



CO₂ Hybrid

Cryogenic systems enhance product quality from origin to market.



TS Series with Cryogenic Hybrid pull down system



The new CO₂ Hybrid

- Quicker temperature recovery after delivery
- Product maintained at set point longer
- Improved temperature control
- Reduced emissions
- Reduced fuel consumption
- Ideal for distribution services
- Reduced diesel system requirements
- Reduced noise level
- Integrated operation



CO₂ Hybrid Specifications

DESCRIPTION

A high-capacity, quick cooling, cryogenic system designed to supplement the pull down capability of a standard diesel based refrigeration system. This exclusive Thermo King kit or option uses a naturally occurring refrigerant, carbon dioxide, stored in a vacuum insulated tank. In liquid form, carbon dioxide provides large cooling capacity instantly.

This innovative system is available in kit form for existing MD, KD, RD, TD, TS-200, TS-300, TS-500 and TS-600 systems. Installed by a factory-authorized dealer, this kit adds a cryogenic cooling coil, a vacuum insulated tank and the controls for the supplemental system.

In new systems, order this enhancement option pre-installed in a TS-300 or TS-500.

REFRIGERATION CAPACITY

System high-speed net cooling capacity is boosted by 9,900 to 13,650 Btu/hr (2900 to 4000 W) depending on system size. Due to the cooling potential of carbon dioxide, this capacity is not affected by ambient or box temperatures.

System net cooling capacity at 86°F (30°C) and 100°F (38°C) ambient and high-speed engine operation.

Return Air to Evaporator

86°F (30°C) Ambient	TS-300 w/Hybrid (Watts)	TS-300 w/Hybrid (Watts)	TS-500 w/Hybrid (Watts)	TS-500 w/Hybrid (Watts)
32°F (-0°C)	6,750	9,650	8,400	12,400
-4°F (-20°C)	4,000	6,900	5,900	9,900
100°F (38°C) Ambient	TS-300 w/Hybrid (Btu/hr)	TS-300 w/Hybrid (Btu/hr)	TS-500 w/Hybrid (Btu/hr)	TS-500 w/Hybrid (Btu/hr)
35°F (2°C)	22,600	32,500	25,000	38,650
0°F (-18°C)	12,500	22,400	18,000	31,650
-20°F (-29°C)	7,500	17,400	12,000	25,650

AIRFLOW

Refer to specifications for standard truck system.

NOISE LEVELS

Refer to specifications for standard truck system. Noise levels are reduced because the diesel system will operate in low speed for a greater period of time.

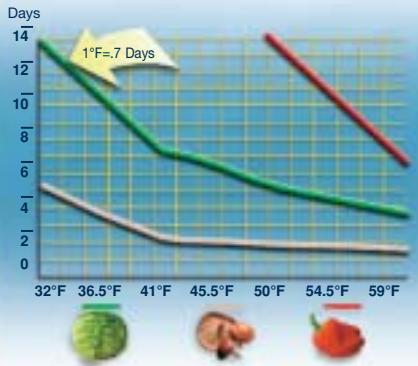
SYSTEM WEIGHT

Charged (CO ₂)	1280 lbs	580 kg
Empty	460 lbs	210 kg

DIMENSIONS inches (millimeters)



Temperature Control & Shelf Life



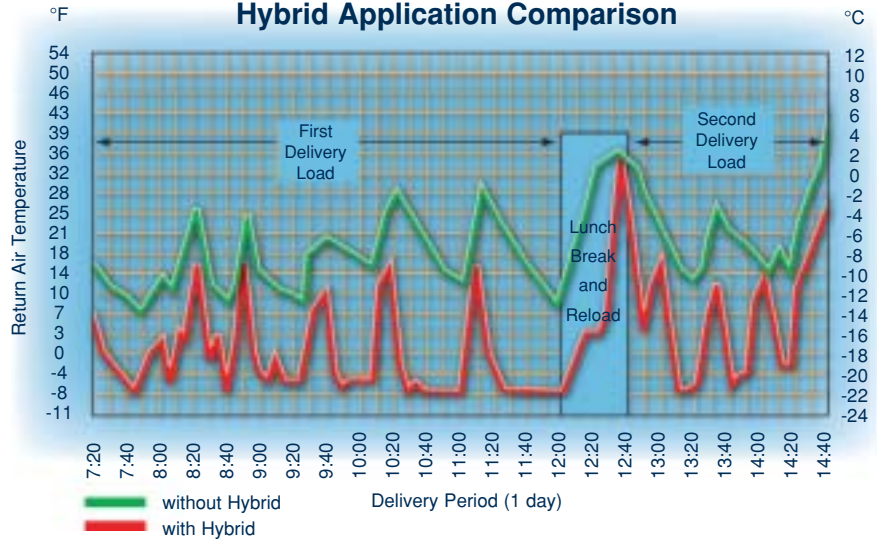
Get to the right temperature faster.

Fueled by growing concerns over temperature accuracy and the shelf life/perishability of food products, governments and customers worldwide are demanding tighter control and more accurate monitoring of temperatures throughout the cold chain. Small variations in temperature can significantly affect the shelf life of sensitive produce. For example, a difference of 1°F (0.5°C) can reduce the shelf life of lettuce by approximately a day.

Warranty

Terms of the Thermo King Warranty are available on request from your local Thermo King dealer. Please reference document TK50047 for Thermo King Self-Powered Truck Unit Warranty.

Hybrid Application Comparison



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