

C-Series

Reliable protection for fresh and frozen cargo

SINGLE TEMPERATURE REFRIGERATION SOLUTIONS FOR SMALL, MEDIUM AND LARGE TRUCKS & VANS



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C-Series - extended product range for small, medium and large vehicles

The C-Series is the ideal way to deliver temperature-sensitive cargo in small, medium, and large vehicles of up to 52 m³. With their superior flexibility, the units are perfectly suited to the rigorous demands of multi-drop distribution runs, even in extreme high and low ambient temperatures.

The faster temperature pull-down enables quicker recovery from door openings and better cargo protection. The user-friendly in-cab controller ensures effortless and error-free operation. C-Series models are ultra light and compact, making it possible to maximize your payload. With the introduction of new medium and large range models, there are seven road-only models available to match your exact needs.

Designed for higher performance

- Quicker temperature pull-down
- Higher airflow
- Larger condensing capacity
- Lightweight and compact design
- Reduced refrigerant charge
- Increased efficiency and sustainability
- Optimized heating performance
- Suitable for extreme ambient conditions
- 2-year warranty (unit and parts)

C-Series – Multiple Choice

C-Series for small to medium trucks: high performance, low total cost of ownership

Looking for top temperature control and reliable, powerful performance, even in demanding, multi-drop urban environments? The highly versatile C-Series is THE solution you need when you want an efficient and compact refrigeration unit.

The C-Series stays chilled even in extreme high and low ambient temperature situations*. In fact, because we know the ambient temperatures determines the unit you choose, Thermo King has created a series of MAX 10 versions. This includes a version for regions that don't require heating, and less costly versions with a simplified refrigeration circuit.

* Temperature range from -30°C to +55°C

You want highly energy efficient and ultralight equipment? The C-Series range has the model to suit your needs:

- No defrost models
- Heating and cooling models
- Cooling only models



C-150 to C-350 Product features

POWERFUL ROAD COMPRESSOR

- Widely available drive kits
- QP16/TM16 standard across the range
- Proven reliability and robustness
- Available in 2 A/Double A and Poly V8/PV8 belt configurations

USER FRIENDLY CONTROLLER

- Intuitive design for easy use
- Microprocessor intelligence
- Display protected against moisture

C-Series for medium to large trucks: the best just got bigger.

The C-Series range includes optimal single-temperature control solutions for large trucks, up to an impressive 52 m³. Naturally, our C-450 and C-550, C-650 and C-750 models have everything you'd expect from Thermo King's C-Series, except that they are bigger and more powerful.

Large condensing capacity? Check. Lightweight? Check. Compact design? Check.

If you want a highly efficient and sustainable unit for both frozen and fresh applications, the new bigger and better C-Series range is the ideal solution for you.



C-450 to C-750 Product features

HIGH CAPACITY CONDENSER FOR LARGE TRUCKS

- Aluminium microchannel heat exchanger to reduce weight and refrigerant charge
- Two condensing fans to improve condensing capacity and design redundancy
- Robust control board/belt configurations

Options

Standard configuration

THERMOKARE

ThermoKare offers a complete selection of service contract solutions to help manage your maintenance costs and your total cost of ownership (TCO).

NEW TOUCHLOG DATA CAPTURE

The user-friendly temperature recorders capture relevant data ensure the availability of delivery and journey reports. Approved to EN 12830, CE Mark, and IP-65 standards. Requires data logger.

TRACKING

Thermo King's TrackKing telematics solutions offer an economical and reliable way to monitor and control the refrigeration unit remotely to keep your valuable loads safe.

Additionally, TrackKing helps you to increase truck asset utilization, reduce operating costs, increase customer satisfaction, improve security, and lower insurance risks.

Access to TrackKing data requires the installation of a telematics device.

Factory-supplied options

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.)

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. Snow Cover not available for C-450, C-550, C-650 and C-750.

LARGE HOSES KIT

The 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). The C-550, C-650 and C-750 are provided with a 6m long hose kit as default.

CSR DASHBOARD HMI HOLDER

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

BUMPER ROOF MOUNTING KIT

The standard kit is for nose-mount installation. This optional kit includes a number of silent blocks for roof-mount installations.

SWIVEL MANIFOLD KIT

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

KIT FITTING HOSES 90°

The C-Series units are shipped without any road compressor fittings as default. 90° road compressor fittings are optionally available from the factory.



Control at your fingertips



From the operator's viewpoint, the interface with the refrigeration system must be both intuitive and informative. The easy-to-use C-Smart Reefer (CSR) in-cab controller optimizes unit performance and ensures total load protection by delivering information to the operator in an intuitive way. A dashboard holder for the in-cab CSR is available as an option enabling the operator to position the controller in multiple places.

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

- 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

FULLY ADJUSTABLE SET POINT RANGE

Refrigerant	R-404a / R-452a	R-134a + Defrost	R-134a
Set point	22 °C to -32 °C	22 °C to -10 °C	22 °C to 0 °C

Versions

VERSION	0 VERSION (NO DEFROST)	10 VERSION	MAX 10 VERSION	MAX 30 VERSION
	C-150 TO C-650	C-150 10 TO C-650 10	C-150 MAX 10 TO C-750 MAX 10	C-150 MAX 30 TO C-750 MAX 30
Unit Configuration				
Refrigerant	R-134A	R-134A	R-404A / R-452A	R-404A / R-452A
Voltage	12V / 24V	12V / 24V	12V / 24V	12V / 24V
Defrost	No	Yes	Yes	Yes
Heating	No	No	No	No
Standby	No	No	No	No



Technical Specifications

MODELS		C-150	C-250	C-350			
PERFORMANCE							
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
Capacity on engine power	R-134a (W)	1665	N/A	2255	N/A	2965	N/A
Capacity on engine power	R-452a (W)	2080	1090	2770	1460	3330	1840
Heating capacity: at -18°C ambient/2400 rpm (max 30 units only)							
Return air to evaporator		+18 °C/-18 °C		+18 °C/-18 °C		+18 °C/-18 °C	
Capacity on engine power	R-452A (W)	1900		2800		3100	
Evaporator fan performance							
		ES100	ES200	ES300			
Airflow volume	m³/h	866	1241	1379			
TECHNICAL DATA							
Weight							
Condenser	kg	23	23	23			
Evaporator	kg	8.5	13	18			
Total weight	kg	32	37	42			
Dimensions							
Condenser (w x d x h)	mm	789 x 500 x 227					
Evaporator (w x d x h)	mm	608 x 490 x 187	985 x 525 x 133	985 x 550 x 178			
Compressor: MAX recommended speed 3000 rpm							
Model		TK08	QP13	QP15			
Displacement	cc	82	131	147			
Number of cylinders		6	6	6			
Dc voltage current draw							
Total current consumption on the road	12 VDC (A)	16.0	21.0	21.0			
	24 V DC (A)	8.0	10.5	10.5			
Refrigerant charge							
R-134a	kg	0.6	1.0	1.2			
R-404a / R-452a	kg	0.6	1.0	1.2			
Defrost							
R134a / R-452a	kg	Automatic hot gas defrost					



	C-450	C-550	C-650	C-750				
PERFORMANCE								
Refrigeration capacity: at 30 °C ambient/2400 rpm								
	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
	3 315	N/A	3 790	N/A	4 200	N/A	N/A	N/A
	4 430	2 335	5 180	2 525	6 030	3 000	6 820	3 735
Heating capacity: at -18°C ambient/2400 rpm (max 30 units only)								
	+18 °C/-18 °C		+18 °C/-18 °C		+18 °C/-18 °C		+18 °C/-18 °C	
	3 800		4 000		4 180		4 350	
	ES300	ES400	ES500	ES600				
	1721	2 040	2 682	2 956				
TECHNICAL DATA								
Weight								
	31	31	31	31				
	18	20	29	31				
	50	59	69	71				
Dimensions								
	1 180 x 485 x 213	1 180 x 485 x 213	1 180 x 485 x 213	1 180 x 485 x 213				
	985 x 550 x 178	1 080 x 592 x 238	1 336 x 733 x 226	1 330 x 592 x 240				
Compressor: MAX recommended speed 3000 rpm								
	QP16							
	163							
	6							
Dc voltage current draw								
	35.0	45.0	53.0	53.0				
	19.0	22.5	26.5	26.5				
Refrigerant charge								
	1.2	1.3	1.6	N/A				
	1.2	1.6	1.7	1.9				
Defrost								
	Automatic hot gas defrost							



Unit selection guide

MODEL	AMBIENT TEMPERATURE			
	30 °C		40 °C	
	+0/2 °C	-20 °C	+0/2 °C	-20 °C
R-134a				
C-150	12 m ³	N/A	8 m ³	N/A
C-250	18 m ³	N/A	13 m ³	N/A
C-350	25 m ³	N/A	18 m ³	N/A
C-450	31 m ³	N/A	22 m ³	N/A
C-550	32 m ³	N/A	21 m ³	N/A
C-650	35 m ³	N/A	23 m ³	N/A
R-404a / R-452a				
C-150 MAX	16 m ³	8 m ³	11 m ³	6 m ³
C-250 MAX	22 m ³	13 m ³	15 m ³	10 m ³
C-350 MAX	28 m ³	17 m ³	20 m ³	13 m ³
C-450 MAX	34 m ³	21 m ³	24 m ³	16 m ³
C-550 MAX	40 m ³	24 m ³	32 m ³	18 m ³
C-650 MAX	47 m ³	30 m ³	38 m ³	22 m ³
C-750 MAX	52 m ³	39 m ³	40 m ³	28 m ³

The table above is a guide to select the right unit in the new C-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 0,35 W/m²K is used for frozen goods (-20 °C) and 0,5 W/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.



C-150 to C-350
Up To 28 m³



C-450 to C-650
Up To 47 m³



C-550 to C-750
Up To 52 m³

Dimensions

CONDENSER UNITS



C-150/C-250/C-350

500 mm x 789 mm x 227 mm*



C-450/C-550/C-650/C-750

485 mm x 1 180 mm x 213 mm*

CONTROLLER



CSR In-cab Controller

30 mm x 70 mm x 28 mm*

EVAPORATORS



**ES100
Ultra Slim Evaporator**

490 mm x 608 mm x 187 mm*



**ES200
Ultra Slim Evaporator**

525 mm x 985 mm x 133 mm*



**ES300
Ultra Slim Evaporator**

550 mm x 985 mm x 178 mm*



**ES400
Evaporator**

592 mm x 1 080 mm x 238 mm*



**ES500
Ultra Slim Evaporator**

733 mm x 1 336 mm x 226 mm*



**ES600
Evaporator**

592 mm x 1 330 mm x 240 mm*

*Depth x Width x Height

Warranty conditions:

Thermo King warrants the new product delivered will be free of defects in material and workmanship for the period of time specified in the applicable warranties. Specific terms of the Thermo King warranty are available on request.

Contact your nearest dealer

The Thermo King dealer network boasts over 500 authorized service points in 75 countries that are open and available 24/7.



Performance-enhancing services & solutions



Mix and max.

With a complete range of smart services and digital solutions, Thermo King helps you **maximize your uptime, sustainability, savings, and control** throughout your operations. From industry-leading telematics to customizable service agreements and performance-enhancing upgrades. **Explore the building blocks of our integrated portfolio right below.**



Don't settle for less, when you can take it to the max. With a complete range of smart services and digital solutions, Thermo King helps you maximize uptime, sustainability, savings and control all throughout your operations. Keep your unit performance up, and your worries down. All day, every day.

- + **MAXIMIZE YOUR UPTIME**
Avoid costly downtime and keep your units going and earning for longer.
- + **MAXIMIZE YOUR SUSTAINABILITY**
Limit your fleet's footprint and save smart on energy.
- + **MAXIMIZE YOUR SAVINGS**
Reduce service and maintenance costs, and maximize your units' residual value.
- + **MAXIMIZE YOUR CONTROL**
Monitor and maintain critical cargo quality at every step of your journey.



UPGRADES

Enhance fleet performance with a vast array of original Thermo King upgrades.



SERVICE CONTRACTS

Maximize uptime with quality maintenance, fast response times and 24/7 dealer support.



GENUINE PARTS

Avoid the costs of poor repairs and insist on **genuine replacement** and **remanufactured parts**.



Get your max at europe.thermoking.com/max-your-cool

Reliable protection for fresh and frozen cargo

– **VERSATILE OPTIONS**

Different models offer heating and cooling, just cooling, or no defrost options

– **SPACE SAVING**

The robust construction is lightweight and compact, giving you more weight allowance and space for cargo

– **HIGH AMBIENT PERFORMANCE**

The Thermo King C-Series provides steady cooling performance in high-ambient conditions, helping protect temperature-sensitive loads in demanding heat.



Thermo King – by Trane Technologies (NYSE: TT), a global climate innovator – is a worldwide leader in sustainable transport climate control solutions. We engineer and provide cutting-edge technology and solutions with sustainability, reliability, and the customer experience in mind. Thermo King has provided transport temperature control solutions for various applications, including trailers, truck bodies, buses, air, shipboard containers, and railway cars since 1938.

For further information
europe.thermoking.com

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dealers.thermoking.com

