

V- AND VX-SERIES

SUPERIOR NON-DIESEL TEMPERATURE CONTROL FOR VANS, SMALL AND LARGE TRUCKS

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Thermo King V- and VX-Series are an extensive range of refrigeration solutions for vans and trucks. The range has minimal environmental impact as the refrigeration unit compressor is driven by the vehicle engine, offering exceptionally low noise and low emissions. Many common components are shared across the range including the Direct Smart Reefer in-cab controller and modular options to suit every customer.

No matter what your business, we have a model to suit including single or dual compartment vehicles carrying at fresh, chilled or frozen temperatures.

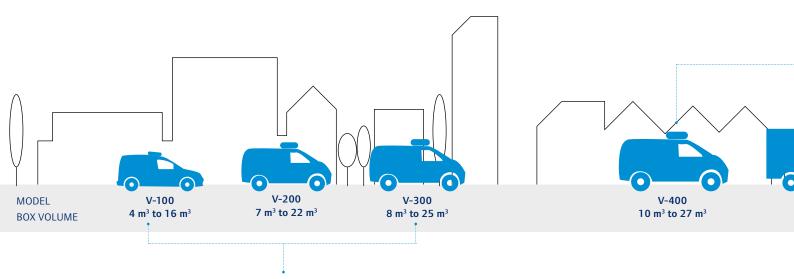


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SINGLE OR MULTI-TEMPERATURE -A SOLUTION FOR EVERY NEED

No matter what your business entails, whether you're delivering delicate flowers requiring a precise chilled environment or transporting frozen meals that need to stay rock-solid, we have a refrigerated vehicle model to perfectly suit your needs.

Our selection includes both single and dual compartment options, allowing you to optimize space and maintain optimal temperatures for your specific cargo, be it fresh, chilled, or frozen.



V-SERIES FOR SMALL TRUCKS AND VANS

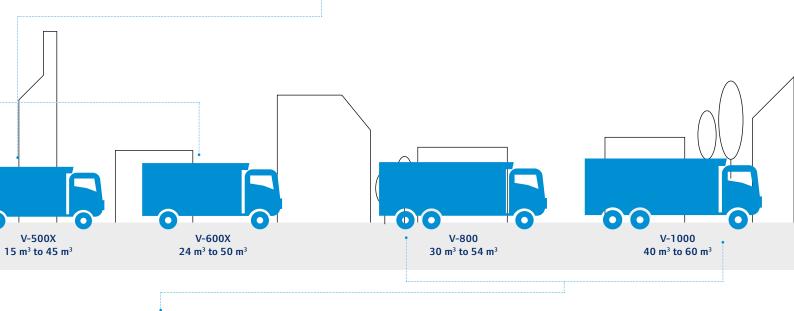
V-100, V-200s, V-200, V-300 offer the optimal temperature control solution for single and multi-temperature vans and small trucks up to 28 m^3 fresh and 21 m^3 frozen.

- Small and lightweight but powerful units with big performance.
- Slim, aerodynamic, and good looking.
- Extremely compact design to blend with small vehicle body shapes.
- Condenser section can be roof or front mounted.
- Also available as multi-temperature Spectrum version providing temperature control for two compartments.

V SERIES MEDIUM TRUCK AND VANS

V-400X, V-500X and V-600X offer the optimal temperature control solution for single and multi-temperature vans and medium trucks up to 10 m³ fresh and 50 m³ frozen.

- Increased performance both on road and stand-by operation.
- Swash plate compressor for ease of installation.
- User friendly and advanced controller Direct Smart Reefer.
- Nose, roof or recessed roof condenser unit for large vans and medium chassis cab trucks.
- Lightweight design allows for greater payload and/or reduced fuel consumption.
- Powerful airflow and cooling capacity to protect loads.
- Also available as multi-temperature Spectrum version providing temperature control for two compartments.



V SERIES LARGE TRUCK

V-800-1000 offer the optimal temperature control solution for single and multi-temperature large trucks up to 30 m³ fresh and 60 m³ frozen.

- Direct drive, non-diesel temperature control solution for operators of large trucks.
- An unbeatable exceptional performance, non-diesel, low noise, low maintenance and low weight solution.
- The most powerful unit in the vehicle-powered range, both in cooling and heating modes.
- The range has minimal environmental impact as the refrigeration unit compressor is driven by the vehicle engine, offering exceptionally low noise and low emissions.
- Compact design with high refrigeration performance to meet single and multi-temperature application needs.
- Nose mount low size and compact condenser unit for the largest trucks.
- Extremely powerful airflow to quarantee load protection.
- Also available as multi-temperature Spectrum version providing temperature control for two compartments.

V-SERIES FOR SMALL TRUCKS AND VANS

FLEXIBLE. POWERFUL. DEPENDABLE.

As Thermo King's most powerful vehicle-powered refrigeration series for both heating and cooling, the V-Series has minimal environmental impact, exceptionally low noise, and reduced emissions.

Thanks to its extensive range, the V-Series has a model to suit, with single- and multi-temperature versions for vans and small trucks up to 25 m³.

MODELS



V-100/V-200s V-200/V-300 V-200/V-300

V-200/V-300 MAX Spectrum

COST-EFFICIENT REFRIGERATION

High performance and high efficiency ensure effective temperature control and a low total cost of ownership.

EFFICIENT AND GREEN

The latest low Global Warming Potential (GWP) refrigerant is available without compromising performance.

URBAN DELIVERIES

Deliver night and day to ULEZs and LEZs thanks to the V-Series' low noise and low emissions.

INTUITIVE CONTROL

The user-friendly Direct Smart Reefer technology gives you complete control of your refrigeration from the comfort and safety of the cab.

Thermo King V-Series is an extensive range of refrigeration solutions for vans and small trucks. The range has minimal environmental impact as the refrigeration unit compressor is driven by the vehicle engine, offering exceptionally low noise and low emissions. Many common components are shared across the range including the Direct Smart Reefer in-cab controller and modular options to suit every customer.

No matter what your business, we have a model to suit including single or dual compartment vehicles carrying at fresh, chill or frozen temperatures.

NO MATTER YOUR BUSINESS, WE HAVE A SYSTEM TO SUIT Your customers demand that you are adaptable, so we gave you a system which is as flexible as you are. Choose from a wide range of units, nose mount, roof mount and recessed roof mount options for both single and multi-temperature applications.



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V-SERIES - FOR SMALL TRUCKS AND VANS



RAPID AND COST-EFFECTIVE SERVICE AND MAINTENANCE

V-Series units are designed with ease of service as a priority. Your DSR controller provides maintenance reminders and uses easy to understand alarm codes to speed up diagnosis. Lifting the condenser cover gives full access to key components while the unit is still running.

LOW NOISE AND ZERO EXHAUST EMISSIONS MEAN THAT YOU ARE WELCOME TO DELIVER ANYWHERE, ANYTIME. Urban deliveries demand people-friendly equipment so you can access your customers 24/7. By using the vehicle engine to power our compressor, you have a system which has no engine, no emissions and extremely low noise.

FASY INSTALLATION KEEPS COSTS TO A MINIMUM

To keep your initial costs down, we make installation really straightforward. Depending on the model, we provide lifting eyes, easy to access mounting holes, pre-installed Jet Cool™ compressor injection cooling and external evaporator connections.

PRIORITY PERFORMANCE FOR PRIORITY PROTECTION

Spectrum multi-temperature models feature Zone Priority which allows you to choose one compartment for maximum cooling or heating, should the application require it. With this option enabled through the controller, temperature pulldown can be up to 40% faster.



SINGLE TEMPERATURE MODELS SPECIFICATIONS

		V-1	00	V-1 MA		V-2	.00	V-2		V-2 M		V-3	300	V-3 M <i>i</i>	
EVAPORATOR		ES.	100	ES1	00	ES2	100	ES1	50	ES2	200	ES	300	ES3	00
SYSTEM NET COOLING CAPACITY	UNDER	ATP COI	NDITION	NS INCLU	IDING 3	0°C AN	IBIENT,	EUROPI	EAN ST	ANDARD)				
RETURN AIR TO EVAPORATOR	°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°0
AIR RETURN/ON THE ROAD	W	1640	650	2030	1060	2240	970	2420	1210	2765	1490	2800	1210	3520	1850
ELECTRIC STAND-BY 50 HZ	W	820	310	1260	520	1910	780	1500	710	2400	1220	2140	850	2870	1440
HEATING CAPACITY: AT -18°C AM	IBIENT/	2400 RI	PM												
ON THE ROAD SWASH PLATE COMPRESSOR	W		-	190	00	-		22	00	28	00		-	31	00
ELECTRIC STANDBY OPERATION	W		-	110	00	-		13	00	20	50		-	22	50
AIRFLOW															
AIRFLOW VOLUME @ 0 PA STATIC PRESSURE	M³/H	1 X	680	1 X 6	580	2 X 1	152	1 X 1	150	2 X 1	1152	3 X	1152	3 X 1	152
WEIGHT															
CONDENSER W/O ELECTRIC STANDBY	KG	2	5	25	5	2	5	2	5	2	5	2	!5	2	5
CONDENSER WITH ELECTRIC STANDBY	KG	4	3	70)	7	0	4	3	7	2	7	0	7	2
EVAPORATOR	KG	Ġ	Э	9	9		15		14		5	1	8	1	8
COMPRESSOR	RESSOR														
MODEL		TKO	08N	TK08N		QP	13	TKC)8N	QP	13	QF	15	QP	15
DISPLACEMENT	CC	8	2	82	2	13	31	82		131		14	6.7	146	5.7
NUMBER OF CYLINDERS		(5	6		(5	e	5	(5		6	e	j .
ELECTRIC STANDBY MOTOR															
VOLTAGE/PHASE/FREQUENCY		230/	1/150	230/1	1/50	230/ 230/ 400/ 230/ 230/	1/60 3/50 3/50	230/	1/50	230/ 400/ 230/	1/50 1/60 3/50 (3/50 (3/60	230/ 400/ 230/	71/50 71/60 73/50 73/50 73/60	230/ 230/ 400/ 230/ 230/	1/60 3/50 3/50
RATING	KW	1	.6	1.6	5	3.7 (400)/3/50)	1.	.6	3.8 (400	0/3/50)	3.7 (400	0/3/50)	3.8 (400)/3/50
REFRIGERANT															
REFRIGERANT		R-1	34A	R-404 R-45		R-1	34A	R-40 R-4!)4A/ 52A	R-1	34A	R-40 R-4!	
CHARGE	KG		0.62 1.0	10/30: 0. - 50:		10/3 20/50	D: 1.1 D: 1.35	1.	.2	10/3 20/5			1.1 1.35	10/30 20/50	
GENERIC															
CONTROLLER								DSF	RIII						
DEFROST															
DEFROST						ALITON	ATIC HO	Γ GAS DE	EDOCT	DEVEDE	CVCLE				

MULTI-TEMPERATURE MODELS SPECIFICATIONS

			V-200 MAX	SPECTRUM				
EVAPORATOR		ES100 MAX +	- ES100 MAX	ES100 MAX +	ES100N MAX*			
REFRIGERATION CAPACITY: AT 30°C AM	MBIENT							
RETURN AIR TO EVAPORATOR	°C	-20)°C	-20)°C			
CAPACITY ON ENGINE POWER	W	14	80	14	80			
CAPACITY ON ELECTRICAL STAND	W	11	10	11	10			
REFRIGERATION CAPACITY: INDIVIDUA	L COOLING CAP	PACITY						
EVAPORATOR		ES100) MAX	ES100N	N MAX*			
RETURN AIR TO EVAPORATOR		0°C	-20°C	0°C	-20°C			
CAPACITY ON ENGINE POWER	W	2370	1230	2260	1170			
CAPACITY ON ELECTRICAL STAND	W	2150	1040	2010	1010			
HEATING CAPACITY								
ON THE ROAD	W		280	00				
ELECTRIC STANDBY OPERATION	W		209	50				
AIRFLOW								
EVAPORATOR		ES100 MAX +	ES100 MAX	ES100 MAX +	ES100N MAX*			
ON HIGH SPEED ENGINE OPERATION	M³/H	69	95	69	95			
WEIGHT								
CONDENSER W/O ELECTRIC STANDBY	KG		25	5				
CONDENSER WITH ELECTRIC STANDBY	KG		7:	,				
EVAPORATOR ES100 MAX	KG		9					
COMPRESSOR								
MODEL			QP	13				
DISPLACEMENT	СС		13	1				
NUMBER OF CYLINDERS			6					
ELECTRIC STANDBY MOTOR								
VOLTAGE/PHASE/FREQUENCY		23	30/1/50 - 230/1/60 - 400/3	3/50 - 230/3/50 - 330/3/6	60			
RATING	KW		3.	3				
REFRIGERANT								
REFRIGERANT			R-404A/	R-452A				
CHARGE	KG		1.3	5				
GENERIC								
CONTROLLER			DSF	III				
DEFROST								
DEFROST			AUTOMATIC HOT	GAS DEFROST				

				V-300 MAX S	PECTRUM						
EVAPORATOR		ES150 -	+ ES150	ES150 +	ES100	ES200 +	- ES100				
REFRIGERATION CAPACITY: AT 30°C A	MBIENT										
RETURN AIR TO EVAPORATOR	°C	-20	D°C	-20	°C	-20°C					
CAPACITY ON ENGINE POWER	W	18	380	176	60	17	70				
CAPACITY ON ELECTRICAL STAND	W	14	160	122	20	14	40				
REFRIGERATION CAPACITY: INDIVIDUA	L COOLING O	APACITY									
EVAPORATOR		ES150 MAX ES100 MAX ES200									
RETURN AIR TO EVAPORATOR		0°C	-20°C	0°C	-20°C	0°C	-20°C				
CAPACITY ON ENGINE POWER	W	3080	1620	2410	1290	2930	1540				
CAPACITY ON ELECTRICAL STAND	W	2490	1350	2220	1070	2610	1370				
HEATING CAPACITY											
ON THE ROAD	w			3100)						
ELECTRIC STANDBY OPERATION	W			2250)						
AIRFLOW											
EVAPORATOR		ES150	XAM C	ES100	MAX	ES200	MAX				
ON HIGH SPEED ENGINE OPERATION	M³/H	89	90	77	0	12	10				
WEIGHT											
CONDENSER W/O ELECTRIC STANDBY	KG			25							
CONDENSER WITH ELECTRIC STANDBY	KG			75							
EVAPORATOR ES150 MAX	KG			12.5	,						
EVAPORATOR ES100 MAX	KG			9							
EVAPORATOR ES200 MAX	KG			15							
COMPRESSOR											
MODEL				QP 1	5						
DISPLACEMENT	СС			146.	7						
NUMBER OF CYLINDERS				6							
ELECTRIC STANDBY MOTOR											
VOLTAGE/PHASE/FREQUENCY			230/1/50	- 230/1/60 - 400/3,	/50 - 230/3/50 - 3	330/3/60					
RATING	KW			3.8							
REFRIGERANT CHARGE											
REFRIGERANT				R-404A/R	-452A						
CHARGE	KG			30: 1.55 -	50: 1.6						
GENERIC											
CONTROLLER				DSR	III						
DEFROST											

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CAPACITY ON ENGINE POWER GIVEN AT 2400 RPM (ATP CONDITIONS)
* ES100N ONLY AVAILABLE UPON SPECIAL REQUEST. PLEASE CONTACT YOUR LOCAL DEALER.

VX-SERIES FOR MEDIUM TRUCKS AND VANS

HIGH PERFORMANCE AND SUSTAINABLE REFRIGERATION.

As Thermo King's most powerful vehicle-powered refrigeration series for both heating and cooling, the VX-Series has minimal environmental impact, exceptionally low noise, and reduced emissions.

Thanks to its extensive range, the V-Series has a model to suit, with single- and multi-temperature versions for vans and small trucks up to 50m³.

MODELS

NOSEMOUNT



Dimensions: 1253 (l) x 631 (w) x 244* (h)

ROOFMOUNT



Dimensions: 1312 (l) x 825 (w) x 241* (h)

V-400X V-400X MAX V-400X MAX Spectrum V-500X V-500X MAX V-600X MAX V-600X MAX Spectrum

ROBUST AND RELIABLE

The future-proof aerodynamic design has been developed to meet the need of daily operations.

LIGHT AND COMPACT

The ultra-light and compact units enable you to maximize your payload.

MINIMAL ENVIRONMENTAL IMPACT

Low noise, zero exhaust emissions, and no engine reduce the ecological footprint of the VX-Series.

PRECISION TEMPERATURE CONTROL

The in-cab controller enables single- and multi-temperature control within 1°C.

 $^{^{\}star}$ Above heights are cover height. Heights including fans: Nose Mount - 276 mm - Roof Mount - 273 mm

IMPROVED PERFORMANCE

The VX-Series unites performance with efficiency on the road:

- Up to 10% faster pulldown than its predecessor
- Lightweight and compact 50%
 lighter than than its predecessor
- Increased refrigeration power 4000W 6500W
- VX-Series models are ultra-light and compact, making it possible to maximize your payload

DESIGNED TO LAST

Compact and robust design that appeals and endures:

- Long-lasting corrosion-proof aluminum frame
- Future-proof design meets low emissions and low noise restrictions in cities
- Aerodynamic and modular design for nose, roof or recessed roof mount for easy installation

SMART CONTROL ON THE ROAD

- The Direct Smart Reefer controller puts your driver in control:
- Continuous load and temperature monitoring for total cargo protection

LOW MAINTENANCE AND SERVICING

You can rely on the VX-Series to keep uptime up:

- Agile service and maintenance monitoring with Direct Smart Reefer controller (DSR)
- Maintenance reminders and intuitive alarm codes for fast diagnosis
- Easily accessible unit for rapid service and maintenance

24/7 CUSTOMER DELIVERIES

Get close to your customers anytime, anywhere:

- Extremely low emissions, noise and vibrations from unit
- Compliant with current and future (U)LEZ legislation



SINGLE TEMPERATURE MODELS SPECIFICATIONS

SINGLE TEMPERATURE MODELS		V-4	00X	V-5	00X	V-6	00X
REFRIGERATION CAPACITY: AT 30°C AMBIENT AT	CONDITIONS						
SETPOINT	°C	0°C	-20°C	0°C	-20°C	0°C	-20°C
CAPACITY ON ENGINE POWER 2400 RPM (R-134a)	W	3220	-	4190	-	-	-
CAPACITY ON ELECTRIC STANDBY 400V/3PH/50HZ (R-134a)	W	2370	-	2570	-	-	-
CAPACITY ON ENGINE POWER 2400 RPM (R-452a)	W	4090	2240	5440	3030	6540	3480
CAPACITY ON ELECTRIC STANDBY 400V/3PH/50HZ (R-452a)	W	3030	1500	3450	1640	4110	1920
HEATING CAPACITY: AT -18°C AMBIENT/2400 RP	М						
SETPOINT	°C	+18	3°C	+18	3°C	+18	8°C
CAPACITY ON ENGINE POWER 2400 RPM (R-452A)	W	35	64	37	'11	43	156
CAPACITY ON ELECTRIC STANDBY 50HZ 400V/3PH/50HZ (R-452a)	W	18	41	19	44	23	324
EVAPORATOR		ES:	300	ES!	500	ES	600
AIRFLOW VOLUME	m³/h	14	20	23	53	25	05
WIDTH x DEPTH x HEIGHT	mm	985 x 5	51 x 178	1336 x 5	96 x 226	1331 x 5	92 x 240
REFRIGERANT							
CHARGE R-134a	kg	1	.8	2	.1		-
CHARGE R-452a – ONLY MAX MODELS	kg	2	.0	2	.0	2	.3
WEIGHT							
CONDENSER (STANDBY)	kg			7	5		
CONDENSER (NO STANDBY)	kg			e	0		
EVAPORATOR	kg	1	8	2	6	2	!8
ROAD COMPRESSOR	kg				7		
TOTAL WEIGHT (STANDBY)	kg	10	02	1	10	1	12
TOTAL WEIGHT (NO STANDBY)	kg	8	7	g	5	9	7
CONDENSER							
CONDENSER DIMENSIONS (NOSE)	mm			1253 (W) x 63	1 (D) x 276 (H)		
CONDENSER DIMENSIONS (ROOF)	mm			1312 (W) x 82	5 (D) x 273 (H)		
CONTROLLER							
DSR 3 WIDTH X DEPTH X HEIGHT	mm			135 x 2	25 x 46		
COMPRESSOR: MAX RECOMMENDED SPEED 3000	RPM						
MODEL				QF	216		
DISPLACEMENT	сс			10	53		
NUMBER OF CYLINDERS				-	5		
ELECTRICAL STANDBY VOLTAGE /							
Standby Voltage/ Phase/ Frequency options	V/PH/Hz			230V : 3PF	I : 50/60Hz I : 50/60Hz I : 50/60Hz		
TOTAL CURRENT CONSUMPTION	12V DC (A)	3	6	4	4	4	14
ON THE ROAD	24V DC (A)	2	0	2	5	2	!5
DEFROST							
AHGD (AUTOMATIC HOT GAS DEFROST)	R134a R-452a			ΔН	GD		

MULTI-TEMPERATURE MODELS SPECIFICATIONS

MULTI-TEMPERATURE MODELS		V-4	00X	MAX SPI	CTR	UM			V-E	500X	MA)	(SPE	CTR	UM		
EVAPORATOR			S200 - 200 M		ES300 5100 M			300 + 00 MA	X E	ES300 ES150 N			300 + 5150 M	AX E	ES50 S100N	
REFRIGERATION CAPACITY: AT 30°C AMBIENT ATP	CONDITIO	NS														
SETPOINT	°C			-20°C							-2	0°C				
CAPACITY ON ENGINE POWER 2400 RPM (R-452A)	W			2170							27	'30				
CAPACITY ON ELECTRIC STANDBY 400V/3PH/50HZ (R-452A)	W			1420							18	80				
REFRIGERATION CAPACITY: INDIVIDUAL CAPACITY		ES1	00	ES200	ES:	300	ES1	IOON	ES	150	ES:	300	2xE	S150	ES!	500
SETPOINT	°C	0°C	-20°C	0°C -20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°
CAPACITY ON ENGINE POWER 2400 RPM (R-452A)	W	2500	1350	3030 1630	3430	1930	2480	1410	3100	1910	3290	1920	4210	2080	4600	237
CAPACITY ON ELECTRIC STANDBY 400V/3PH/50HZ (R-452A)	W	2110	990	2420 2000	2710	1370	2450	1320	2650	1450	2990	1700	3100	1660	3570	172
EVAPORATOR																
AIRFLOW VOLUME	m³/h	86	56	1241	14	120	56	56	8	91	2 x	891	14	120	23	353
HEATING CAPACITY: AT -18°C AMBIENT																
SETPOINT	°C			+18°C							±1:	8°C				
CAPACITY ON ENGINE POWER 2400RPM (R-452A)	W			3570								60				
CAPACITY ON ELECTRIC STANDBY 400V/3PH/50HZ (R-452A)	W			1850								30				
REFRIGERANT																
	l		1.0		1.0			2.1		2.0			2.2		7.7	,
CHARGE - R-452a	kg		1.9		1.9			2.1		2.0			2.3		2.3)
WEIGHT									_							
CONDENSER (STANDBY)	kg								5							
CONDENSER (NO STANDBY) EVAPORATOR	kg kg		30		27			36	U	32			46		46	
ROAD COMPRESSOR	kg		7		7			7		7			7		7	
TOTAL WEIGHT (STANDBY)	kg		114		110			120		116	<u>;</u>		130		130)
TOTAL WEIGHT (NO STANDBY)	kg		99		95			105		101			115		115	5
DIMENSIONS	_															
CONDENSER DIMENSIONS (NOSE)	mm					1	253 (W	/) x 63	1 (D) x	276 (H	1)					
CONDENSER DIMENSIONS (ROOF)	mm					1	312 (W	/) x 82	5 (D) x	273 (H	1)					
CONTROLLER																
DSR 3 WIDTH X DEPTH X HEIGHT	mm							135 x 2	25 x 46							
COMPRESSOR: MAX RECOMMENDED SPEED 3000	RPM															
MODEL								QF	16							
DISPLACEMENT	СС								53							
NUMBER OF CYLINDERS									5							
ELECTRICAL							2201	, 15:								
STANDBY VOLTAGE/ PHASE / FREQUENCY OPTIONS	V/PH/Hz						230\	/:3PF	I : 50/6 I : 50/6 I : 50/6	50Hz						
TOTAL CURRENT CONSUMPTION ON THE ROAD	12V DC (A) 24V DC (A)		53 30		44 25			53 30		44 25			53 30		53 30	
DEFROST																
AHGD (AUTOMATIC HOT GAS DEFROST)	R134a R-452a							AH	GD							

V-SERIES FOR LARGE TRUCKS

FLEXIBLE. POWERFUL. DEPENDABLE.

As Thermo King's most powerful vehicle-powered refrigeration series for both heating and cooling, the V-Series has minimal environmental impact, exceptionally low noise, and reduced emissions.

Thanks to its extensive range, the V-Series has a model to suit, with singleand multi-temperature versions for vans and small trucks up to 60m³.



Dimensions: 1864 (l) x 588 (w) x 536 (h)

MODELS

V-800 V-1000 V-800 MAX V-1000 MAX

V-800 MAX Spectrum V-1000 MAX Spectrum

COST-EFFICIENT REFRIGERATION

High performance and high efficiency ensure effective temperature control and low total cost of ownership.

INTUITIVE CONTROL

The user-friendly Direct Smart Reefer technology gives you complete control of your refrigeration from the comfort and safety of the cab.

URBAN DELIVERIES

Deliver night and day to ULEZs and LEZs thanks to the V-Series' low noise and low emissions.

EFFICIENT AND GREEN

The latest low Global Warming Potential (GWP) refrigerant is available without compromising performance.

V - 1000

MORE CAPACITY, MORE FLEXIBILITY.

V-1000 is uniquely positioned to satisfy the needs of large truck operators with the benefits of advanced vehicle drive technology when it comes to sustainability, cost control, load protection and productivity.

The V-1000 unit from Thermo King easily matches the performance of the leading diesel offerings while delivering the low cost, low weight and compact size of a vehicle-powered unit. If you think that's too good to be true, prepare to be surprised.

READY FOR CHANGE

The V-1000 uses a compressor exclusively developed for Thermo King which, when driven by the truck engine produces performance previously unattainable in units of this type. This makes it a competitive initial investment compared to diesel powered unit with equivalent performance. High cooling capacity and high airflow guarantee load protection under the most arduous conditions. Total costs of ownership are driven down by low maintenance costs and low fuel consumption.



V-SERIES – FOR LARGE TRUCKS



SUSTAINABILITY

Transport solutions not only need to do the job, but do it in a way that minimises environmental impact. The V-1000 is an exceptionally "low-touch" performer, leaving diesel units out of sight when it comes to protecting the world we live in.

These are just some of the key environmental benefits of this remarkable system:

- No diesel emissions from the unit
- No CO₂ emissions from the unit
- Low noise when in operation
- Less additional weight on the vehicle
- More cargo carried per journey
- Easily installed on progressive fleets using LNG/CNG or bio-diesel.

COST CONTROL

The V-1000 positively impacts Total Cost of Operation (TCO) in these key areas:

- Fuel consumption, the principal cost of operating a refrigeration unit, is up to 54% less than an equivalent self-powered system.
- Maintenance costs including both parts and labour are cut by up to 33% thanks to the absence of a diesel engine.

PRODUCTIVITY

You want units in your fleet that pull their weight when it comes to the key measure of productivity. The V-1000 is an exceptional performer when compared with an equivalent diesel unit:

- Weight is less than half of an equivalent unit, giving savings of 250 kg without standby and 150 kg with standby. This means much more carrying capacity for the vehicle and more revenue for your operation.
- Flexibility is exceptional. The V-1000 comes in single or various multi-temperature configurations. Its compact profile make it ideal for high cabs and it's equally at home with multiple vehicle types including CNG, LNG or Biodiesel. Available in both 12 V or 24 V making it your perfect fit for trucks that range all the way from 3.5 tn to 25 tn depending on your application needs.

LOAD PROTECTION

Savings and productivity while vital are meaningless if there are any doubts about load protection.

The V-1000 features exceptional performance which is why it can compete directly with self-powered units and in many cases, even outperform them.



SINGLE TEMPERATURE MODELS SPECIFICATIONS

		V-8	300) MAX /20) MAX /50	V-1	000		0 MAX /20		0 MAX /50	
EVAPORATOR		ES	300	ES	800	ES	300	ES1	000	ES1	000	ES1	000	
REFRIGERATION CAPACITY: AT 30 °C AM	BIENT													
RETURN AIR TO EVAPORATOR	°C	0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °	
CAPACITY ON ENGINE POWER 2400 RPM (R-452A)	W	5680	-	7940	4050	7950	4190	6460	-	10060	5050	9970	4810	
CAPACITY ON ELECTRIC STANDBY 400V/3PH/50HZ (R-452A)	W	5030	-	7130	3690	6860	3610	6020	-	9310	4650	9400	449	
HEATING CAPACITY: AT -18 °C AMBIENT	/2400 R	PM												
ON THE ROAD SWASH PLATE COMPRESSOR	W		-		36	00			-		80	00		
ELECTRIC STANDBY OPERATION	W		-		31	20			-		80	00		
AIRFLOW														
AIRFLOW VOLUME @ 0 PA STATIC PRESSURE	M³/H		26	80						35	537			
WEIGHT														
CONDENSER W/O ELECTRIC STANDBY	KG	9	6	g	96	1	11	9	16	9	96	1	11	
CONDENSER WITH ELECTRIC STANDBY	KG	2	05	205		220		205		2	05	2	20	
EVAPORATOR	KG			3	35 50					50				
COMPRESSOR														
MODEL				QF	21					QF	25			
DISPLACEMENT	CC			2	15					2	50			
NUMBER OF CYLINDERS				1	10			10						
ELECTRIC STANDBY MOTOR														
VOLTAGE/PHASE/FREQUENCY				380, 230,	/3/50 /3/60 /3/50 /3/60					230/ 400/	/3/50 /3/50 /3/60 /3/60			
RATING	KW				.2 (3/50)						.8 ′3/50)			
REFRIGERANT														
REFRIGERANT		R-1	34A		04A/ I52A			R-1	34A		R-404A	/R-452A		
CHARGE	KG		4.55 4.85		0: 4.7 50: 5				5.4 5.7		5.9		5.9 6.2	
GENERIC														
CONTROLLER							DSI	R III						
DEFROST														
DEFROST		Δ١	IGS	ΔΕ	IGS	F	RC.	ΔΕ	IGS	ΔΙ	IGS	F	RC	

NOTE: SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

AHGS = AUTOMATIC HOT GAS DEFROST - RC = REVERSE CYCLE

MULTI-TEMPERATURE MODELS SPECIFICATIONS

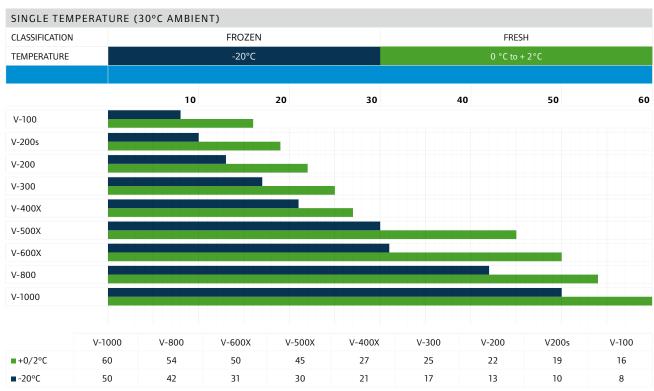
		V-	-800 MAX S	PECT	RUM					
EVAPORATOR		ES400 M	AX+ ES400 MAX	x	E:	S600MAX+ ES1	50 MAX	ES600 N	ЛАХ+ 2x ES1	50 MAX
REFRIGERATION CAPACITY: AT 30°C AME	BIENT									
RETURN AIR TO EVAPORATOR	°C		-20°C			-20°C			-20°C	
CAPACITY ON ENGINE POWER	W		4140			3900			4070	
CAPACITY ON ELECTRICAL STAND	W		3520			3380			3370	
REFRIGERATION CAPACITY: INDIVIDUAL (COOLING CAPAC	CITY								
EVAPORATOR		ES400) MAX		ES600	MAX	ES150	MAX	2 X ES1	50 MAX
RETURN AIR TO EVAPORATOR		0°C	-20°C	0	,C	-20°C	0°C	-20°C	0°C	-20°
CAPACITY ON ENGINE POWER	W	6060	3230	63	20	3060	3500	1930	5640	299
CAPACITY ON ELECTRICAL STAND	W	5670	3090	61	20	3050	3580	1950	5045	270
HEATING CAPACITY										
ON THE ROAD	W					4500				
ELECTRIC STANDBY OPERATION	W					4000				
AIRFLOW										
		ES400 M	AX + ES400 MA	х	ES	600 MAX + ES	150 MAX	ES600 N	1AX + 2XES1	50 MAX
ON HIGH SPEED ENGINE OPERATION	M³/H		1760x2			2260+890)	2	2260+(2x890))
WEIGHT										
CONDENSER W/O ELECTRIC STANDBY	KG					100				
CONDENSER WITH ELECTRIC STANDBY	KG					160				
EVAPORATOR ES600 MAX	KG					28				
EVAPORATOR ES400 MAX	KG					20				
EVAPORATOR 2 X ES150 MAX	KG					25				
EVAPORATOR ES150 MAX	KG					12.5				
SWASH PLATE COMPRESSOR	KG					8.5				
COMPRESSOR										
MODEL						QP21				
DISPLACEMENT	СС					215				
NUMBER OF CYLINDERS						10				
ELECTRIC STANDBY MOTOR										
VOLTAGE/PHASE/FREQUENCY				400,	/3/50 -	230/3/50 - 400)/3/60 - 230/	3/60		
RATING	KW					8.2 (400/3/	50)			
REFRIGERANT CHARGE										
EVAPORATOR		ES400 M	AX + ES400 MA	х	ES	600 MAX + ES	150 MAX	ES600 N	MAX + 2XES1	50 MAX
REFRIGERANT						R-404A/R-4	52A			
CHARGE	KG		5.2			5.0			5.15	
GENERIC										
CONTROLLER						DSR III				
DEFROST										
DEFROST					ΔΙΙΤ	OMATIC HOT GA	S DEEROST			

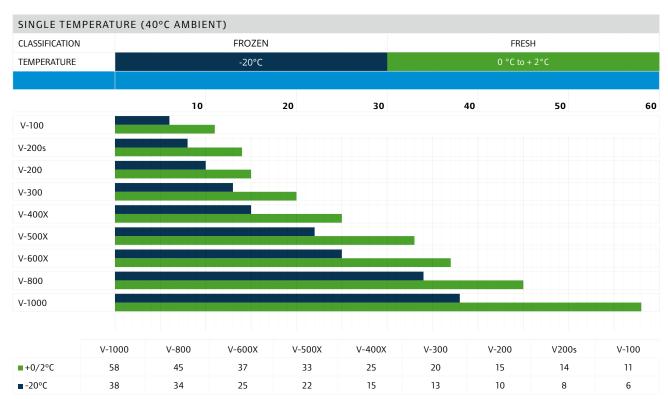
			V-10	00 SPECTR	JM						
EVAPORATOR		ES600 MAX	+ ES600 MAX	ES600 MAX	+ ES150 MAX	ES600 MA	X + 2XES1!	50 MAX	ES800 M	AX + ES3(00 MAX
REFRIGERATION CAPACITY: AT 30°C A	MBIENT										
RETURN AIR TO EVAPORATOR	°C	-20	0 °C	-20) °C		-20 °C			-20 °C	
CAPACITY ON ENGINE POWER	W	52	230	46	20		5040			4840	
CAPACITY ON ELECTRICAL STAND	W	47	700	44	50		4620			4620	
REFRIGERATION CAPACITY: INDIVIDUA	L COOLING	CAPACITY									
EVAPORATOR		ES60	0 MAX	ES150	MAX	2 x ES1	50 MAX	ES80	0 MAX	ES300	0 MAX
RETURN AIR TO EVAPORATOR		0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °C	0 °C	-20 °
CAPACITY ON ENGINE POWER	W	8510	4370	4000	2300	5760	3130	8390	4660	4600	2330
CAPACITY ON ELECTRICAL STAND	W	8100	4050	3980	2040	5830	3030	8130	4200	4590	2170
HEATING CAPACITY											
ON THE ROAD	w				5	000					
ELECTRIC STANDBY OPERATION	W					000					
AIRFLOW											
EVAPORATOR		FS600 MAX	+ ES600 MAX	FS600 MAX	ES150 MAX	ES600 MA	X + 2 x FS1	50 MAX	FS800 M	AX + ES3(OO MAX
ON HIGH SPEED ENGINE OPERATION	M³/H		11 x 2		+ 1396		I + (2 x 1396			730 + 1643	
WEIGHT	101 / 11	243	1 X Z	2431	1 1330	2431	1 1 (2 × 133)	3)	2,	30 1 1043	,
CONDENSER W/O ELECTRIC STANDBY	KG					96					
	KG					205					
CONDENSER WITH ELECTRIC STANDBY EVAPORATOR ES800 MAX	KG					35					
	KG					28					
EVAPORATOR 2 X FC1F0 MAX											
EVAPORATOR 2 X ES150 MAX	KG					25					
EVAPORATOR ES300 MAX	KG					18					
EVAPORATOR ES150 MAX	KG				ı	2.5					
COMPRESSOR											
MODEL					-	P25					
DISPLACEMENT	CC					250					
NUMBER OF CYLINDERS						10					
ELECTRIC STANDBY MOTOR											
VOLTAGE/PHASE/FREQUENCY				400/3,	/50 - 230/3/50		- 230/3/60				
RATING	KW					3.8					
REFRIGERANT											
EVAPORATOR		ES600 MAX	+ ES600 MAX	ES600 MAX	ES150 MAX	ES600 MA	X + 2 x ES1	50 MAX	ES800 M	AX + ES30	XAM OC
REFRIGERANT					R-404A	/ R452A					
CHARGE	KG					: 5.9 : 6.2					
GENERIC											
CONTROLLER					DS	SR III					
DEFROST											
DEFROST					AUTOMATIC H	OT CAS DEED	OST				

V AND VX UNIT SELECTION GUIDE

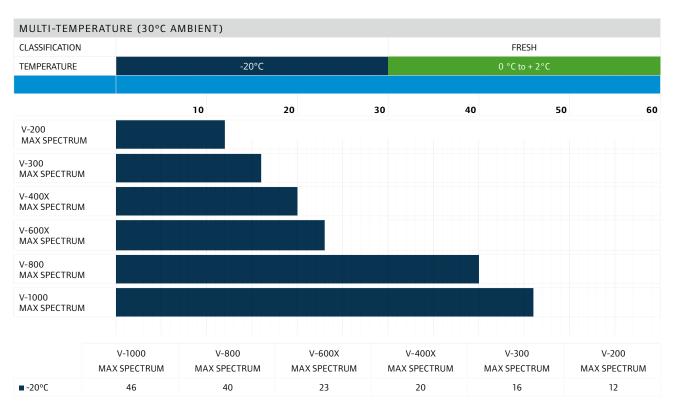
These tables are a guide to select the right unit that could match your application. These figures are maximum vehicle volumes, calculated in road operation, at 2400 rpm compressor speed and 30°C/40°C ambient temperature for single temperature and multi-temperature applications.

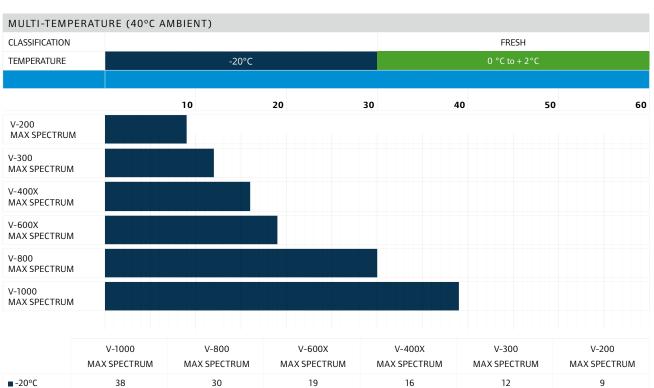
+0/2°C: 3 brief door openings per hour, k-factor 0.5W/m²K -20°C: 2 brief door openings per hour, k-factor 0.35W/m²K





Recommendations are based on precooled loads and for distribution of 8 hours and are not a guarantee of performance as there are many variables to be considered. Speak to your local Thermo King dealer for complete information.





Recommendations are based on precooled loads and for distribution of 8 hours and are not a guarantee of performance as there are many variables to be considered. Recommendations for multi-temperature units are based on the following evaporator pairs: V-200 SP (ES100+ES100N), V-300 SP (ES150+ES150), V-400X SP (ES200+ES200), V-600X SP (ES300+ES300), V-800 SP (ES400+ES400), V-1000 (ES600+ES600)

Speak to your local Thermo King dealer for complete information.

UPGRADE YOUR UNIT FOR ENHANCED PERFORMANCE

THFRMOKARF

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

TOUCHLOG DATA CAPTURE

Temperature data capture and printing, approved to EN 12830, CE mark and IP-65 standards.

WINTRAC (DATA ANALYSIS SOFTWARE)

User-friendly software compatible with DSR controller for configuration file downloads.

USB DATALOGGER

Humidity, temperature and dewpoint recorder.

DATALOGGER JR

Programmable temperature recorder.

WLOG DATALOGGER

Wireless temperature monitoring and data logging solutions for transport refrigeration units.

DOOR SWITCHES

Reduce load temperature rise and save fuel when doors are opened.

DIN ADAPTER

The din adaptor box permits the adaption of the DSR controller to the vehicle dashboard. The aesthetically designed box allows the placement of the DSR controller in any available radio slot compartment in the driver cab.

HOSE COVERS

Full protection of hoses and cables on the road and full resistance under all climate adversities. Designed to seamlessly integrate into unit while complimenting the reefer and vehicle aesthetics while delivering exceptional durability. User-friendly installation (only for chassis installations, no vans).

MUFFLER KIT

Thermo King muffler eliminates the vibration and noise in the interior cab of small vehicles. The muffler is attached to the refrigeration system thus eliminating the vibration transfer from the unit to the driver cab enhancing user comfort and ease of use.

SNOW COVERS

Thermo King snow covers are designed to protect your unit against extreme climate conditions.

The aerodynamically design snow cover prevents the buildup of snow and ice on the units fans which can lead to downtime and further maintenance costs resulting in longer running times for your unit.

HARNESS AND HOSE EXTENSIONS

The 2, 4 or 6 meter harness and hose extensions allows evaporators to be located to suit any customer needs with an extremely easy installation (plug and play connection with corresponding hose splice connectors) and provides full flexibility to position the evaporators especially in multi-temperature applications.



	MODELS	10	20	MAX 10	MAX 20	MAX 30	MAX 50
	V-100	✓	1	1	1	✓	1
뿚	V-200	✓	1	✓	✓	1	1
SINGLE TEMPERATURE	V-300	✓	1	✓	1	1	1
MPE	V-400X	✓	1	✓	1	1	1
==	V-500X	✓	1	✓	1	1	1
SING	V-600X	,	,	✓	√	✓	✓
	V-800	✓ ✓	<i>J</i>	<i>J</i>	<i>'</i>	<i>\</i>	1
	V-1000 V-200 SP	•	•	•	•	√	/
TURE	V-300 SP					/	/
PERA	V-400X SP					1	1
MULTI-TEMPERATURE	V-600X SP					1	1
i III	V-800 SP					1	✓
Σ	V-1000 SP					1	✓
	UNIT CONFIGURATION						
	REFRIGERANT	R-134a	R-134a	R-404a / R-452a	R-404a / R-452a	R-404a / R-452a	R-404a / R-452
NO.	VOLTAGE	12V / 24V	12V / 24V	12V / 24V	12V / 24V	12V / 24V	12V / 24V
UNIT CONFIGURATION	DEFROST (HOT GAS)	•	•	•	•	•	•
ONFI	STANDBY	-	•	-	•	-	•
Ę	HEATING	-	-	-	-	•	•
-	POWER PACK	-	230V : 1PH 230V : 3PH 400V : 3PH (50/60 HZ)	-	230V : 1PH 230V : 3PH 400V : 3PH (50/60 HZ)	-	230V: 1PH 230V: 3PH 400V: 3PH (50/60 HZ)
	LIFE COST MANAGEMENT						
	THERMOKARE SERVICE CONTRACTS			4	L		
	DATA CAPTURE AND COMMUNICATIONS						
	BLUEBOX LITE			()		
	TRACKING			()		
	TOUCHPRINT (INTERNAL/EXTERNAL MOUNT)			()		
	TOUCHPRINT (EXTENDED HARNESS)			()		
	WINTRAC (DATA ANALYSIS SOFTWARE)				L		
UNIT OPTIONS	CUSTOMIZATION						
TOP	DIN ADAPTER	0	0	0	0	0	0
Z	DOOR SWITCH	0	0	0	0	0	0
	HOSE COVER	0	0	0	0	0	0
	CONDENSER FAN COVER	0	0	0	0	0	0
	CONDENSER INSTALLATION TEMPLATE	0	0	0	0	0	0
		0		0	0	0	0
	EVAPORATOR INSTALLATION TEMPLATE		0				
	HARNESS EXTENSION TOUCHPRINT 7m	0	0	0	0	0	0
	HIGH ROOF INSTALLATION BRACKET KIT	0	0	0	0	0	0*
	HARNESS EXTENSION 2m / 4m / 6m	-	-	-	0*	-	0*
	HOSE EXTENSION 2m / 4m / 6m	-	-		0*		0*
	NOSE / ROOF / RECESSED ROOF KIT			VX-SEF	RIES ONLY		

● STANDARD FEATURE O OPTION: FACTORY SUPPLIED ▲ OPTION: DEALER SUPPLIED O* SPECTRUM/MULTI-TEMP UNITS ONLY # LIMITED MODEL OPTION - NOT AVAILABLE

DIRECT SMART REEFER (DSR) CONTROLLER



The Direct Smart Reefer (DSR) Controller brings state of the art microprocessor-based intelligent control to Thermo King's vehicle powered product range.

KEY FEATURES

- straightforward to understand and use even for new operators.
- Flexible, modular and stylish.
- Designed for error-free control and monitoring of the refrigeration unit from inside the cab.
- Advanced control features.

THE DSR IN-CAB DISPLAY

- Provides the ideal user interface.
- LED backlighting ensures the screen remains bright and legible in all light conditions.
- Multiple functions to suit specific transport applications, ensuring optimal temperature control and product integrity.
- Ease to interprete malfunction alarm codes allow drivers to take rapid and appropriate remedial action.

STANDARD FEATURES

- Keeps your load and unit in top shape with continuous monitoring.
- Seamless operation: Unit restarts automatically after any power cut, keeping your load protected.
- Records usage duration (travel & stationary).
- Minimize downtime with intuitive alerts.
- Prevent downtime with scheduled servicing notifications.
- Manual or automatic defrost to schedule defrost initiation and termination to suit the application.
- Tamper-proofing by removing the in-cab control panel after presetting.
- Vehicle battery protection with low voltage monitoring, sequential evaporator starts and "soft starting" during unit power-up to avoid power "spikes".
- Compressor protection with the optional "soft start" feature
- Load protection by delaying evaporator start-up after defrosts.

THE DSR CONTROL BOARD

- A modular concept that separates control and power relay boards.
- Improved reliability, serviceability and component replacement.
- Lower service and maintenance costs.

PROGRAMMABLE FEATURES

- Set point limits for optimum temperature range selection.
- Set point lock to prevent the driver modifying a predetermined temperature.
- On-screen alarm when return air temperature is out of range.
- Door switches to shut down the unit each time the door is opened, to maintain the box temperature and protect the load.
- Wintrac Windows-based software package for configuration parameter editing in the field.

M U LT I - T E M P E R A T U R E F E A T U R E S

- Each compartment can be switched on/off independently.
- Improved door switch functionality allows each evaporator to be controlled independently.
- Set point range can be independently adjusted for each compartment.
- Operation in single temperature mode for increased flexibility.



BLUEBOX LITE

THERMO KING'S VEHICLE-POWERED TRUCK TELEMATICS SOLUTION FOR V- AND VX-SERIES UNITS.

Receive critical controller information along with temperature, position, and other crucial data in near real-time thanks to 4G connectivity and high logging frequency. Conveniently access the data via our cost-effective TracKing subscription.

The BlueBox Lite device does not require the installation of an additional data logger, as it's conveniently connected to your DSR controller.

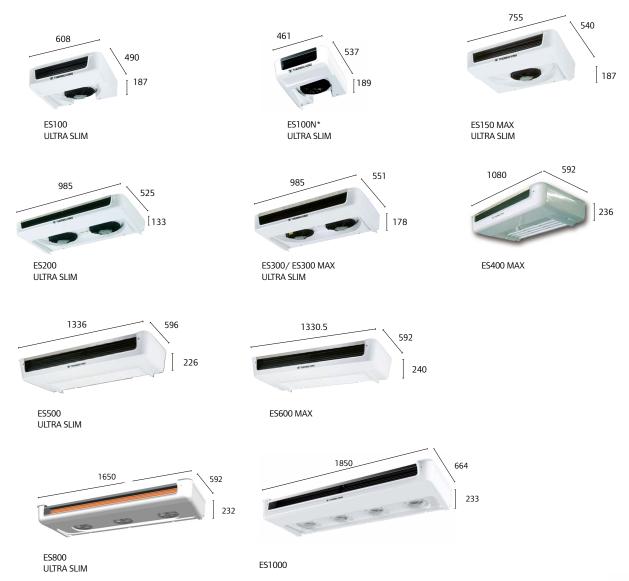
For compliance with the EN12830 European standard, just add the TouchLog data logger.

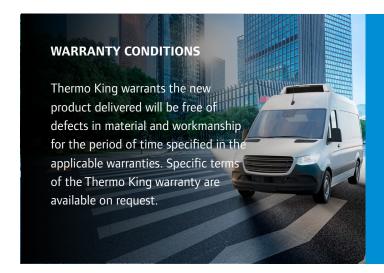
Furthermore, it allows you to integrate the collected data from the vehicle-powered unit into any third-party website or back-end system.



DIMENSIONS (MM)

EVAPORATORS





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.







V- AND VX-SERIES



PEACE OF MIND WITH THERMO KING SERVICE CONTRACTS.

Keeping your V- and VX-Series equipped fleet on the road 24/7 takes a substantial amount of time and effort. Rely on Thermo King to help. Our customized service contracts empower fleet operators to select the exact services needed to maintain and improve their fleet utilization.

RECOMMENDED CONTRACTS:

FLEXIBLE SERVICE SUPPORT

From MaintenancePlus, which covers scheduled fleet maintenance, to the full service offered by ComfortPlus, Thermo King service contracts are tailored to your fleet's needs.

EXTENDED WARRANTY

Increase your peace of mind by extending your warranty for your Thermo King refrigerated units.

24/7 FLEET MONITORING SERVICE

Our experts monitor your fleet in real-time around the clock, responding to every issue and arranging solutions as soon as a problem is detected.



ROADSIDE ASSISTANCE

With every contract, you enjoy peace of mind with comprehensive breakdown call-out support and multilingual assistance.



OF YOUR UNIT WITH OUR AFTERMARKET SERVICES

Take your unit to the max.

Thanks to Thermo King's complete range of services and solutions, you can take your fleet to new heights of performance. With our global dealer network with 24/7 availability, you'll always have a certified Thermo King dealer to count on.

Thermo King helps your fleet reach its maximum potential and gets it ready for any challenge. All day, every day.

+ MAXIMIZE UPTIME

Avoid costly downtime and keep your units going and earning for longer.

+ MAXIMIZE SUSTAINABILITY

Limit your fleet's footprint and save smart on energy.

+ MAXIMIZE SAVINGS

Reduce service and maintenance costs, and maximize your units' residual value.

+ MAXIMIZE CONTROL

Monitor and maintain critical cargo quality every step of the way.

TAKE IT TO
THE MAX WITH
BLUEBOX LITE

BlueBox Lite gives you the data you need to make your operations smarter and more efficient.

A data recording device, standard embedded in your unit, registers information on your refrigeration unit in near realtime, thanks to 4G connectivity and high logging frequency.

Once activated you will get information on unit position, alarms, temperature, door opening and you will be able to re-set temperature from afar.

Ask your dealer for more info on our activation and annual subscription plans.

V-SERIES AND VX-SERIES HIGH PERFORMANCE, SUSTAINABLE REFRIGERATION WITH PRECISE TEMPERATURE CONTROL Sustainability boost Low weight and an aerodynamic design help reduce your fuel consumption and environmental impact. With its extremely low emissions, noise, and vibrations, the VX-Series gives you access to ULEZs and LEZs day and night. Versatile power source Suitable for diesel, non-diesel, and battery pack applications, and flexible alternative power sources when the engine is off. **Precision cooling** Extremely accurate set point temperature control within+/-1°C.

THERMO KING

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**

Find your nearest dealer on dealers.thermoking.com

