

V-SERIES

— flexible, powerful, dependable —



SINGLE- AND MULTI-TEMPERATURE
REFRIGERATION SOLUTIONS FOR SMALL TRUCKS & VANS



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V-Series

SUPERIOR NON-DIESEL TEMPERATURE CONTROL FOR VANS AND SMALL TRUCKS

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.



V-Series - flexible, powerful, dependable

Thermo King V-Series comprises six models which offer a direct drive, non-diesel temperature control solution for operators of small, medium and large trucks from 5 m³ to 54 m³, fresh and frozen.

Total load protection with low operating costs.

The V-Series is a range of high performance, high efficiency units delivering effective temperature control with low cost of ownership.

Direct Smart Reefer technology puts you in control.

The advanced and user-friendly Direct Smart Reefer controller gives you complete control of your V-Series unit from the comfort and safety of the cab. Key data is simply presented so that operating errors can be minimised.



R-452A as standard - advanced, efficient, green

The latest low Global Warming Potential refrigerant is available without compromising performance. Your environmental impact will be reduced and your customers will know that you care.

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.

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.

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, roof mount or front mount, single or multi-temperature, fresh or frozen.

Easy 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 you wish. In addition, temperature pulldown will be up to 40% faster.

Single or multi-temperature – a solution for every need

The V-100, 200 and 300 Series offer the optimal temperature control solution for single and multi-temperature vans and small trucks up to 28 m³. This complete range shares many common components and has many modular options to fulfil the requirements of every customer. By using the vehicle engine to drive the compressor, noise and emissions are minimised.

The V-500, 600 and 800 Series offer a direct drive, non-diesel temperature control solution for operators of trucks up to 54m³. For multi-temperature applications, the V-500 and 800 Spectrum models are available. The range has minimal environmental impact as the refrigeration unit compressor is driven by the vehicle engine, offering exceptionally low noise and low emissions.

V-200 Series

- » Small, powerful units for vans and trucks.
- » Condenser section can be roof or front mounted for total flexibility.
- » V-200s model combines the compact size of the V-100 with the high cooling capacity of the V-200.
- » Also available as multi-temperature Spectrum version providing temperature control for two compartments.

V-600 Series

- » Increased performance both on road and stand-by operation.
- » Swash plate compressor for ease of installation.
- » User friendly and advanced controller Direct Smart Reefer.
- » More environmentally friendly.
- » Superior performance.
- » A full range available.



5 to 16m³

V-100 Series

- » Smallest of the series, but with big unit performance.
- » Slim, aerodynamic and good looking.
- » Condenser section can be roof or front mounted.
- » Extremely compact design to blend with small vehicle body shapes.
- » Compactness.
- » Low weight.



9 to 22m³



10 to 28m³

V-300 Series

- » Mid-size unit for mid-size vans and trucks.
- » Slim, aerodynamic and good looking.
- » The largest of the V-series small platform range where the condenser can be roof or front mounted.
- » Also available as multi-temperature Spectrum version providing temperature control for two compartments.



13 to 42m³

V-500 Series

- » Nose mount condenser unit for medium trucks.
- » Powerful airflow and cooling capacity to protect loads.
- » Compact all-aluminium condenser brings significant lifecycle benefits.
- » Also available as multi-temperature Spectrum version providing temperature control for two compartments.



30 to 48m³

V-800 Series

- » Nose mount condenser unit for the largest trucks.
- » The most powerful unit in the vehicle-powered range, both in cooling and heating modes.
- » An unbeatable non-diesel, low noise and low weight solution.
- » Also available as multi-temperature Spectrum version providing temperature control for two compartments.



42 to 54m³

Direct Smart Reefer (DSR) Controller

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

Key features

- » Ease of use
- » 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

The DSR in-cab unit provides the ideal user interface. LCD technology with LED backlighting makes the screen easy to read in all light conditions. The operator can select from multiple functions to suit specific transport applications, ensure optimal temperature control and product integrity. In the event of a malfunction, an easily interpreted alarm code allows drivers to take rapid and appropriate remedial action.

Standard features

- » Continuous monitoring of load and temperature control unit.
- » Automatic start-up in case of a power interruption on the road or in standby.
- » A full record via three hour meters of compressor and unit operating hours.
- » Simple alarm codes with clear descriptions for quick diagnosis and reduced maintenance costs.
- » Maintenance reminders to encourage preventative maintenance and reduce downtime.
- » 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 to increase engine compressor life.
- » Load protection by delaying evaporator start-up after defrosts, to avoid accidental water discharge into the load space.

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.



The DSR in-cab display

Programmable features

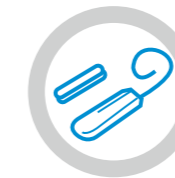
- » Set point limits for optimum temperature range selection.
- » Set point lock to prevent the driver modifying a predetermined temperature.
- » On-screen alarm when return air temperature is out of range.
- » Door switches to shut down the unit each time the door is opened, to maintain the box temperature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

Multi-temperature features

- » Each compartment can be switched on/off independently.
- » Improved door switch functionality allows each evaporator to be controlled independently so that only the compartment with the door open is turned off.
- » Set point range can be independently adjusted for each compartment.
- » Operation in single temperature mode for increased flexibility.



switch on/off each compartment



improved door switch



adjustable set point range for each compartment



single temp if required



Alex Brown, Retailer
Delivers fresh fruit and vegetables

"In my job, making mistakes just isn't an option. The DSR controller lets me know exactly what's going on and even warns me if there's a problem. And the information is right where I need it, in the cab. Although it's a very smart device, I find it really easy to use."

Information, in-cab:
In control.

Tune your unit - features and options

	V-100 V-100 MAX V-200s MAX	V-200 10 V-200 MAX 10/30 V-200 MAX 30 SPECTRUM	V-300 10 V-300 MAX 10/30 V-300 MAX 30 SPECTRUM	V-200 20 V-200 MAX 20/50 V-200 MAX 50 SPECTRUM	V-300 20 V-300 MAX 20/50 V-300 MAX 50 SPECTRUM
LIFE COST MANAGEMENT					
ThermoKare service contracts	▲	▲	▲	▲	▲
DATA CAPTURE AND COMMUNICATIONS					
TouchPrint data capture	▲	▲	▲	▲	▲
Wintrac (data analysis software)	▲	▲	▲	▲	▲
USB Datalogger	▲	▲	▲	▲	▲
Datalogger Jr	▲	▲	▲	▲	▲
LOAD PROTECTION					
Door switch	△	△	△	△	△
Din adapter	△	△	△	△	△
Hose cover	△	△	△	△	△
Muffler kit	△	△	△	△	△
Snow cover (also called kit deflector small)	△	△	△	○	○
Snow cover (also called kit deflector big)	○	○	○	△	△
Harness extension 2 m/4 m/6 m	△	△	△	△	△
Hose extension 2 m/4 m/6 m	△	△	△	△	△

○ Not available ● Standard feature △ Option: factory installed ▲ Option: dealer supplied

ThermoKare

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

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.

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.

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.

V-500 V-500 MAX V-600 MAX	V-500 MAX SPECTRUM	V-800 V-800 MAX	V-800 MAX SPECTRUM
▲	▲	▲	▲
▲	▲	▲	▲
▲	▲	▲	▲
▲	▲	▲	▲
△	△	△	△
△	△	△	△
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○	○	○	○
○	○	○	○
○	△	○	△
○	△	○	△

Hose covers

Full protection of hoses and cables on the road and full resistance under all climate adversities. Designed with best aesthetics to promote brand image and with an 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

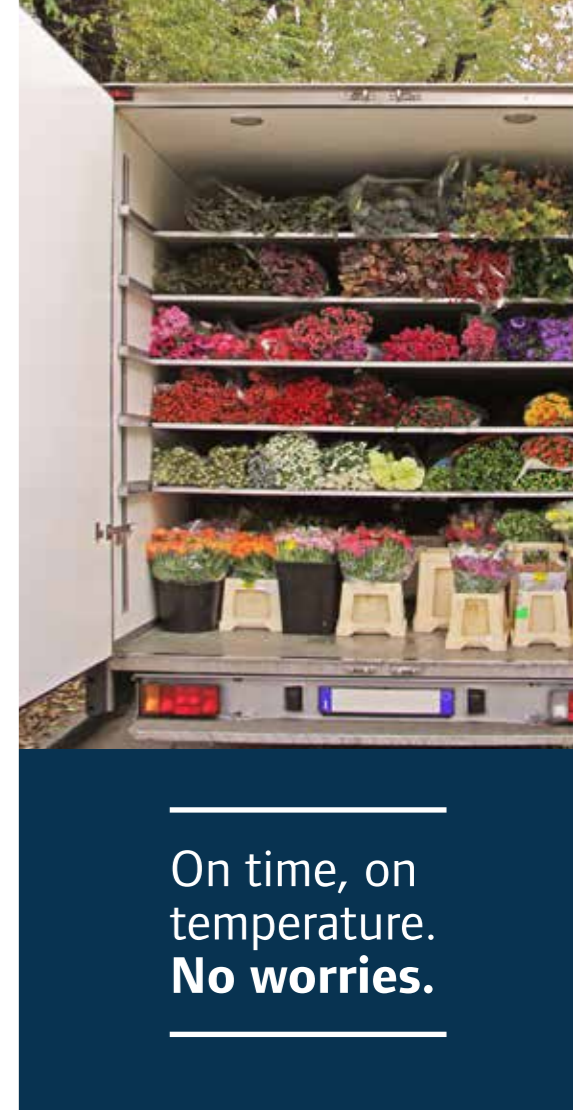
Thermo King snow covers are designed to protect your unit against extreme climate conditions. The aerodynamically design snow cover prevents the buildup of snow and ice on the units fans which can lead to downtime and further maintenance costs resulting in longer running times for your unit.

Harness extension

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

Hose extension

The 2, 4 or 6 meter hose extensions (includes corresponding splice connectors) are also on offer as option for remote evaporators.



On time, on temperature.
No worries.

Unit selection guide

The table below indicates 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.

MODEL	AMBIENT TEMPERATURE			
	30°C		40°C	
	BOX TEMPERATURE			
	+0/2°C	-20°C	+0/2°C	-20°C
V-100	12 m ³	5 m ³	8 m ³	4 m ³
V-100 MAX	16 m ³	8 m ³	11 m ³	6 m ³
V-200	18 m ³	9 m ³	13 m ³	7 m ³
V-200s MAX	19 m ³	10 m ³	14 m ³	8 m ³
V-200 MAX	22 m ³	13 m ³	15 m ³	10 m ³
V-300	25 m ³	10 m ³	18 m ³	8 m ³
V-300 MAX	28 m ³	17 m ³	20 m ³	13 m ³
V-200 MAX Spectrum	-	12 m ³	-	9 m ³
V-300 MAX Spectrum	-	16 m ³	-	12 m ³
V-500	30 m ³	13 m ³	21 m ³	10 m ³
V-500 MAX	42 m ³	25 m ³	29 m ³	19 m ³
V-500 MAX Spectrum	-	22 m ³	-	17 m ³
V-600 MAX	48 m ³	30 m ³	34 m ³	24 m ³
V-800 MAX Spectrum	-	40 m ³	-	30 m ³
V-800	44 m ³	-	31 m ³	-
V-800 MAX	54 m ³	42 m ³	38 m ³	34 m ³

Recommendations are based on precooled loads and K value of 0.35 W/m²K is used for frozen goods (-20°C) and 0.5 W/m²K for fresh goods (+0/2°C), for a distribution of 8 hours. Recommendation for V-500 MAX Spectrum unit is based on ES300+ES300 configuration, and ES400+ES400 for V-800 MAX Spectrum unit. Recommendations are not a guarantee of performance as there are many variables to be considered. See your Thermo King dealer for complete information.

MODEL	REFRIGERANT	SMALL PLATFORM	MEDIUM PLATFORM	LARGE PLATFORM	STANDBY	HEATING	MULTI-TEMP.
V-100 10	R-134a	✓	-	-	-	-	-
V-100 20	R-134a	✓	-	-	✓	-	-
V-100 MAX 10	R-404A /R-452A	✓	-	-	-	-	-
V-100 MAX 20	R-404A /R-452A	✓	-	-	✓	-	-
V-100 MAX 30	R-404A /R-452A	✓	-	-	-	✓	-
V-100 MAX 50	R-404A /R-452A	✓	-	-	✓	✓	-
V-200 10	R-134a	✓	-	-	-	-	-
V-200 20	R-134a	-	✓	-	✓	-	-
V-200s MAX 20	R-404A /R-452A	✓	-	-	✓	-	-
V-200s MAX 50	R-404A /R-452A	✓	-	-	✓	✓	-
V-200 MAX 10	R-404A /R-452A	✓	-	-	-	-	-
V-200 MAX 20	R-404A /R-452A	-	✓	-	✓	-	-
V-200 MAX 30	R-404A /R-452A	✓	-	-	-	✓	-
V-200 MAX 50	R-404A /R-452A	-	✓	-	✓	✓	-
V-200 MAX 30 Spectrum**	R-404A /R-452A	✓	-	-	-	✓	✓
V-200 MAX 50 Spectrum**	R-404A /R-452A	-	✓	-	✓	✓	✓
V-300 10	R-134a	✓	-	-	-	-	-
V-300 20	R-134a	-	✓	-	✓	-	-
V-300 MAX 10	R-404A /R-452A	✓	-	-	-	-	-
V-300 MAX 20	R-404A /R-452A	-	✓	-	✓	-	-
V-300 MAX 30	R-404A /R-452A	✓	-	-	-	✓	-
V-300 MAX 50	R-404A /R-452A	-	✓	-	✓	✓	-
V-300 MAX 30 Spectrum*	R-404A /R-452A	✓	-	-	-	✓	✓
V-300 MAX 50 Spectrum*	R-404A /R-452A	-	✓	-	✓	✓	✓
V-500 10	R-134a	-	-	✓	-	-	-
V-500 20	R-134a	-	-	✓	✓	-	-
V-500 MAX 10	R-404A/R-452A	-	-	✓	-	-	-
V-500 MAX 20	R-404A/R-452A	-	-	✓	✓	-	-
V-500 MAX 30	R-404A/R-452A	-	-	✓	-	✓	-
V-500 MAX 50	R-404A/R-452A	-	-	✓	✓	✓	-
V-500 MAX 30 Spectrum ¹	R-404A/R-452A	-	-	✓	-	✓	✓
V-500 MAX 50 Spectrum ¹	R-404A/R-452A	-	-	✓	✓	✓	✓
V-600 MAX 10	R-404A/R-452A	-	-	✓	-	-	-
V-600 MAX20	R-404A/R-452A	-	-	✓	✓	-	-
V-600 MAX 30	R-404A/R-452A	-	-	✓	-	✓	-
V-600 MAX 50	R-404A/R-452A	-	-	✓	✓	✓	-
V-800 10	R-134a	-	-	✓	-	-	-
V-800 20	R-134a	-	-	✓	✓	-	-
V-800 MAX 10	R-404A/R-452A	-	-	✓	-	-	-
V-800 MAX 20	R-404A/R-452A	-	-	✓	✓	-	-
V-800 MAX 30	R-404A/R-452A	-	-	✓	-	✓	-
V-800 MAX 50	R-404A/R-452A	-	-	✓	✓	✓	-
V-800 MAX 50 Spectrum ²	R-404A/R-452A	-	-	✓	✓	✓	✓

✓ Included - Not included - * Available in the following configurations: ES150+ES150 / ES150-ES100 / ES100+ES100
 ** Available in the following configurations: ES100 + ES100 - (1) Available in the following configurations: ES300+ES300, ES300+ES150 and ES300+2xES150
 (2) Available in the following configurations: ES400+ES400, ES600+ES150 and ES600+2xES150



“Load space is critical when you run a small delivery van. My V-Series evaporator is so slim, it lets me use the whole compartment. They say time is money – but so is space.”

Freshness assured with V-Series

Joey Williams, Retailer
Home delivery

Single temperature models specifications

	V-100	V-100 MAX	V-200	V-200s MAX	V-200 MAX	V-300	V-300 MAX
SYSTEM NET COOLING CAPACITY UNDER ATP CONDITIONS INCLUDING 30°C AMBIENT, EUROPEAN STANDARD							
	°C	0°C	-20°C	0°C	-20°C	0°C	-20°C
Air return/on the road	W	1665	680	2080	1090	2255	945
Electric stand-by 50 Hz	W	975	390	1260	695	1850	685
		1450	660	1970	1130	2090	865
		2840	1235				
HEATING CAPACITY: AT -18°C AMBIENT/2400 RPM							
On the road swash plate compressor	W	-	1900	-	2200	2800	-
Electric standby operation	W	-	1100	-	1300	2050	-
AIRFLOW							
Airflow volume @ 0 pa static pressure	m³/h	1 x 680	1 x 680	2 x 1152	1 x 1150	2 x 1152	3 x 1152
							3 x 1152
WEIGHT							
Condenser w/o electric standby	kg	25	25	25	25	25	25
Condenser with electric standby	kg	43	70	70	43	72	70
Evaporator	kg	9	9	15	14	15	18
Swash plate compressor	kg	6.5	6.5	6.9	6.5	6.9	6.8
COMPRESSOR							
Model		QP08N	QP08N	QP13	QP08N	QP13	QP15
Displacement	cc	82	82	131	82	131	146.7
Number of cylinders		6	6	6	6	6	6
ELECTRIC STANDBY MOTOR							
Voltage/phase/frequency		230/1/150	230/1/50	230/1/50 230/1/60 400/3/50 230/3/50 230/3/60	230/1/50	230/1/50 230/1/60 400/3/50 230/3/50 230/3/60	230/1/50 230/1/60 400/3/50 230/3/50 230/3/60
Rating	kW	1.6	1.6	3.7 (400/3/50)	1.6	3.8 (400/3/50)	3.7 (400/3/50)
						3.8 (400/3/50)	
REFRIGERANT CHARGE							
Charge	kg	10: 0.62 20: 1.0	10/30: 0.62 20:1 - 50: 1.2	10/30: 1.1 20/50: 1.35	1.2	10/30: 1.0 20/50: 1.2	10: 1.1 20: 1.35
							10/30: 1.1 20/50: 1.35
GENERIC							
Refrigerant		R-134a	R-404A/ R-452A	R-134a	R-404A/ R-452A	R-404A/ R-452A	R-134a
Controller		DSR III	DSR III	DSR III	DSR III	DSR III	DSR III
DEFROST							
Defrost		Automatic hot gas defrost/Reverse cycle					

	V-500	V-500 MAX	V-600 MAX	V-800	V-800 MAX
REFRIGERATION CAPACITY: AT 30°C AMBIENT					
	°C	0°C	-20°C	0°C	-20°C
Air return/on the road	W	3915	1655	4865	2515
Electric standby 50 Hz	W	3160	1090	4115	1915
		4970	2550	4920	-
		7790	4160		
HEATING CAPACITY: AT -18°C AMBIENT/2400 RPM					
On the road swash plate compressor	W	-	3600	4000	-
Electric standby operation	W	-	3120	3200	-
AIRFLOW					
Airflow volume @ 0 pa static pressure	m³/h	3 x 680	3 x 680	3 x 1152	2680
					2680
WEIGHT					
Condenser w/o electric standby	kg	53	53	53	100
Condenser with electric standby	kg	125	125	125	160
Evaporator	kg	25.5	25.5	28	35
Swash plate compressor	kg	7.1	7.1	7.1	8.5
COMPRESSOR					
Model		QP16	QP16	QP16	QP21
Displacement	cc	163	163	163	215
Number of cylinders		6	6	6	10
ELECTRIC STANDBY MOTOR					
Voltage/phase/frequency			400/3/50 380/3/60 230/3/50 230/3/60 230/1/50 230/1/60		400/3/50 400/3/60 230/3/50 230/3/60
Rating	kW	6.4 (400/3/50)	6.4 (400/3/50)	6.4 (400/3/50)	8.2 (400/3/50)
					8.2 (400/3/50)
REFRIGERANT CHARGE					
Charge	kg	10:2.0 20:2.2	10:2.1 20/30:2.2 50:2.3	10:2.2 20/30:2.3 50:2.4	10:4.55 20:4.85
					10/30:4.7 20/50:5
GENERIC					
Refrigerant		R-134a	R-404A/ R-452A	R-404A/ R-452A	R-134a
Controller		DSR III	DSR III	DSR III	DSR III
DEFROST					
Defrost		Automatic hot gas defrost/Reverse cycle			

Multi-temperature models specifications

V-200 MAX SPECTRUM

REFRIGERATION CAPACITY: AT 30°C AMBIENT					
		ES100 MAX + ES100 MAX		ES100 MAX + ES100N MAX*	
Return air to evaporator	°C	-20°C		-20°C	
Capacity on engine power	W	1750		1750	
Capacity on electrical stand	W	1170		1170	
REFRIGERATION CAPACITY: INDIVIDUAL COOLING CAPACITY					
		ES100 MAX		ES100N MAX*	
Return air to evaporator		0°C	-20°C	0°C	-20°C
Capacity on engine power	W	2670	1450	2260	1345
Capacity on electrical stand	W	2195	1125	2015	1015
HEATING CAPACITY					
On the road	W	2800			
Electric standby operation	W	2050			
AIRFLOW					
		ES100 MAX + ES100 MAX		ES100 MAX + ES100N MAX*	
On high speed engine operation	m³/h	695		695	
WEIGHT					
Condenser w/o electric standby	kg	25			
Condenser with electric standby	kg	75			
Evaporator ES100 MAX	kg	9			
Swash plate compressor	kg	6.9			
COMPRESSOR					
Model		QP 13			
Displacement	cc	131			
Number of cylinders		6			
ELECTRIC STANDBY MOTOR					
Voltage/phase/frequency		230/1/50 - 230/1/60 - 400/3/50 - 230/3/50 - 330/3/60			
Rating	kW	3.8			
REFRIGERANT CHARGE					
Charge	kg	1.35			
GENERIC					
Refrigerant		R-404A/R-452A			
Controller		DSR III			
DEFROST					
Defrost		Automatic hot gas defrost			

Capacity on engine power given at 2400 rpm (ATP conditions)

* ES100N only available upon special request. Please contact your local dealer.

V-300 MAX SPECTRUM

REFRIGERATION CAPACITY: AT 30°C AMBIENT							
		ES150 + ES150		ES150 + ES100		ES200 + ES100	
Return air to evaporator	°C	-20°C		-20°C		-20°C	
Capacity on engine power	W	2150		2150		1870	
Capacity on electrical stand	W	1380		1415		1315	
REFRIGERATION CAPACITY: INDIVIDUAL COOLING CAPACITY							
		ES150 MAX		ES100 MAX		ES200 MAX	
Return air to evaporator		0°C	-20°C	0°C	-20°C	0°C	-20°C
Capacity on engine power	W	2895	1625	2685	1540	2940	1585
Capacity on electrical stand	W	2340	1240	2205	1145	2480	1180
HEATING CAPACITY							
On the road	W	3100					
Electric standby operation	W	2250					
AIRFLOW							
		ES150 MAX		ES100 MAX		ES200 MAX	
On high speed engine operation	m³/h	890		770		1210	
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					
Swash plate compressor	kg	6.8					
COMPRESSOR							
Model		QP 15					
Displacement	cc	146.7					
Number of cylinders		6					
ELECTRIC STANDBY MOTOR							
Voltage/phase/frequency		230/1/50 - 230/1/60 - 400/3/50 - 230/3/50 - 330/3/60					
Rating	kW	3.8					
REFRIGERANT CHARGE							
Charge	kg	30: 1.55 - 50: 1.6					
GENERIC							
Refrigerant		R-404A/R-452A					
Controller		DSR III					
DEFROST							
Defrost		Automatic hot gas defrost					

Multi-temperature models specifications

V-500 MAX SPECTRUM

REFRIGERATION CAPACITY: AT 30°C AMBIENT											
		ES300 MAX+ ES300 MAX		ES300 MAX+ 2xES150 MAX		ES300 MAX+ ES150 MAX		ES500+ ES100n			
Return air to evaporator	°C	-20°C		-20°C		-20°C		-20°C			
Capacity on engine power	W	2290		2290		2290		2210			
Capacity on electrical stand	W	1920		1920		1920		1705			
REFRIGERATION CAPACITY: INDIVIDUAL COOLING CAPACITY											
		ES300 MAX		2XES150 MAX		ES150 MAX		ES500		ES100n	
Return air to evaporator		0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C
Capacity on engine power	W	3585	1850	3974	1970	2925	1410	4630	2380	2300	1290
Capacity on electrical stand	W	3385	1670	3596	1700	2579	1320	4085	2020	2410	1075
HEATING CAPACITY											
On the road	W	3600									
Electric standby operation	W	3120									
AIRFLOW											
		ES300 MAX + ES300 MAX		ES300 MAX + 2XES150 MAX		ES300 MAX + ES150 MAX		ES500+ ES100n			
On high speed engine operation	m³/h	2x1185		1185+(2x700)		1185+700		2700+790			
WEIGHT											
Condenser w/o electric standby	kg	53									
Condenser with electric standby	kg	125									
Evaporator ES300 MAX	kg	18									
Evaporator ES150 MAX	kg	12.5									
Evaporator ES100N	kg	8.5									
Evaporator ES500	kg	25.5									
Swash plate compressor	kg	7.1									
COMPRESSOR											
Model		QP 16									
Displacement	cc	163									
Number of cylinders		6									
ELECTRIC STANDBY MOTOR											
Voltage/phase/frequency		400/3/50 - 230/3/50 - 230/3/60 - 230/1/50 - 230/1/60 - 380/3/60									
Rating	kW	6.4 (400/3/50)									
REFRIGERANT CHARGE											
Charge	kg	Model 30 = 2.4 kg and model 50 = 2.5 kg									
GENERIC											
Refrigerant		R-404A/R-452A									
Controller		DSR III									
DEFROST											
Defrost		Automatic hot gas defrost									

Capacity on engine power given at 2400 rpm (ATP conditions)

V-800 MAX SPECTRUM

REFRIGERATION CAPACITY: AT 30°C AMBIENT									
		ES400 MAX+ ES400 MAX		ES600MAX+ ES150 MAX		ES600 MAX+ 2x ES150 MAX			
Return air to evaporator	°C	-20°C		-20°C		-20°C			
Capacity on engine power	W	4395		3850		4300			
Capacity on electrical stand	W	3595		3385		3595			
REFRIGERATION CAPACITY: INDIVIDUAL COOLING CAPACITY									
		ES400 MAX		ES600 MAX		ES150 MAX		2 X ES150 MAX	
Return air to evaporator		0°C	-20°C	0°C	-20°C	0°C	-20°C	0°C	-20°C
Capacity on engine power	W	5740	3300	6765	3460	3975	2270	5640	2995
Capacity on electrical stand	W	5300	3010	6305	3110	3850	2165	5045	2705
HEATING CAPACITY									
On the road	W	4500							
Electric standby operation	W	4000							
AIRFLOW									
		ES400 MAX + ES400 MAX		ES600 MAX + ES150 MAX		ES600 MAX + 2XES150 MAX			
On high speed engine operation	m³/h	1760x2		2260+890		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	cc	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									
Charge	kg	ES400+ES400: 5.2 - ES600+ES150: 5.0 - ES600+2XES150: 5.15							
GENERIC									
Refrigerant		R-404A/R-452A							
Controller		DSR III							
DEFROST									
Defrost		Automatic hot gas defrost							

Note: specifications are subject to change without notice.

Dimensions (mm)

CONDENSER UNITS



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



V-200/V-300



V-200/V-300 Spectrum



V-500/V-500 MAX/
V-600 MAX/V-500 MAX Spectrum



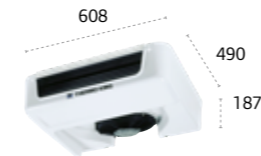
V-800/V-800 MAX/V-800 MAX Spectrum

CONTROLLER

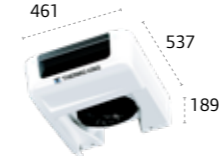


In-cab Direct Smart Reefer

EVAPORATORS



ES100
Ultra Slim



ES100N*
Ultra Slim



ES150 MAX
Ultra Slim



ES200
Ultra Slim



ES300/ES300 MAX
Ultra Slim



ES400 MAX



ES500
Ultra Slim



ES600 MAX



ES800
Ultra Slim

Weights (approximate)

Condensers:

V-100/V-200/V-300 without electric stand-by	25 kg
V-100/V-200s with electric stand-by	43 kg
V-200/V-300 single temp. with electric stand-by	70 kg
V-200/V-300 Spectrum with electric stand-by	72 kg
V-500/V-500 MAX/ V-600 MAX/ V-500 MAX Spectrum	53 kg
V-800/V-800 MAX/ V-800 MAX Spectrum	100 kg

Evaporators:

ES100 (Ultra Slim)	9.5 kg
ES100N* MAX (Ultra Slim)	8.5 kg
ES150 MAX (Ultra Slim)	14 kg
ES200 (Ultra Slim)	15 kg
ES300/ES300 MAX (Ultra Slim)	18 kg
ES400 MAX	20 kg
ES500 (Ultra Slim)	25.5 kg
ES600 MAX	28 kg
ES800 (Ultra Slim)	35 kg

Others:

Installation kit (incl. cpr.)	24 kg
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* ES100N only available upon special request. Please contact your local dealer.



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.





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THERMO KING ThermoKare



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TK Wintrac is just an example. Check it out on europe.thermoking.com/telematics





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