

## TDD-CL

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### BENEFITS AND FEATURES:

- Purpose designed for passenger comfort in double deck vehicles
- Electrostatic filter for better air quality
- Low weight for greater economy
- User-friendly CANAIRE™ control system
- Single compressor operation for total reliability
- Long life, efficient brushless motors

## Rear-mounted HVAC unit for double-decker applications

The Thermo King TDD-CL unit is a multi-zone air conditioning system purpose designed for double deck buses. The TDD-CL single piece evaporator and condenser unit is rear mounted. An all-new electrostatic filter is fitted as standard for enhanced air quality and passenger comfort. Heating can be added as an option. The integrated unit ensures flawless bus aesthetics, reduced noise and easier access for service.

### Controls

The Thermo King CANAIRE™ control system is a CAN-based controller for bus air conditioning systems. It is designed to control temperature in one, two, or three separate zones. It allows automatic or operator selected cool, heat and vent mode operation. Automatic and manual preheater control, driver defrost, and airflow controls are also available.

The CANAIRE™ system has several programmable features that provide flexibility in adapting the controller to many different heating and cooling applications. These controls operate on standard vehicle voltages. It has a base module, optional display module, and up to four expansion modules to control remote options, including front box, pre-heater and floor heating. The control system has a CAN interface for use with Thermo King CANdiag diagnostic software.

Different driver panels are available:

#### CANAIRE™



#### ClimaAIRE



# TDD-CL

## Rear-mounted HVAC unit for double-decker applications

| PERFORMANCE CHARACTERISTICS:                |  | Rated                   | High Ambient |
|---|--|-------------------------|--------------|
| <b>Cooling Capacity - R134a model:</b>      |  |                         |              |
| with X430 compressor                        |  | 26,1 kW                 | 32,4 kW      |
| with S616 compressor                        |  | 27 kW                   | 36,9 kW      |
| Ambient:                                    |  | 35 °C                   | 42 °C        |
| Interior dry Temp:                          |  | 27 °C                   | 49 °C        |
| Interior wet Temp:                          |  | 19 °C                   | 26 °C        |
| X430 Compressor RPM:                        |  | 3000 1/min              |              |
| S616 Compressor RPM:                        |  | 2000 1/min              |              |
| <b>Refrigerant / Charge:</b>                |  | R134a                   | 7,4 kg       |
| <b>Max. operating temperature:</b>          |  |                         |              |
| with capacity controlled compressor:        |  | 49 °C                   |              |
| with fixed displacement compressor:         |  | 45 °C                   |              |
| <b>Heating Capacity (system 1004 only):</b> |  |                         |              |
|   |  | 90 kW                   |              |
| Coolant temp.inlet:                         |  | 80 °C                   |              |
| Return air temperature:                     |  | -20 °C                  |              |
| Coolant flow:                               |  | 16,7 L/min              |              |
| <b>Evap/Heater:</b>                         |  |                         |              |
| Blower free blow:                           |  | 10200 m <sup>3</sup> /h |              |
| Unit air flow:                              |  | 7000 m <sup>3</sup> /h  |              |

| ELECTRICAL CHARACTERISTICS: |               |         |
|-----------------------------|---------------|---------|
| <b>Voltage:</b>             |               | 27 V DC |
| <b>Current (max.):</b>      | Total:        | 186 A   |
|                             | Unit:         | 174 A   |
|                             | Boost pump:   | 8,5 A   |
|                             | Comp. clutch: | 3 A     |

| PHYSICAL CHARACTERISTICS: |                          |                                   |
|---------------------------|--------------------------|-----------------------------------|
| <b>Weight</b>             | Unit w/o compressor:     | 234 kg incl. electrostatic filter |
|                           | Compressor X430 w/clutch | 52 kg                             |
|                           | Compressor S616 w/clutch | 72 kg                             |
| <b>Unit Dimension:</b>    | Length                   | 2140 mm                           |
|                           | Height                   | 1020 mm                           |
|                           | Width                    | 715 mm                            |

**Dimensions:** 2140 mm x 1020 mm x 715 mm

