

Ce-SERIES

— delivering temperature sensitive cargo in small vehicles —

SINGLE TEMPERATURE REFRIGERATION SOLUTIONS
FOR SMALL TRUCKS & VANS

Ce-Series

Market leading performance for trucks and vans

The Ce-Series provides the ideal solution for operators delivering temperature sensitive cargo in small vehicles. There are four road-only models to suit vehicle bodies up to 34 m³.

Each model in the range offers superior flexibility not only to its predecessor but also to any of its competitors. The Ce-Series is perfectly suited to the rigorous demands of multi-drop distribution runs, even when the outside temperature reaches extreme highs or lows. Faster temperature pull-down means quicker recovery from door openings and better cargo protection. An all-new in-cab controller ensures easy and error-free operation.

- evolution and expertise
- exceptional performance
- extreme temperature capability
- easy to use, service and repair

Product overview

MODEL	COMPRESSOR	CONDENSER	EVAPORATOR	CONTROLLER
C-150e	 QP08	 C-150e Condenser	 ES100e Ultra Slim Evap	 New CSR
C-250e	 QP13	 C-250e Condenser	 ES200e Ultra Slim Evap	 New CSR
C-350e	 QP15	 C-350e Condenser	 ES300e Ultra Slim Evap	 New CSR
C-450e	 QP16	 C-450e Condenser	 ES450e Ultra Slim Evap	 New CSR

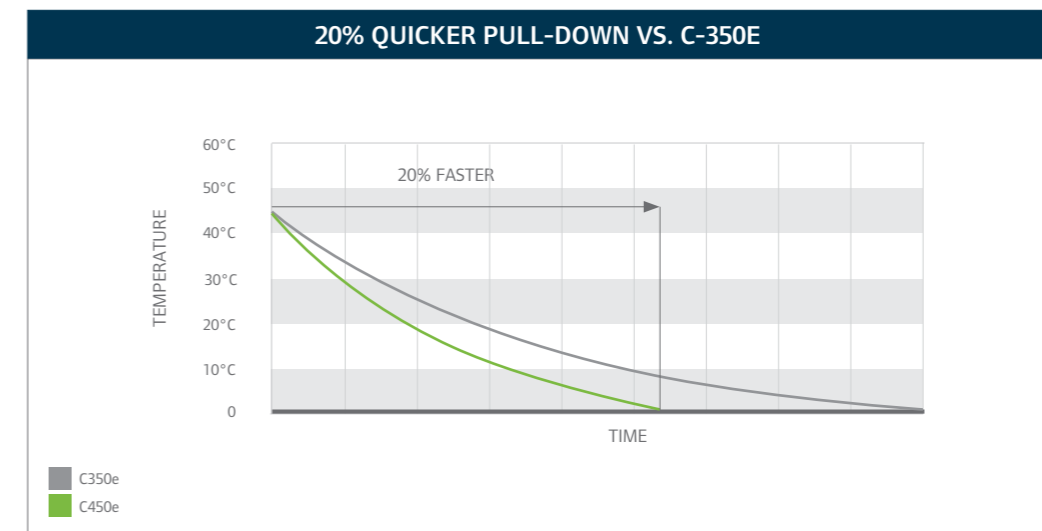
New in the range: C-450e

New product features



New in the range: C-450e, designed for higher performance

- Increasing demand for larger vans and boxes
- Quicker pull-down
- Higher airflow
- Higher capacity
- Higher condensing capacity
- Light and compact condenser section design
- Reduced weight, reduced refrigerant charge
- Increased efficiency and sustainability
- Increased heating performance
- Suitable for extreme ambient conditions



All new Ce Smart Reefer (CSR) In-Cab Controller

From the operator's viewpoint, the interface with the refrigeration system must be both intuitive and informative. Thermo King has designed the new, easy to use CSR in-cab to meet these criteria while being smart enough to optimise unit performance and ensure total load protection.



Features

- Durable and reliable in extreme temperatures up to 75°C
- User friendly and compact
- Flexible and modular
- Microprocessor intelligence
- Display protected against moisture
- Soft starting to reduce peak battery demands and increase compressor life
- "Limp home" function to allow operation without any display
- Discrete design to complement vehicle dashboard

Functions

- Fully adjustable set point range from 22°C to -32°C (R-452a)
- Fully adjustable set point range from 22°C to -10°C (R-134a + Defrost)
- Fully adjustable set point range from 22°C to 0°C (R-134a)
- Heat, cool and defrost symbols
- Easily understandable symbols and alarm codes
- Manual and automatic defrost
- Hour metres to record operation times
- Battery voltage check
- Optional dashboard mount kit for CSR

Features and options

FEATURES AND OPTIONS	C-150e C-250e C-350e C-450e	C-150e 10 C-250e 10 C-350e 10 C-450e 10	C-150e MAX 30 C-250e MAX 30 C-350e MAX 30 C-450e MAX 30
UNIT CONFIGURATION			
Refrigerant	R-134a	R-134a	R-452a
Defrost	NO	YES	YES
Heating	NO	NO	YES
LIFE COST MANAGEMENT			
ThermoKare Service Contract	⊘	⊘	⊘
DATA CAPTURE & COMMUNICATIONS			
Touch Print	⊘	⊘	⊘
Tracking Advanced*	⊘	⊘	⊘
TRACK AND TRACE			
Tracking Light	⊘	⊘	⊘
Tracking Basic	⊘	⊘	⊘
CUSTOMIZATION			
Hose Cover	⊘	⊘	⊘
CSR Dashboard HMI Holder	⊘	⊘	⊘
Snow Cover**	⊘	⊘	⊘
Kit Hoses Large	⊘	⊘	⊘
Kit Bumper Roof Mounting	⊘	⊘	⊘
Kit Swivel Manifold	⊘	⊘	⊘
Kit Fitting Hoses 90°	⊘	⊘	⊘

* Requires data logger **Snow Cover not available for C-450e
 ⊘ Standard configuration ⊘ Factory supplied option ⊘ Dealer supplied option

ThermoKare

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

New TouchPrint 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

Tracking Light

An economical and reliable solution to monitor your valuable load. Tracking Light offers you constant monitoring of your cargo temperature or fuel and a direct connection to door switches for increased security. This geo-localization device includes also a 3-axis movement sensor to monitor driver behaviour and extensive analysis and reporting functions.

Tracking Basic

A simple and independent device to track and trace your goods on the move. Tracking Basic with its internal battery records position at street level at regular interval. This compact but powerful GPRS/GPS device can be installed on any movable asset to prevent theft and misuse.

Hose Covers

Full protection of hoses and cables against climate extremes while on the road. Aesthetically designed and exceptionally durable. User friendly installation. (Only for chassis installations. Not suitable for vans.)

CSR Dashboard HMI Holder

Optional plastic support to locate in-cab CSR controller in an ideal location.

Snow Covers

Designed to protect the unit under extreme weather conditions. The aerodynamically designed covers prevent the accumulation of ice and snow on the fans, which can adversely affect the functioning of the unit.

Kit Hoses Large

Standard kit is equipped with 5 metres long hoses to connect road compressor and condensing section. This optional kit is suitable for larger hose routings (6 metres long).

Kit Bumper Roof Mounting

Standard kit is for nose mount installation. This optional kit includes a number of silent blocks for roof Mount installations.

Kit Swivel Manifold

Standard manifold is straight (fixed position). This optional manifold (swivel) allows connections to compressor to be adjustable.

Kit Fitting Hoses 90°

90° compressor fittings are optional in the Ce-Series.



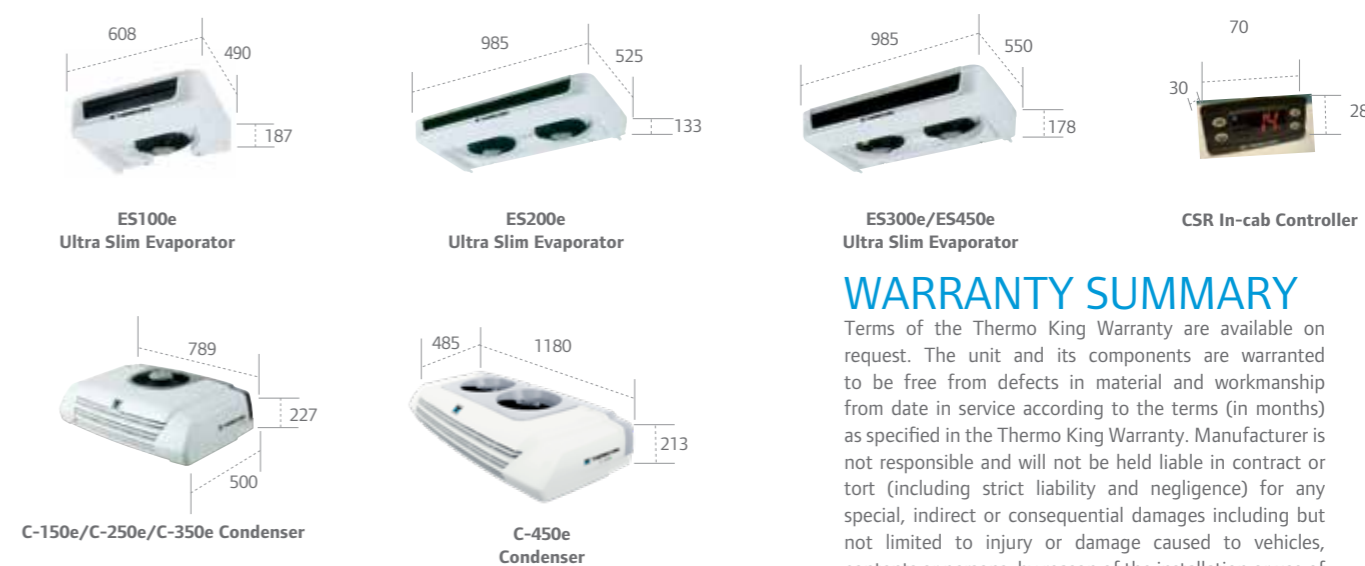
Unit selection guide

AMBIENT TEMPERATURE				
MODEL	30°C		40°C	
	m ³			
	+0/2°C	-20°C	+0/2°C	-20°C
C-150e	12	N/A	8	N/A
C-150e MAX	16	8	11	6
C-250e	18	N/A	13	N/A
C-250e MAX	22	13	15	10
C-350e	25	N/A	18	N/A
C-350e MAX	28	17	20	13
C-450e	31	N/A	22	N/A
C-450e MAX	34	21	24	16

The table above is a guide to select the right unit in the new Ce-Series to match your application. These figures are maximum vehicle volumes, calculated on road operation, at 2400 rpm compressor speed and 30°C/40°C ambient temperature. Recommendations are based on precooled loads and a K value of 0,35W/m²K is used for frozen goods (-20°C) and 0,5W/m²K for fresh goods (0°C and +6°C) for a distribution cycle of 8 hours. Recommendations are not a guarantee of performance as there are many variables to be considered. See your Thermo King dealer for complete information.

Specifications

SPECIFICATIONS		C-150e	C-250e	C-350e	C-450e				
REFRIGERATION CAPACITY: AT 30°C AMBIENT/2400 RPM									
RETURN AIR TO EVAPORATOR		0°C/30°C	-20°C/30°C	0°C/30°C	-20°C/30°C	0°C/30°C	-20°C/30°C	0°C/30°C	-20°C/30°C
Capacity on engine power	R-134a (W)	1665	N/A	2255	N/A	2965	N/A	3315	N/A
Capacity on engine power	R-452a (W)	2080	1090	2770	1460	3330	1840	4430	2335
HEATING CAPACITY: AT -18°C AMBIENT/2400 RPM									
RETURN AIR TO EVAPORATOR		+18°C/-18°C		+18°C/-18°C		+18°C/-18°C		+18°C/-18°C	
Capacity on engine power	R-452a (W)	1900		2800		3100		3800	
EVAPORATOR FAN PERFORMANCE									
		ES100E ULTRA SLIM EVAPORATOR	ES200E ULTRA SLIM EVAPORATOR	ES300E ULTRA SLIM EVAPORATOR	ES450E ULTRA SLIM EVAPORATOR				
Airflow volume	m ³ /h	745	1100	1400	1650				
WEIGHT									
Condenser	kg	23	23	23	31				
Evaporator	kg	8.5	13	18	18				
COMPRESSOR: MAX RECOMMENDED SPEED 3000 RPM									
Model		QP08	QP13	QP15	QP16				
Displacement	cc	82	131	146.7	163				
Number of cylinders		6	6	6	6				
ELECTRIC MOTOR									
dc voltage options									
Total current consumption on the road		12 Vdc: 16 A 24 Vdc: 8 A	12 Vdc: 21 A 24 Vdc: 10.5 A	12 Vdc: 21 A 24 Vdc: 10.5 A	12 Vdc: 35 A 24 Vdc: 19 A				
REFRIGERANT:									
Charge	R-134a kg	0.62	0.95	1.2	1.2				
Charge	R-452a kg	0.62	0.95	1.2	1.2				
DEFROST									
	R134a/R-452a	Automatic hot gas defrost							



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.



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, please contact:

europe.thermoking.com

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