home Standby Generator w/o transfer switch (steel or aluminum enclosure) | 17 kW               |
| Liquid-Cooled (Steel Enclosure)              |  |                     |
| ASPES1CCL025                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 25 kW               |
| ASPES1CCL030                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 30 kW               |
| ASPES1CCL045                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 45 kW               |
|  | Liquid-Cooled (Aluminum Enclosure)                                       |                     |
| ASPEA1CCL018                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 18 kW               |
| ASPEA1CCL025                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 25 kW               |
| ASPES1CCL035                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 35 kW               |
| ASPEA1CCL045                                 | Liquid-Cooled Gas Engine Generator Sets                                  | 45 kW               |