B-Series
Superior all-electric Temperature Control for chilled products

- Compatible with vehicles equipped with original AC system
- Ultra slim line evaporator for minimum intrusion
- No vehicle modification required
- Low Amp consumption
- Road & Stand-by operation
- Top class performance
B-Series

B-100 is the new All Electric unit range to provide outstanding refrigeration capacity for small trucks and vans. No compressor in the engine compartment is needed, which allows the vehicle to run its original AC system. The system is powered by the vehicle’s battery (minimum recommended 90 Ah and 125 A Alternator) and controlled by the Thermo King “Direct Smart Reefer” controller.

B-100 features an ultra thin ceiling mounted evaporator which increases payload space. It is built and backed by the world leader in transport temperature control systems offering world wide service network, multi lingual Thermo Assistance Service, 24 hrs a day, 7 days-a-week, another good reason to choose Thermo King’s B-100 Series.

Description
The B-100 Thermo King refrigeration unit is a cooling system primarily designed for fresh applications on small trucks and vans. The compressor is powered by the vehicle’s battery. On the B-100 20 model, an AC motor in the condenser allows the unit to run on electric stand-by.

Models available
- B-100 10
  Cool only operation with vehicle battery driven compressor.
- B-100 20
  Same as B-100 10 but with electric stand-by
  - Amp draw (approximate): 63 A/13.5 Vdc and 31 A/27 Vdc
  - Vehicle alternator rating: 125 A
  - Vehicle battery minimum rating: 90 Ah

Operation
Start-stop cooling on battery operation/stand-by operation
Low battery voltage protection

Refrigeration Capacity
System net cooling capacity under ATP Certificate M620, conditions +30°C ambient

<table>
<thead>
<tr>
<th>B-Series</th>
<th>Road Operation</th>
<th>Electric Stand-by</th>
<th>Refrigerant</th>
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<tbody>
<tr>
<td></td>
<td>0°C (32°F)</td>
<td>1050W</td>
<td>R-134a</td>
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<tr>
<td></td>
<td>-20°C (-4°F)</td>
<td>390W</td>
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<tr>
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<td>0°C (32°F)</td>
<td>1080W</td>
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B-Series Selection guide

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<thead>
<tr>
<th>Loadspace volume (m³)</th>
<th>Door openings per hour</th>
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<td>1</td>
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Example: 30°C/86°F maximum ambient, chilled compartment, at 3°C/37°F, 5 door openings per hour: B-100 suits vehicles up to 6 m³ (212 cu. ft.).
### Evaporator blower performance
Evaporator blower performance at 0 mm (0 in) water column external static pressure:
Airflow volume: 680 m³/hr (400 cfm)

### System components
- Condenser
- Ultra slim evaporator ES100
- Installation kit
- In-cab control box

### Compressor
Number of cylinders: 2
Displacement: - 47.7 cc (2.9 cu.in.)

### Refrigeration
- HFC R-134a
- Chlorine: Zero
- Ozone Depletion Potential: Zero
- Refrigerant charge: 0.95 kg

### Defrost
Automatic hot gas defrost

### Standard features
- In-cab Controls with digital LED thermometer
- Automatic hot gas defrost
- Electric thermostat

### Electric motors
- **DC voltage options:**
  - 12 Vdc and 24 Vdc
- **Electric stand-by options:**
  - 230V/1 Phase/50 Hz
  - 230V/ 1 Phase/ 60 Hz
  - 115V/ 1 Phase/ 60 Hz
- **Total current consumption on the road:**
  - 63 A at 12 Vdc
  - 31 A at 24 Vdc
- **Total stand-by current consumption:**
  - 5.5 A 230V/1 Phase/50Hz
  - 6.8 A 230V/1 Phase/60Hz
  - 11.0 A 115V/1 Phase/60Hz

### Dimensions

#### Condenser
- 789 (31.1) x 200 (7.9) x 500 (19.7)

#### In-cab Direct Smart Reefer
- 135 (5.3) x 46 (1.8) x 25 (1)

#### ES 100 Ultra Slim Evaporator
- 608 (24) x 490 (19.3) x 187 (7.4)

### Weights (approximate)
- B-100 10 47 kg
- B-100 20 59 kg
- ES100 9 kg

### Warranty summary
Terms of the Thermo King Warranty are available on request. The unit and its components are warranted to be free from defects in material and workmanship from date in service according to the terms (in months) as specified in the Thermo King Warranty. Manufacturer is not responsible and will not be held liable in contract or tort (including strict liability and negligence) for any special, indirect or consequential damages including but not limited to injury or damage caused to vehicles, contents or persons, by reason of the installation or use of any Thermo King product or its mechanical failure.
Features & Options

**1 ThermoKare**
ThermoKare offers a complete selection of service contract solutions to manage maintenance costs and hence total life cost of a unit.

**2 TKDL data capture**
- User-friendly temperature recorders
- Delivery and journey printouts at the touch of a button
- Approved to EN 12830, CE Mark and IP-65 standards

**3 Wintrac (data analysis software)**
User-friendly software compatible with DSR controller for configuration file downloads

**4 Door Switches**
Reduce load temperature rise and save fuel when doors are opened

**5 Din Adapter**
The Din Adaptor box permits the adaption of the DSR controller to the vehicle dashboard. The esthetically designed box allows the placement of the DSR controller in any available radio slot compartment in the driver cab.

**6 Hose Covers**
Full protection of hoses and cables on the road and full resistance under all climate adversities. Designed with best aesthetics to promote brand image and with an exceptional durability. User friendly installation (Only for Chassis Installations. No Vans)

**7 Snow Covers**
Thermo King Snow Covers are designed to protect your unit against extreme climate conditions. The Aerodynamically design snow cover prevents the buildup of snow and ice on the units fans which can lead to downtime and further maintenance costs resulting in longer running times for your unit.
ThermoKare Service Solutions

ThermoKare is a complete selection of service contract solutions, designed for fleets operating nationally or internationally. The contracts are designed to optimise the efficiency of your fleets, minimise operating costs and maximise the resale value of your equipment. Our tailored service contract solutions help to remove the non-core tasks from your daily business operations such as maintenance planning, scheduling, invoice interpretation and general fleet administration. The ThermoKare service contract solutions offer you everything from “administration only” to the complete “peace of mind” contract at an agreed, fixed cost.

For more information about ThermoKare, please contact your Thermo King representative.

Thermo Assistance
Thermo Assistance is a multilingual 24-hour telephone breakdown assistance service available throughout Europe that puts you in direct contact with an authorised Service Dealer whenever you require one.

Thermo King Dealer Service Network

Anywhere in Europe

- Blanket coverage across Europe
- Open & available 24/7
- Over 300 authorised service points
- 1300 certified technicians
Thermo King Corporation, a business of Ingersoll Rand - the world leader in creating and sustaining safe, comfortable and energy efficient environments - was founded in 1938 and manufactures transport temperature control systems for a variety of mobile applications, including trailers, truck bodies, buses, shipboard containers and railway cars. The company operates 10 manufacturing facilities and 17 parts distribution centers worldwide. Sales and service is provided by a global dealer network of 865 independently owned companies in 75 countries.