

# 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*





## New Battery-operated unit range for chilled applications

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 (220V/1 Phase/50 Hz)
  - 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

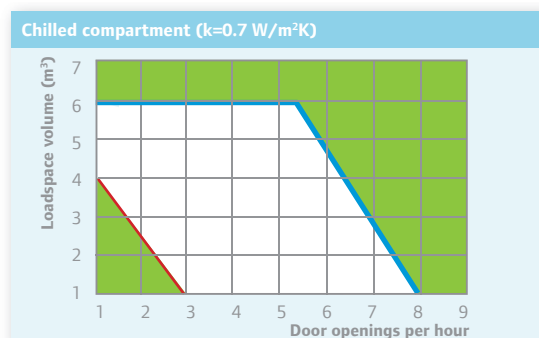
- Start-stop cooling on battery operation/stand-by operation
- Low battery voltage protection

### Refrigeration Capacity

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

Road Operation		
0°C (32°F)	1050W	3586 BTU/hr
-20°C (-4°F)	390W	1332 BTU/hr
Electric Stand-by		
0°C (32°F)	1078W	3682 BTU/hr
-20°C (-4°F)	428W	1462 BTU/hr
Refrigerant		
R-134a		

### B Series Selection guide



— ambient: 30°C/86°F, compartment: 3°C/37°F  
 — ambient: 38°C/100°F, compartment 3°C/37°F

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 m<sup>3</sup> (212 cu. ft.).





## Evaporator blower performance

Evaporator blower performance at 0 mm (0 in) water column external static pressure:  
Airflow volume: 680 m<sup>3</sup>/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: 1.05 kg

## Defrost

- Automatic hot gas defrost

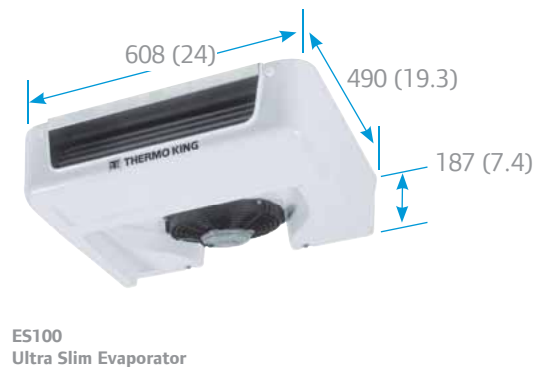
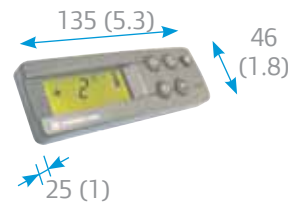
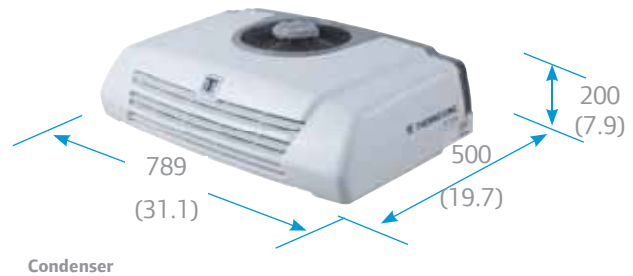
## Standard features

- 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
- *Total current consumption on the road:*  
63 A at 12 Vdc  
31 A at 24 Vdc
- *Total stand-by current consumption:*  
5.5 A

## Dimensions



## Weights (approximate)

- B-100 10 47 kg
- B-100 20 59 kg
- ES100 9 kg

## WARRANTY SUMMARY

Terms of the Thermo King Express 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 Express 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.

Specifications are subject to change without notice.



Providing equipment and services to manage controlled-temperature environments for food and other perishables, our Climate Control Technologies sector encompasses both transport and stationary refrigeration solutions. Our product brands include Thermo King®, a world leader in transport temperature control systems, and Hussmann®, a manufacturer of refrigeration and food merchandising equipment.

[www.thermoking.com](http://www.thermoking.com)   [www.hussmann.com](http://www.hussmann.com)   [www.ingersollrand.com](http://www.ingersollrand.com)

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