THERMO KING

MONZONE®

CONTAINER FRESH & FROZEN

— Refrigeration Solutions for Containers —

WE PROTECT YOUR CARGO, FRESH OR FROZEN

TRANE TECHNOLOGIES

Proven reliability across the seas

Thermo King creates innovative temperature control solutions that help your fleet perform more efficiently. CFF is the culmination of our deep container refrigeration knowledge acquired from the intermodal use of reefer units on rough roads and even rougher seas.

Our new CFF unit features improved temperature and humidity control, lower total cost of ownership and the implementation of a low pressure, lower GWP refrigerant. The results speak for themselves. The worldwide reference for marine reefer refrigeration.

-30°C to +30°C

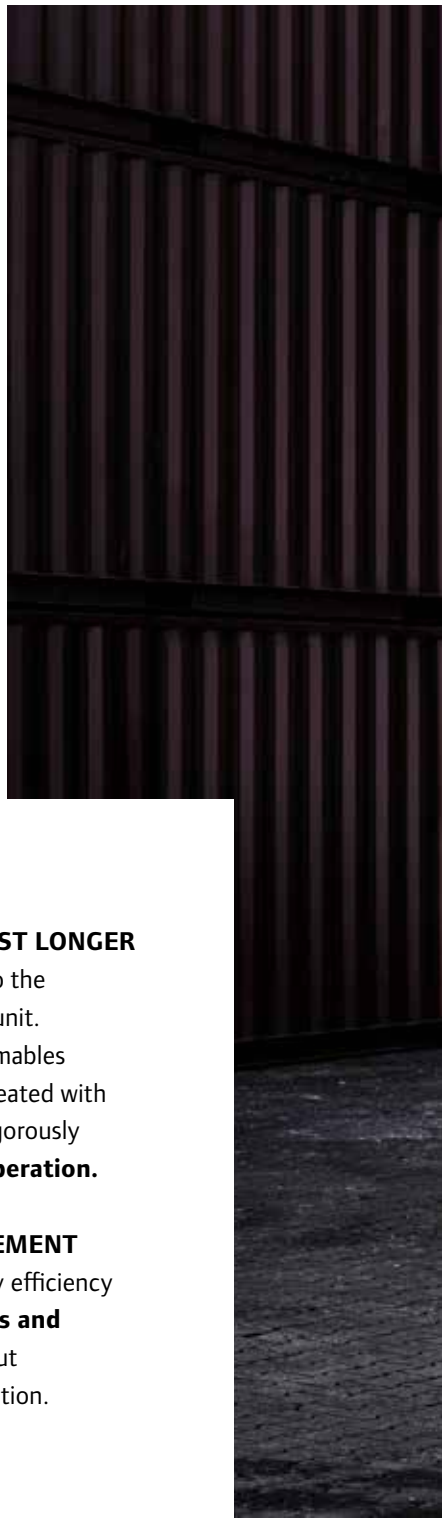
CHOOSE YOUR OPTIMAL SET-POINT
CFF can reach and maintain box temperature in the toughest conditions between -30°C and +30°C to safeguard product quality.

+25 years

DESIGNED TO LAST LONGER
CFF makes use of proven technology – the characteristic V-shape picture frame has been a frontrunner in the market for 25+ years. Its unique design allows for **optimal heat exchange, system efficiency and easy service access.**

24/7 support

SERVICE AROUND THE WORLD
From planned maintenance to unscheduled repairs – Thermo King's extensive service network provides superior parts availability and **around the clock support**.



Raising reefer performance since the 1950s

At Thermo King, we take pride in CFF and what it offers to our customers. Here are the 5 main reasons to choose our industry-leading solution:

1. **PRECISE TEMPERATURE CONTROL**
   The unique CFF advanced temperature management control system delivers extremely precise temperature control **+/- 0.25°C in chilled mode and +/- 1°C in frozen mode.**

2. **FAST PULL-DOWN**
   Thanks to its superior cooling capacity, CFF can reach specific set-points faster and **increase the storage life of your shipments.**

3. **LOWER GWP REFRIGERANTS FOR LESS ENERGY CONSUMPTION**
   CFF comes with the industry-standard R-134A and is 100% ready for R-513A as a drop-in. Both are lower Global Warming Potential refrigerants that enable an optimal Coefficient of Performance and **drastically reduce your energy cost.**

4. **THERMO KING PARTS LAST LONGER**
   Every component is crucial to the overall performance of your unit. Genuine Thermo King consumables and replacement parts are created with high-quality materials and rigorously tested to **ensure reliable operation.**

5. **SMART ENERGY MANAGEMENT**
   CFF offers remarkable energy efficiency through **intelligent controls and component design** – without compromising on load protection.

Contribute to the largest climate commitment in B2B

Trane Technologies – our parent company – has challenged itself to reduce our customers' carbon footprint by 1 gigaton by 2030. The all-new CFF unit will help us achieve that goal by increasing the power coefficient and drastically reducing your environmental impact.

SMART CONTAINERS. SMARTER CHOICES.

Unique and customizable cold-chain technology

SEAMLESS CONNECTIVITY

CFF's MP-4000 controller is compatible with a wide range of telematics solutions for both one-way and two-way communication. It features a built-in Remote Monitoring Module that can interface with the advanced wireless remote monitoring system of your choice.

SMART PTI: AUTOMATED PERFORMANCE AUDITS

Smart PreTrip Inspection can be enabled to save you time and money. The intelligent MP-4000 controller will perform full inspections during reefer operation – anytime or anywhere, empty or loaded.

ADVANCED FRESH AIR MANAGEMENT

AFAM+ protects fresh produce from detrimental atmospheric conditions. Just indicate your desired fresh air rate on the MP-4000 controller and AFAM+ will ensure the specified fresh air rates are maintained. Air vent logging (AVL) will also document the actual air exchange process.

SYNCHRONIZED DEFROST

Simultaneous defrost cycles for adjoining reefers are critical for optimum cooling performance and energy efficiency.

COMPATIBLE WATER-COOLED CONDENSERS (OPTION)

When air cooling capacity is insufficient – e.g. below-deck – water-cooled condensers offer a reliable and compatible alternative while reducing power consumption.

REAL DATA FOR REAL DECISIONS

Energy data logging keeps you informed about real-life power consumption, so you can make better decisions about power usage than ever before.

SHOW OFF YOUR STYLE

Proudly display your brand around the world by customizing the visual aspects of your CFF units with your logo, decals, and colors.

MP-4000 controller: helping you run a tighter ship

Every CFF unit comes equipped with an MP-4000 controller – boasting advanced control algorithms, a faster processor and the implementation of ultraprecise PT1000 control sensors. The uniquely intelligent MP-4000 controller is one of the main driving forces behind the CFF's ability to deliver best-in-class temperature control with an accuracy of up to +/-0.25°C.

ECO-MODE EFFICIENCY

Engage the optimized power consumption mode to consume less energy and activate a wider temperature spread without compromising your cargo. Depending on your chosen set-point and the ambient temperature, the CFF sets new standards in operating efficiency and gives you the potential for significant cost and fuel savings.

RENOWNED USABILITY

The MP-4000 has been used on the MAGNUM PLUS® for 10+ years and has been widely praised among its users for its usability – which is why the CFF will feature the same:

- alarm and warning codes
- PreTrip Inspections
- option set
- text rich definitions
- screen flow
- software customization capability

CERTIFIED 2-WAY CONNECTIVITY

The MP-4000 features a built-in **Remote Monitoring Module** that you can enable through software. As a result, the controller can interface with the advanced wireless remote monitoring system of your choice. The MP-4000 controller also features a **data logger** to record temperatures, humidity, air-exchange, CO_2/O_2, pressures, events, PTI results, and power consumption for each trip.

DOWNLOAD
THE COMPLETE
CFF MANUAL ONLINE

SYSTEM NET COOLING CAPACITY - FULL COOL MAGNUM+ MODEL - AIR COOLED CONDENSING

460/230V	460/230V, 3 Phase, 60 Hz Power		
	NET COOLING CAPACITY		POWER CONSUMPTION
	60 Hz Capacity B/hr	60 Hz Capacity kW	60 Hz Power kW
21.1°C (70°F)	59,921	17,572	10,849
1.7°C (35°F)	35,338	10,363	8,782
-17.8°C (0°F)	20,457	5,999	5,641
-28.9°C (-20°F)	11,086	3,251	4,544

System net cooling capacity with a 38°C (100°F) ambient air temperature.

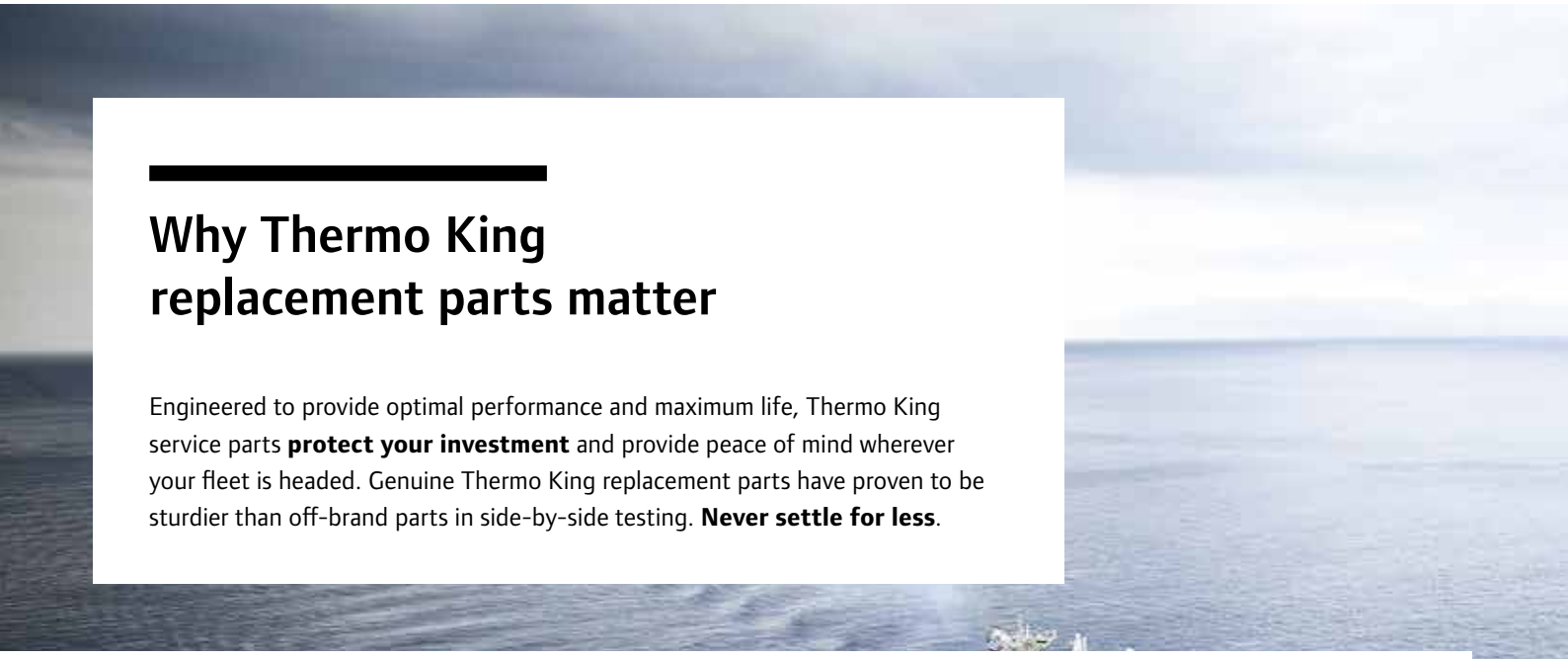
EVAPORATOR AIRFLOW SPECIFICATIONS SYSTEM NET HEATING CAPACITY CONDENSING

CFF	460/230V, 3 Phase, 60 Hz Power			380/190V, 3 Phase, 50 Hz Power		
	HEATING CAPACITY			HEATING CAPACITY		
	Watts	Kcal/hr	BTU/hr	Watts	Kcal/hr	BTU/hr
	5,250	4,515	17,914	3,900	3,353	13,300

System net cooling capacity with a 38°C (100°F) ambient air temperature.

Stay supported by your Thermo King dealer

The Thermo King dealer network boasts over 460 authorized service points throughout the world – all are open and available 24/7.



Why Thermo King replacement parts matter

Engineered to provide optimal performance and maximum life, Thermo King service parts **protect your investment** and provide peace of mind wherever your fleet is headed. Genuine Thermo King replacement parts have proven to be sturdier than off-brand parts in side-by-side testing. **Never settle for less**.

MONZONE®

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THERMO KING

Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport temperature control solutions. Thermo King has been providing transport temperature control solutions for a variety of applications, including trailers, truck bodies, buses, air, shipboard containers and railway cars since 1938.

For further information
europe.thermoking.com

Find your nearest dealer on
dealers.thermoking.com

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