



The New X-Series Range of Units

X-traordinary performance

- *For buses from 8 to 15 metres*
- *A range with units for all the climates of Europe, the Middle East and Asia Pacific*
- *Innovative design allows for both centre and side air return*
- *CANAIRE® controller technology inside*
- *Lightweight with high capacity*
- *Reduced refrigerant charge*





X-Series

Introducing the all-new X-Series range of units from Thermo King, specifically for bus and coach applications and designed to offer X-traordinary performance.

The new range now features the X-500[®], X-700[®], X-900[®] and the innovative X-900[®]-AdvanTech and has been manufactured to provide market-leading performance with a lightweight design, delivering outstanding value for operators.

With an innovative aluminium microchannel condenser, both the weight and refrigerant charge are reduced. The new design also incorporates a large surface area offering maximum flexibility with the option of both side and centre air return.

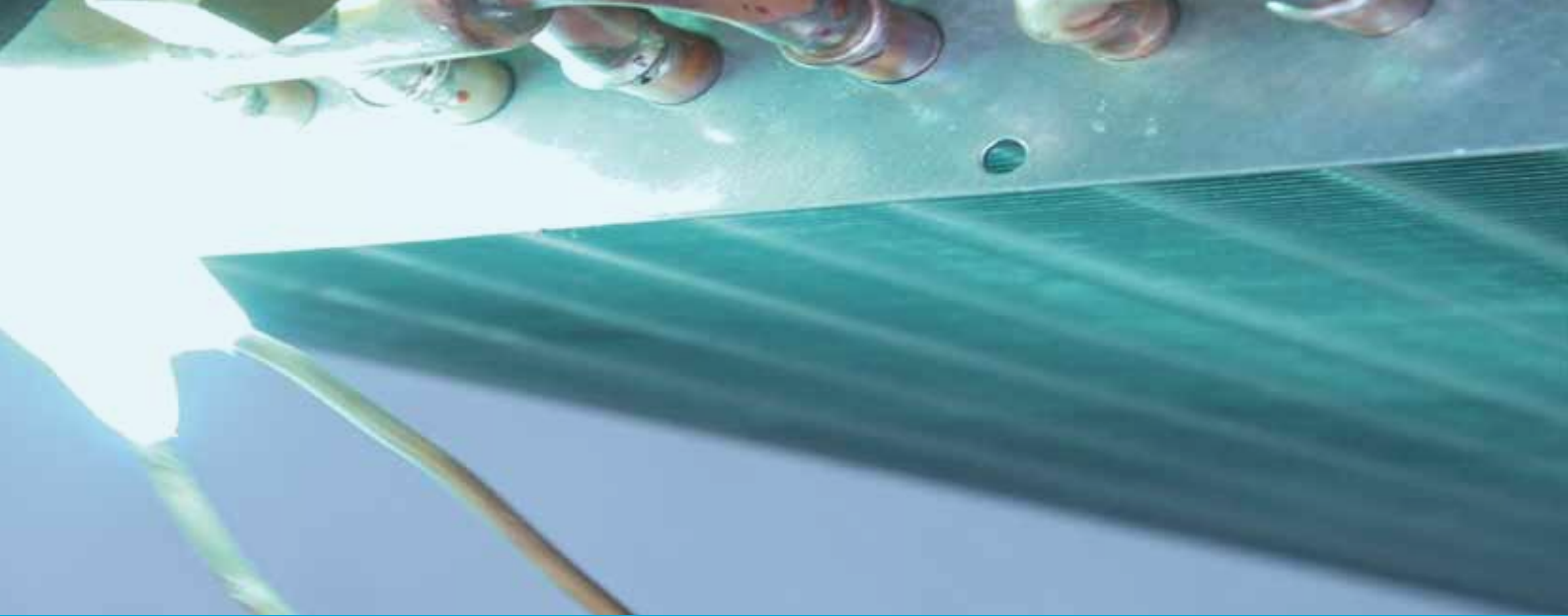
The new X-Series range has units for vehicles between 8 and 15m in length and for climates from the cold areas of Europe to the heat and humidity of India or the Middle East.

The X-Series family of units focuses on innovative green technology, and has significantly reduced weight and refrigerant charge to minimise impact on the environment.

ADVANTECH

AdvanTech, an innovative HVAC solution for buses. Customers should look out for units that include AdvanTech, Thermo King's latest technology for HVAC buses. AdvanTech reduces the total cost of ownership by limiting downtime and allowing control over the balance of comfort and the costs associated with operation. AdvanTech units are Thermo King's most energy efficient units for the capacity they deliver, which results in a dramatic reduction in fuel consumption. It is this fuel efficiency, which makes for a substantially reduced impact on the environment, which has earned AdvanTech units their green leaf logo.





Key features of the X-Series family include:

- One-piece unit
- Significantly shorter dimensions for capacity
- Lightweight
- Brazed aluminium microchannel condenser coil
- Less refrigerant
- Flexible return air design
- CANAIRE® expandable microprocessor controller with HMI options



X-500®



X-700®



X-900®



X-900® AdvanTech



X- Series specifications

Specifications	X-500°N	X-500°W	X-700°	X-900°	X-900° AdvanTech
List cooling capacity	18		27	35	35-42
Rated cooling capacity*	14.5		21	25	25-32
Heating capacity	34		39	47	47
Evaporator air flow** [m³/h]	2900 (3750)		3400 (4400)	5100 (6600)	5100 (6600)
Fresh Air [%]	20		20	20	20
Current Draw*** [A]	46 (57)		63 (74)	90 (101)	99 (110)
Dimensions [mm] (W x L x H)	1523x2200x184	1800x2200x184	1800x2200x184	1997x2587x182	1997x3050x207
Weight [kg] (model 1000)	86	90	96	136	150
Refrigerant	R-134a		R-134a	R-134a	R-407C

*Test Conditions 35/27/19

**m³/h of unit (Free Blow)

***Amp draw for unit only (Amp draw for system including clutch and pump)

Unit and compressor combinations

Specifications	X-500°	X-700°	X-900°	X-900° AdvanTech
TM21	●	●	○	○
TM31	14.5	14.8	○	○
X430	○	21	25	25 to 32

Table shows rated (35/27/19) cooling capacity of compressor and unit configurations.

- Option not available
- Available on request

Note - Contact Thermo King for information on split unit options i.e. 2 x TM21 with X-900°



GREEN – WE CARE BECAUSE YOU CARE

Thermo King is committed to developing market-leading, innovative product solutions and technologies designed to care for the environment. We continually strive to build on our green credentials and develop products that offer enhanced efficiencies and improved performance.



TOTAL PEACE OF MIND FOR YOU

Thermo King's state-of-the-art R&D centre is one of the most advanced and rigorous testing facilities in the world, ensuring that only the highest levels of quality and reliability are achieved. This ensures the continual improvement of products that are cost effective, dependable and simple to operate.



Controller: CANAIRE® or ClimAire

CANAIRE®

The X-Series features the modular CANAIRE®, a unique new HVAC control system. It can be used with the unit only, or expanded to include floor heating, driver's area and auxiliary pre-heater - all controlled from one easy-to-use HMI (human machine interface) panel. There are three other HMI options to choose from in the CANAIRE® range. The controller uses CAN (Controller Area Network) to communicate with the I/O modules for the expanded functions as well as the vehicle if required.

CANAIRE®: Controller Overview

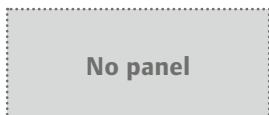


CANAIRE® controller
located in unit



Expansion node

CANAIRE®: Driver Panels (HMI's)



No Panel – Auto control with On/Off and option of set point control



Saloon Control



Panel Integrated into vehicle dash. Communication with control using CAN



Integrated Saloon, Front Box & combustion heater control.

ClimAire: the "All-in-One" Controller

ClimAire offers a cost effective controller solution. The main controller unit is incorporated in the driver panel.



ClimAire, main unit incorporated in driver panel.

Configurations	CANAIRE	CLIMAIRE 1
Saloon only	●	●
Saloon + Front box	●	○
Saloon + Floor heating and / or Front box	●	○

○ Option not available ● Option available on request



Thermo King Corporation, a business of Ingersoll Rand - the world leader in creating and sustaining safe, comfortable and energy efficient environments - was founded in 1938 and manufactures transport temperature control systems for a variety of mobile applications, including trailers, truck bodies, buses, shipboard containers and railway cars. The company operates 10 manufacturing facilities and 17 parts distribution centers worldwide. Sales and service is provided by a global dealer network of 865 independently owned companies in 75 countries.

europe.thermoking.com thermoking.com ingersollrand.com

For further information please contact: