



# TRANSPORT REFRIGERATION SOLUTIONS

FOR TODAY AND TOMORROW



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# INTRODUCING FRIGOBLOCK

## FULL ELECTRIC TRANSPORT REFRIGERATION SOLUTIONS

### POWERFUL

- OVER 40 YEARS OF FULL ELECTRICAL EXPERIENCE
- HIGHEST COOLING CAPACITY PROTECTS YOUR GOODS  
ANYTIME, ANYWHERE
- FRIGOBLOCK PORTFOLIO INCLUDES TEMPERATURE  
CONTROL SYSTEMS FOR A MULTITUDE OF APPLICATIONS

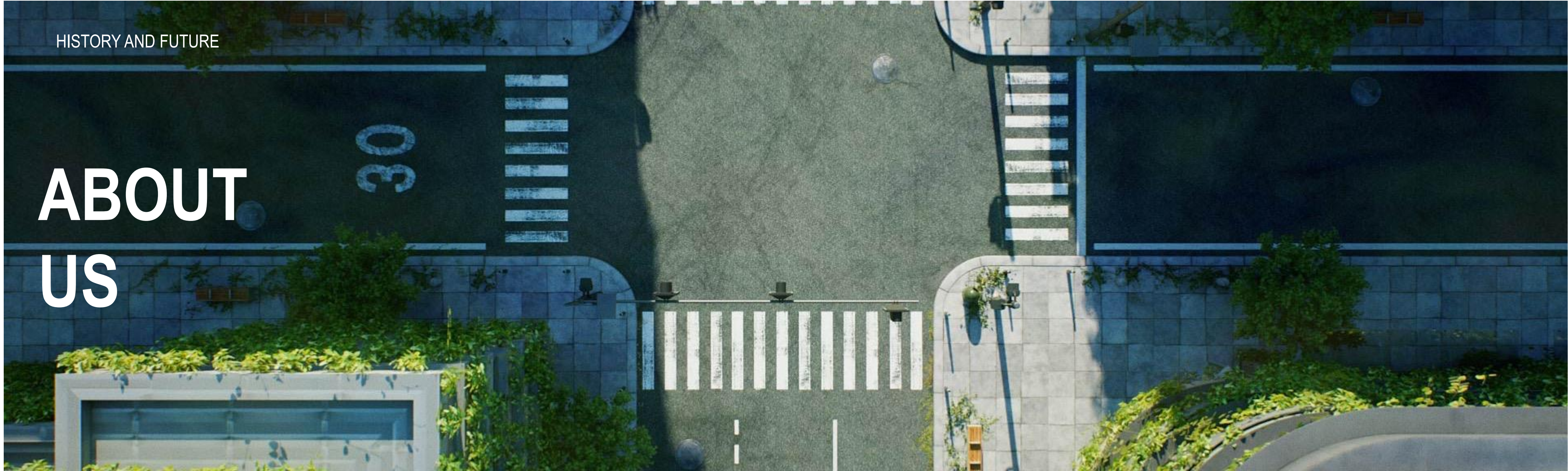
### HIGHLY EFFICIENT

- SMART INVERTER CONTROL AND ENERGY MANAGEMENT
- DO MORE WITH LESS: HIGH PERFORMANCE WITH LOW  
FUEL CONSUMPTION
- LOWEST DRIVING RANGE IMPACT FOR ELECTRIC VEHICLE  
APPLICATIONS

### CLEAN

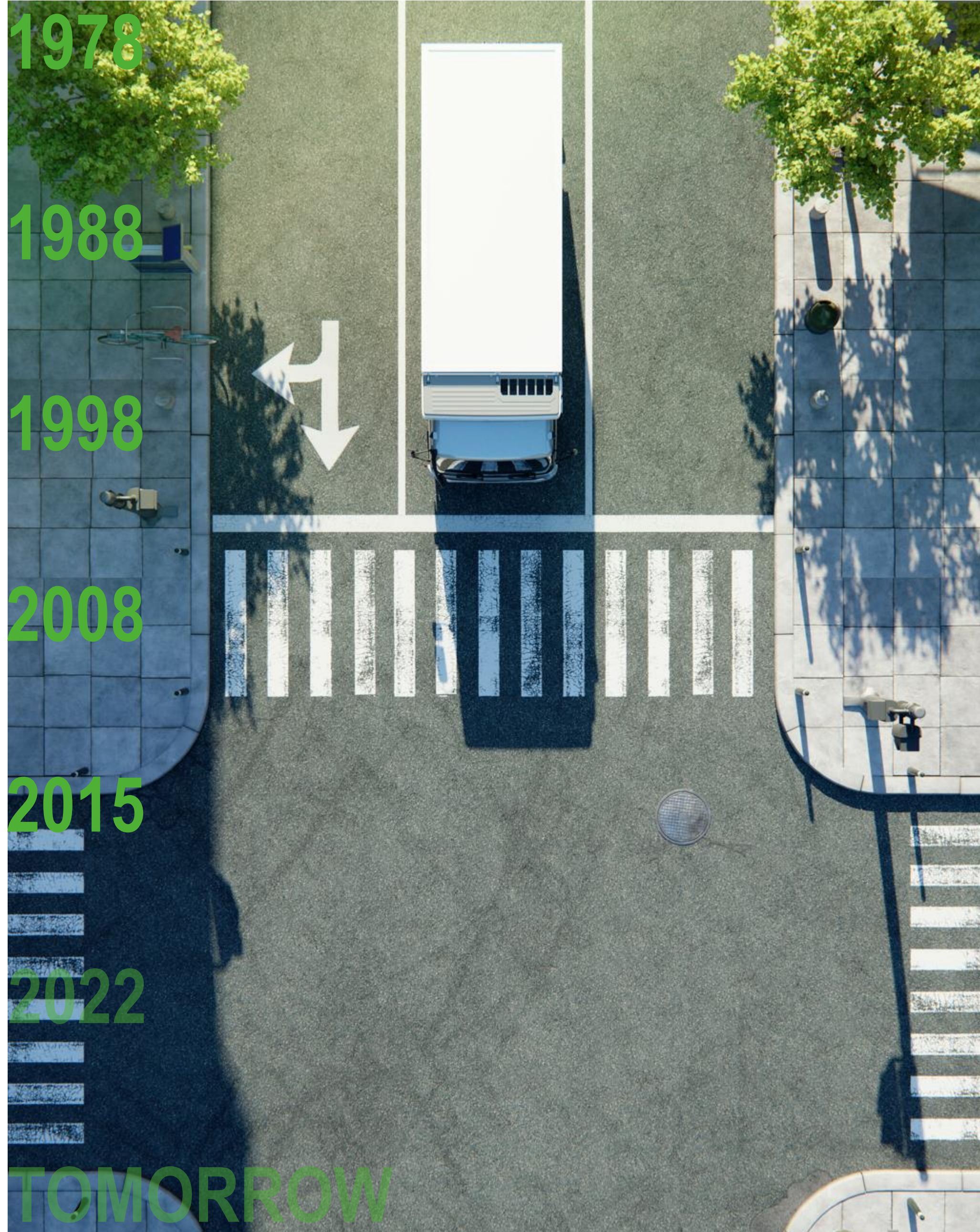
- ENVIRONMENTALLY FRIENDLY
- OUR ELECTRIC SOLUTIONS PREPARE YOU FOR CURRENT  
AND FUTURE REGULATIONS
- READY TO ENTER ZERO EMISSION ZONES

# ABOUT US



**FRIGOBLOCK IS THE PIONEER IN ELECTRIC TRANSPORT REFRIGERATION  
AND HAS SET THE STANDARD FOR MORE THAN 40 YEARS**





## ABOUT US - HISTORY

## NUMEROUS INNOVATIONS AND DEVELOPMENTS

**1978**

FRIGOBLOCK GMBH WAS FOUNDED & DEVELOPED INTO A LEADING MANUFACTURER OF FULL ELECTRIC TRANSPORT REFRIGERATION UNITS IN GERMANY

**1984**

FRIGOBLOCK FIRST MANUFACTURER OF MULTI TEMP SOLUTIONS

**2013**

LAUNCH OF NEW INVERTER TECHNOLOGY

**2014**

FIRST BATTERY ELECTRICAL TRUCK

**2015**

FRIGOBLOCK BECAME PART OF TRANE TECHNOLOGIES

**2018**

LAUNCH OF ENVIRODRIVE TECHNOLOGY TO POWER HYBRID DIESEL UNITS

**2022**

LAUNCH OF NEW ELECTRIFIED PRODUCT RANGE



ABOUT US – TODAY, TOMORROW

## FRIGOBLOCK TODAY

**Today**, FRIGOBLOCK – as portfolio brand of Thermo King - is the leading European supplier of full electric transport refrigeration units.

**Today**, there are over 40,000 FRIGOBLOCK full electric transport refrigeration units on the road providing faultless service to customers throughout Europe.

**Today**, these units are serviced and maintained by a network of over 500 professional partners providing service to FRIGOBLOCK customers and ensuring a matchless level of availability to end users.

**FRIGOBLOCK – A SYNONYM FOR FOCUS ON CUSTOMERS,  
PERFORMANCE, RELIABILITY, ECONOMY AND ENVIRONMENTAL  
RESPONSIBILITY.**

# DISCOVER THE RANGE





## FK SERIES

- FRONT WALL MOUNTED UNIT, IDEAL FOR RIGID TRUCK APPLICATIONS
- INTEGRATED EVAPORATOR INCREASES LOADING HEIGHT
- MEETS HIGH DEMANDS OF MULTI DROP DISTRIBUTION
- AVAILABLE IN SINGLE AND MULTI TEMPERATURE
- TELEMATICS OPTIONAL
- ALSO AVAILABLE AS FK*i* SERIES, WITH INTEGRATED INVERTER

[DISCOVER THE FK SERIES](#)






# FK SERIES

## FOR RIGIDS

- HIGH EFFICIENCY
- HIGHEST COOLING CAPACITY
- UP TO 50% LESS FUEL CONSUMPTION
- INTEGRATED EVAPORATOR, NOT INTERFERING THE CARGO SPACE
- HYDRAULIC TILTING MECHANISM SAVES UP TO 300 MM TOTAL HEIGHT
- MULTIPLE COMPARTMENT COMBINATIONS POSSIBLE



## FKi SERIES

- FRONT WALL MOUNTED UNIT, IDEAL FOR RIGID TRUCK APPLICATIONS
- INTEGRATED INVERTER TECHNOLOGY
- MULTI TEMPERATURE UNIT FOR LONGITUDINAL COMPARTMENTS
- 2 INTEGRATED EVAPORATORS
- INDEPENDENT SPEED CONTROL (FAN MOTORS AND COMPRESSOR)
- SILENT OPERATION  Piek
- TELEMATICS OPTIONAL
- OPTIONAL ADDITIONAL REMOTE EVAPORATORS
- DESIGNED FOR DIRECT CONNECTION TO BATTERY ELECTRIC VEHICLES

[DISCOVER THE FK SERIES](#)



## EK SERIES

- UNDERMOUNT SPLIT REFRIGERATION TRANSPORT SOLUTION
- COMBINATION OF EK CONDENSER AND A RE SERIES EVAPORATOR FOR SINGLE AND MULTI TEMPERATURE APPLICATIONS
- IDEAL FOR LOW-HEIGHT TRUCK BODIES OR THROUGH-LOADING TRAILERS
- MOST COMPACT UNDERMOUNT SOLUTION
- LIGHTWEIGHT
- TELEMATICS OPTIONAL

## DK SERIES

- ROOF MOUNTED SINGLE TEMPERATURE HOST UNIT
- ALTERNATIVE SPECIAL SOLUTION FOR RESTRICTED TRUCK SPACE
- BENEFIT OF ALL SPECIFICATIONS AS IN THE EK SERIES

[DISCOVER THE EK/DK SERIES](#)



# EK/DK SERIES

## UNDERMOUNT & ROOF-INTEGRATED SPLIT REFRIGERATION UNITS

- HIGH EFFICIENCY
- HIGHEST COOLING CAPACITY
- UP TO 50% LESS FUEL CONSUMPTION
- LIGHT WEIGHT AND COMPACT DESIGN
- ULTRA-SLIM EVAPORATORS ALLOW YOU TO MAXIMISE CARGO SPACE
- MULTIPLE COMPARTMENT COMBINATIONS POSSIBLE ON EK SERIES



## HK SERIES

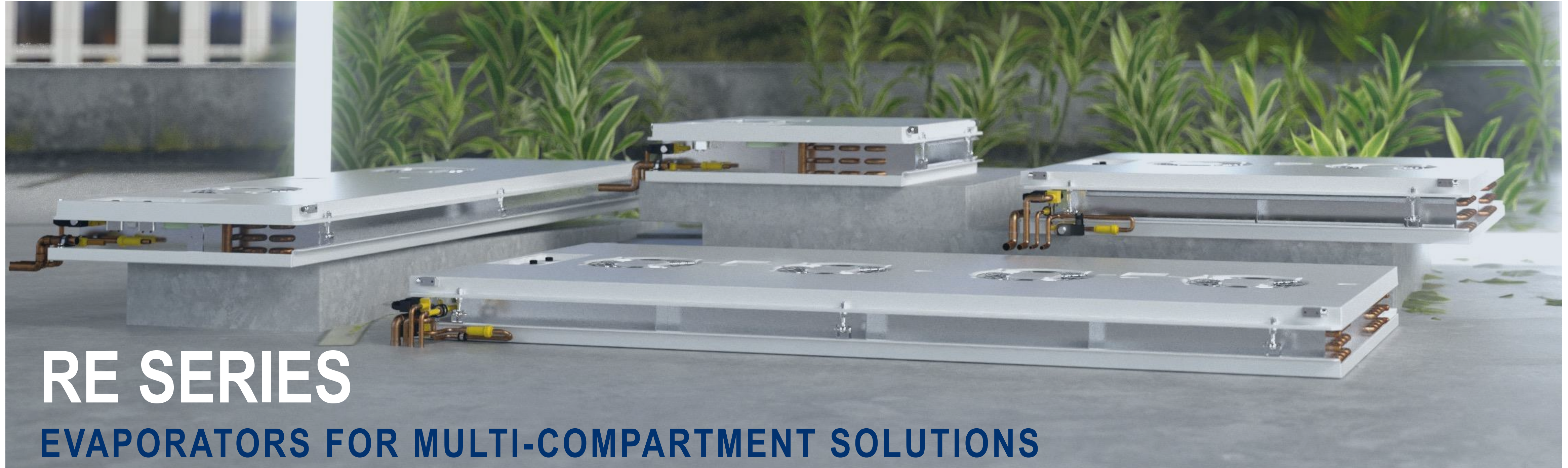
- FRONT WALL MOUNTED REFRIGERATION UNIT
- FOR DRAWBAR COMBINATIONS AND SEMI-TRAILERS
- UP TO 50% WEIGHT REDUCTION COMPARED TO CONVENTIONAL UNITS
- EASE OF INSTALLATION AND MAINTENANCE
- HINGE OPENING FOR FULL ACCESSIBILITY, EVEN WHEN THE TRAILER IS FULLY LOADED
- TELEMATICS OPTIONAL

[DISCOVER THE HK SERIES](#)

# HK SERIES

## FOR SEMI-TRAILERS AND DRAWBAR COMBINATIONS

- HIGH EFFICIENCY
- HIGHEST ELECTRIC COOLING CAPACITY
- UP TO 50% LESS FUEL CONSUMPTION
- LIGHT WEIGHT AND COMPACT DESIGN
- MULTIPLE COMPARTMENT COMBINATIONS POSSIBLE WITH REMOTE EVAPORATORS



# RE SERIES

## EVAPORATORS FOR MULTI-COMPARTMENT SOLUTIONS

- COMPACT DESIGN ALLOWS FOR OPTIMUM LOAD SPACE
- USE IN SPLIT COMBINATION WITH EK AND DK SERIES
- USE IN ADDITIONAL ZONES IN MULTI-COMPARTMENT FK AND HK SERIES
- WIDE RANGE, INCLUDING DIFFERENT DIMENSIONS
- HIGH AIRFLOW WITH SINGLE AND DUAL OUTPUT



**CLEAN AND EFFICIENT ELECTRIC SOLUTIONS COMBINED WITH THE POWER OF FRIGOBLOCK  
ALTERNATOR AND INVERTER TECHNOLOGY MAKES FRIGOBLOCK'S COOLING SYSTEMS SO  
COST-EFFICIENT**



# FUTURE PROOF CONFIGURATIONS

DRIVE

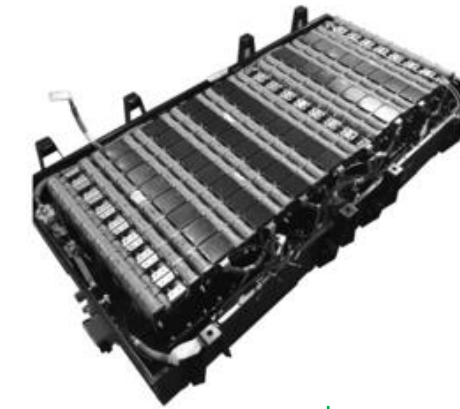
ALTERNATOR

INVERTER

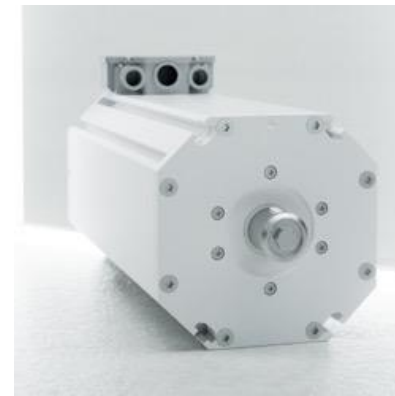
REFRIGERATION UNIT



TRUCK ENGINE



BATTERY E-TRUCK



WATER COOLED ASYNCHRONOUS AW ALTERNATOR



INVERTER FILTER



FK SERIES



HK SERIES



EK/DK SERIES



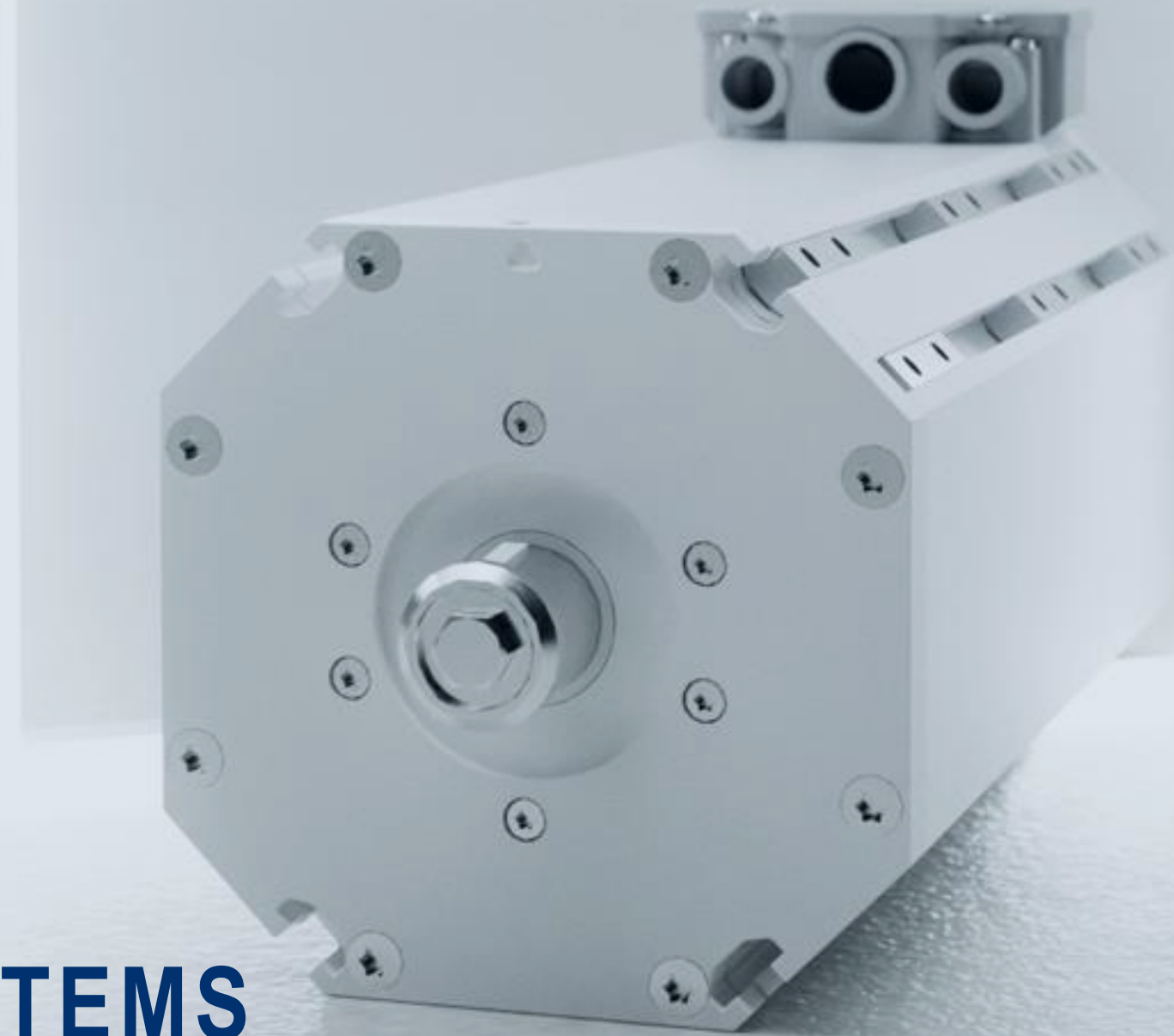
HYBRID



FK 25 i

# ALTERNATORS

## 3-PHASE ALTERNATOR SYSTEMS



- SINCE 1978, FRIGOBLOCK IS THE LEADING PRODUCER OF ALTERNATOR DRIVE SYSTEMS APPROVED BY LEADING TRUCK MANUFACTURERS FOR DIESEL AND GAS COMBUSTION ENGINES
- COMPACT DESIGN AND LIGHT WEIGHT
- SMOOTH BELTDRIVE THANKS TO SOFT START
- LOW MAINTENANCE
- MOST EFFICIENT TECHNOLOGY TO TRANSFER TRUCK MECHANICAL ENERGY TO ELECTRICAL ENERGY

# INVERTER FILTER

## UNIQUE INVERTER FILTER TECHNOLOGY FOR TRANSPORT REFRIGERATION



- INVERTER TECHNOLOGY WITH MULTIPLE OUTPUTS
- INCREASED COOLING CAPACITY
- HIGH FLEXIBILITY OFFERING BROAD FREQUENCY RANGE
- POSSIBLE TO SIMULTANEOUSLY POWER TRUCK AND TRAILER UNIT
- SOFT START OF THE REEFER UNIT FOR INCREASED UNIT LIFE CYCLE
- DIFFERENT OPERATING PROFILES TO MAXIMISE COOLING EFFICIENCY
- OPTIMISED POWER CONTROL REGARDLESS OF VEHICLE ENGINE SPEED
- SUITABLE POWER SOURCE FOR HYBRID SOLUTIONS

BENEFITS

# BENEFITS

## SAFE TRANSPORT, SAVE COST AND STRONG PERFORMANCE

WHAT MAKES FRIGOBLOCK'S COOLING TECHNOLOGY SO BENEFICIAL?

IT'S THE UNIQUE MIX OF SMART DESIGN CHOICES, CLEAN & EFFICIENT ELECTRIC SOLUTIONS PLUS THE POWER OF FRIGOBLOCK INVERTER TECHNOLOGY.

## IT'S SMALL CHANGES, WITH BIG RESULTS.

# SUSTAINABILITY – TYPICALLY FRIGOBLOCK

FRIGOBLOCK full electric solutions are the most powerful and green refrigeration units in the market. Our refrigeration systems have no direct pollution emissions in operation with no direct CO<sub>2</sub> emissions from the unit.

The combination of the direct alternator drive, large heat exchange surfaces and innovative control system makes FRIGOBLOCK an outstanding example of efficiency.

## FUTURE WAY OF TRANSPORT INNOVATION THAT'S YEARS AHEAD OF THE CURVE

- Our commitment to future-proofing our range and supporting technology to reduce emissions ensures that FRIGOBLOCK units are fully mountable on battery electrical and fuel cell trucks.
- A direct connection to the same battery that powers the electrical truck ensures that no additional components are required and installation is simple and cost effective.
- Better still, this configuration offers the same cooling capacity as alternator or diesel-powered solutions.
- FRIGOBLOCK is the leading manufacturer and has been working with all major vehicle OEMs, established upfitters and start-up companies since 2014.



# FRIGOBLOCK CONNECTIVITY

- Connected Solutions is a technology by Thermo King designed to deliver information that matters to you.
- Putting this data to work gives you the ability to track and trace individual deliveries across your fleet.
- You'll be able to demonstrate temperature levels, meet regulatory requirements and respond instantly to new challenges.



FRIGOBLOCK

FORWARD THINKING

