

EV-SERIES

— power for revolution —



REFRIGERATION SOLUTIONS FOR ELECTRICAL SMALL
LIGHT TRUCKS & VANS

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EV-Series

FOR SMALL AND MEDIUM VEHICLES

The EV-Series is the ideal electrical solution to deliver temperature-sensitive cargo in small and medium vehicles of up to 26 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. EV-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 four road-only models available to match your exact needs.



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DESIGNED FOR HIGHER PERFORMANCE

- Quicker temperature pull-down
- Higher airflow
- Larger cooling capacity
- Light weight and compact design
- Reduced refrigerant charge
- Increased efficiency and sustainability
- Suitable for extreme ambient conditions
- 1-year warranty (unit and parts)

Professional Solution

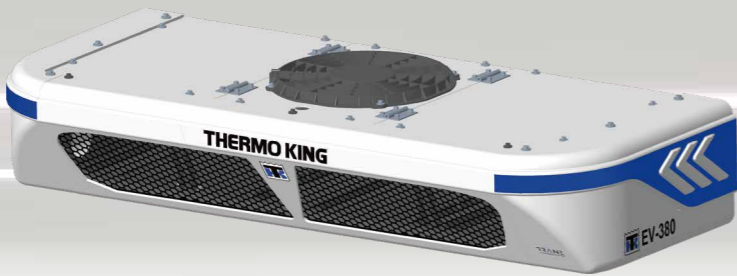
NEW

EV-SERIES FOR SMALL TRUCKS:
HIGH PERFORMANCE, LOW TOTAL COST OF OWNERSHIP.

The Mini EV series has been completely upgraded with a unified family design, a professional electrical platform, powerful capacity, and flexible installation. Our EV-280 and EV-380 meet all your expectations for Thermo King’s EV products.

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

- Split layout offering EV-280 / EV-380
- Roof mount and nose mount



EV-280 & EV-380



EV-580 & EV580S

NEW

EV-SERIES FOR LIGHT TRUCKS:
THE BEST JUST GOT BIGGER.

The EV-Series range has been updated. It now includes optimal control solutions **for light trucks, up to an impressive 26 m³**. Naturally, our EV-580 and EV-580S models have everything you’d expect from Thermo King’s EV-Series, except that they are bigger and more powerful.

If you want a highly efficient and sustainable unit for both frozen and fresh applications, the new models of EV-Series range are the ideal solution for you.

- Split layout offering EV-580
- One piece layout offering EV-580S
- Cooling and heating models

PRODUCT FEATURES

POWERFUL CAPACITY MINI TRUCK

- Lightweight design, over 20% lower weight
- Powerful cooling, 13% higher capacity
- Integrated control core solution
- Robust control logic

HIGH CAPACITY LIGHT TRUCKS

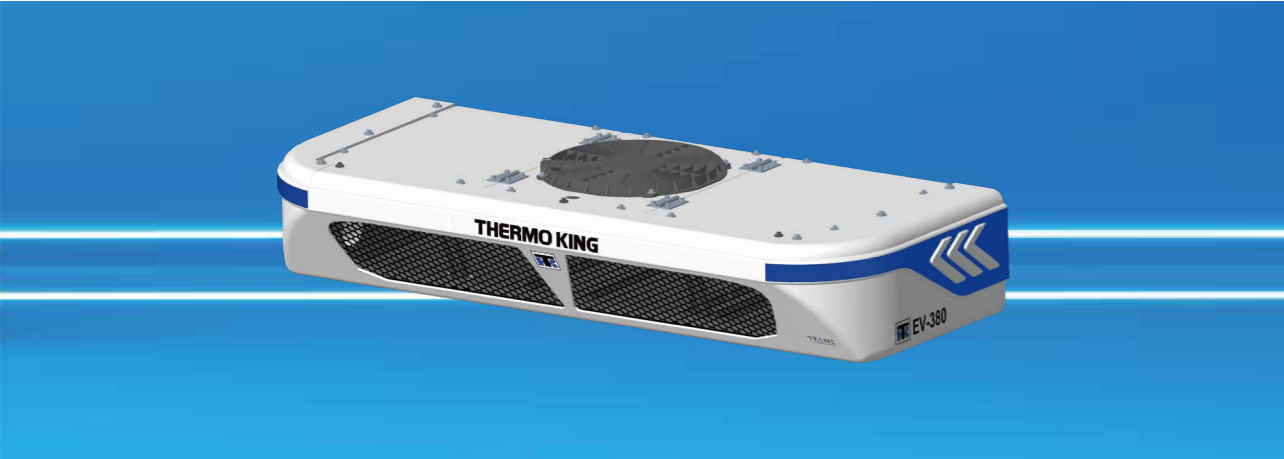
- 20% lower weight, 12% shorter length
- 28% higher capacity, 8.3% higher efficiency(EV-580S)
- Aluminium Frame & ABS cover to reduce weight
- Larger microchannel heat exchanger to improve condensing capacity and design redundancy

ARCON ROBUST CONTROL ARCHITECTURE

- Integrated control core solution
- Vehicle components selections
- Powerful ECU for Truck with abundant resource
- Robust control logic

Specifications

Specification	Unit	EV-280	EV-380
REFRIGERATION CAPACITY AT DC POWER INPUT:			
FRESH CAPACITY@30/0℃	W	2400	3400
FROZEN CAPACITY @30/-20℃	W	1300	1800
REFRIGERATION CAPACITY AT 1PH STANDBY POWER INPUT:			
FRESH CAPACITY@30/0℃	W	2400	3400
FROZEN CAPACITY @30/-20℃	W	1300	1800
EVAPORATOR FAN PERFORMANCE			
AIR FLOW@0 PA	m³/h	700	1500
PERFORMANCE			
FRESH EFFICIENCY		1.3	
HEATING(PTC OPTION)	W	1500	
MAX POWER CONSUMPTION	W	2200	3100
TEMP RANGE	℃	-15 ~ 55Cooling	
POWER INPUT			
DC POWER	V	320~750	
STANDBY POWER		1Ph-220V-50HZ	
CONTROL POWER	V	12	
WEIGHT			
CONDENSOR	Kg	57	
EVAPORATOR	Kg	10	17
DIMENSION			
CONDENSOR Nose (W x D x H)	mm	1330 x 550 x 253	1330 x 550 x 253
CONDENSOR Roof (W x D x H)	mm	1402 x 765 x 260	1402 x 765 x 260
EVAPORATOR (W x D x H)	mm	608 x 490 x 187	985 x 551 x 180
REFRIGERATION CHARGE			
R-404A/R-452A	Kg	1.7	



EV-580	EV-580S
REFRIGERATION CAPACITY AT DC POWER INPUT:	
4650	5650
2650	2900
REFRIGERATION CAPACITY AT 1PH STANDBY POWER INPUT:	
4650	4700
2650	2900
EVAPORATOR FAN PERFORMANCE	
1800	2000
PERFORMANCE	
1.3	1.3
2500	
4500	5500
-15 ~ 55Cooling / -25 ~ 55Heating	
POWER INPUT	
320~750	
3Ph-380V-50HZ* /1Ph-220V-50HZ	
24	
WEIGHT	
83	99
16	
DIMENSION	
1436x572x508	1436x572x508
-	-
1080x592x238	1088x587x228
REFRIGERATION CHARGE	
2.4	2.4

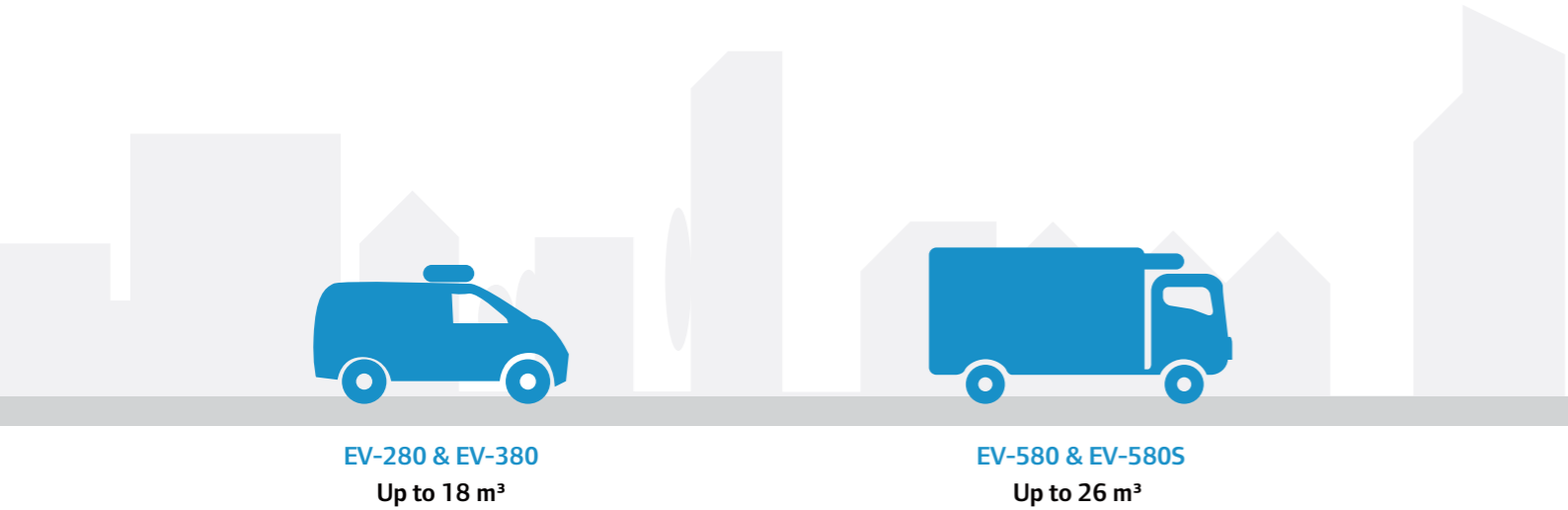
*The capacity of 3ph standby is the same as DC power input.



Unit selection guide

AMBIENT TEMPERATURE					
MODEL	30°C		40°C		-18°C
Set temp.	0/2°C	-20°C	0/2°C	-20°C	5°C
EV-280	14m³	7m³	11m³	5m³	-
EV-380	18m³	11m³	15m³	9m³	-
EV-580	26m³	18m³	26m³	16m³	26m³
EV-580S	26m³	23m³	26m³	18m³	26m³

The table above is a guide to select the right unit in the new EV-Series to match your application. These figures are maximum vehicle volumes, calculated on road operation, at DC power 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.



Dimensions

CONDENSER UNITS

EV-280/EV-380 Condenser(Nose)

EV-280/EV-380 Condenser(Roof)

EV-580/ EV-580S Condenser

EVAPORATORS

EV-280 Evaporator

EV-380 Evaporator

EV-580 Evaporator

CONTROLLER

Arcon controller

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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