## GREETINGS

Welcome to AT-THERMO. Co., Ltd.

As a specialist in vehicle refrigeration systems, AT-THERMO. Co., Ltd. is growing rapidly by competing with many domestic and overseas competitors. Unlike general industrial refrigerators, this system requires high reliability to maintain freshness and optimal temperatures while moving to various areas. It provides high performance under bad conditions by accurate temperature control. Many overseas customers have recognized our technology for its quality and advantages.

Our products, exported to Southeast Asia, the Middle East, South America, etc., are well-known as refrigeration systems that can be applied to harsh environments and unfavorable conditions. We are broadening our value through our innovative technology and better-quality products.

We will try hard and hard to become a leading manufacturer in the global market. We sincerely thank you for your interest and support.

## Thank you.

Jem.sh

President & CEO AT-THERMO. Co., Ltd

## **PRODUCTS OVERVIEW**

**MAIN TYPE** (Vehicle Engine Driven Referigeration Unit)



**RX-100** 



RX-200 / RX-200ES Optional



RX-200 Mini



RX-500 / RX-500ES Optional



[TATA DAEWOO OEM] RX-500



## RX-400 / RX-400ES Optional



## RX-700 / RX-700ES Optional



## [TATA DAEWOO OEM] RX-700

## MAIN TYPE (Vehicle Engine Driven Referigeration Unit)



RX-800HL



**RX-900** 



**RX-1000** 



**RX-500D** 

**RX-700D** 



**RX-900D** 

# **PRODUCTS OVERVIEW**

**MAIN TYPE** (Vehicle Engine Driven Referigeration Unit)



RT-200HL / RT-200HLes Optional



RT-400HL / RT-400HLes Optional



RT-500HL / RT-500HLes Optional

ELECTRIC VEHICLE TYPE (Under Development)



EV-300/EV-400

## **SUB TYPE** (Diesel Engine Driven Referigeration Unit)



AT-700S / AT-700ES Optional



AT-900S / AT-900ES Optional



AT-800S / AT-800ES Optional



## AT-1000S / AT-1000ES Optional





AT-1000U / AT-1000Ues Optional



AT-1200U / AT-1200Ues Optional



AT-1500U / AT-1500Ues Optional

## **RX - 100**

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for small insulated trucks & vans in range of  $3 \sim 7 \text{ m}^3$  storage volume.

## Description

A small van refrigeration system exclusively designed for fresh and fronzen products.

Nose or Roof-Top Mount Type are available with high efficiencies of performance.



## Condenser Unit

### PLATE FIN TYPE

One PP axial fan - diam. 280 mm

Weight : 20.7 kg (45.5 lbs)

Overall Size : 789W x 450D x 212H mm (31W x 17.7D x 8.3H inch)



## **Evaporator Unit**

### PLATE FIN TYPE

One plastic axial fan - diam. 230 mm - 1160m<sup>3</sup>/h

Weight : 13.7 kg (30.2 lbs)

Overall Size : 706W x 595D x 190H mm (27.8W x 23.4D x 7.5H inch)



## Capacity

Evaporator tempe			R-404a refrige Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	2348	2730	9315	1920	2211	7545
-20	-4	1316	1530	5220	-	-	-

\* Specifications can be changed without notice in advance

## **Compressor**

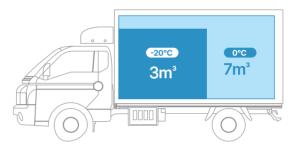
Model : VALEO / TM-15 Displacement : 147 cc Cylinder : 6 cylinders Model : SANDEN / SD-5H14 Displacement : 138 cc Cylinder : 5 cylinders





-20°C

Ambient 30°C



## Others

Refrigerants : R404a or R134a Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

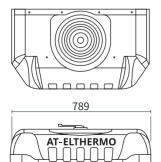
Condenser Case : Frame : GI - steel / Grill : ABS

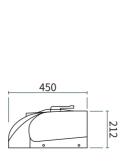
Evaporator Case : ABS SLIM



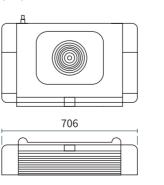
## Dimension

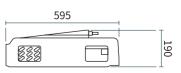
(mm)





(mm)





## RX-200 / RX-200ES Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for small insulated trucks & vans in range of 7~17 m<sup>3</sup> storage volume.

## Description

A slim dynamic small truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of performance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser plastic axial fan and evaporator with two plastic axial fans separately.



## **Condenser Unit**

#### PLATE FIN TYPE

plastic axial fan - diam. 280 mm Weight: 29 kg (63.9 lbs) Overall Size : 916W x 493D x 233H mm (36W x 19.4D x 9.2H inch)



## **Evaporator Unit**

#### PLATE FIN TYPE

Two plastic axial fans - diam. 230 mm - 1160m<sup>3</sup>/h Weight: 20 kg (44 lbs) Overall Size : 1006W x 590D x 188H mm (39.6W x 23.2D x 7.4H inch)



## Capacity

Evaporator tempe			R-404a refrig Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3025	3518	12003	2451	2850	9723
-20	-4	1901	2210	7541	-	-	-

\* Specifications can be changed without notice in advance

## Compressor

Model : VALEO / TM-16

Displacement : 162.9 cc

Cylinder: 6 cylinders

Model : SANDEN / SD-7H15

Displacement : 154 cc

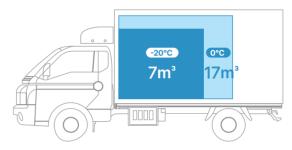
Cylinder: 7 cylinders

## Box volume



-20°C

Ambient 30°C



## Others

Refrigerants : R404a or R134a

Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

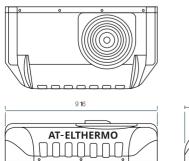
Condenser Case : Frame : GI - steel / Grill : ABS

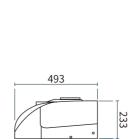
Evaporator Case : ABS SLIM



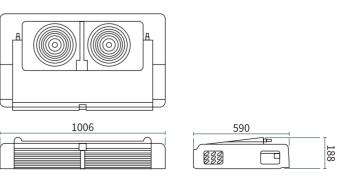
## Dimension

(mm)





(mm)



## **RX - 200 Mini**

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

Nose type high performance refrigeration unit for small insulated trucks & vans of 3~7m<sup>3</sup> storage volume.

## Description

A slim dynamic small truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of perfprmance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with two plastic axial fan and evaporator with two plastic axial fans separately.



## Condenser

## Ultra slim micro-channel heat exchanger Type

One Plastic Axial Fan - diam. 380mm x 1ea

Weight: 26.0Kg

Overall Size: 947L x 506W x 188H (mm)



## **Evaporator**

## PLATE FIN & TUBE TYPE

One Plastic Axial Fan - diam. 305mm x 1ea - 850m³/h Weight : 14.7Kg Overall Size : 752L x 743W x 207H (mm)



## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 1.0 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth

## Compressor

Engine Driven / 2,400rpm VALEO TM-15 147cc Oil Charge SW-32 POE 400cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 33.1Amp (OPTION - DC24V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity

Evaporator tempe			R-404a refrig Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	2597	3020	10304	2104	2446	8346
-20	-4	1497	1740	5937	-	-	-

\* Specifications can be changed without notice in advance

## RX-400 / RX-400ES Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium truck in range of 7~17 m<sup>3</sup> storage volume.

## Description

A refrigerator system exclusively designed for fresh and frozen applications on medium truck. The compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with two plastic axial fans and evaporator with two plastic axial fans separately.



## Condenser Unit

#### PLATE FIN TYPE

Two plastic axial fans - diam. 280 mm Weight : 24.1 kg (53.1 lbs) Overall Size : 1042W x 425D x 293H mm (41.0W x 16.7D x 11.5H inch)



## **Evaporator Unit**

## PLATE FIN TYPE

Two plastic axial fans - diam. 255 mm x 2ea - 1,410m<sup>3</sup>/h Weight : 23.6 kg Overall Size : 1039L x 694D x 207H mm



## Capacity

Evaporato tempe			R-404a refrig Road Operatio		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3526	4100	13989	2856	3321	11331
-20	-4	1978	2300	7848	-	-	-

\* Specifications can be changed without notice in advance

## Compressor

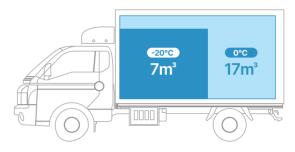
Model : VALEO / TM-16 Displacement : 162.9 cc Cylinder : 6 cylinders Model : SANDEN / SD-7H15 Displacement : 154 cc Cylinder : 7 cylinders

## Box volume



-20°C

Ambient 30°C



## Others

Refrigerants : R404a or R134a

Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

Condenser Case : Frame : GI - steel / Grill : ABS

Evaporator Case : ABS SLIM

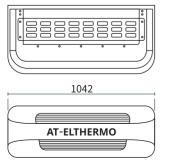
## AC standby (option)

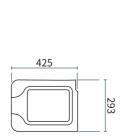
AC220/240V = 50/60HZ : QHD-23K 8A

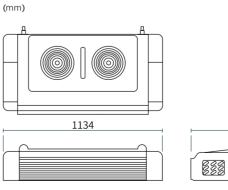


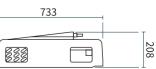
## Dimension











15

## RX-500 / RX-500ES Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of 10~18m<sup>3</sup> storage volume.



## Description

A refrigerator system exclusively designed for fresh and frozen applications on medium and large truck. The compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with two plastic axial fans and evaporator with two plastic turbo fans separately.

## Evaporator Unit

### PLATE FIN TYPE

Two turbo fans - diam. 230 mm - 1650 m<sup>3</sup>/h Weight : 23.3 kg (51.3 lbs) Overall Size : 1260W x 593D x 185H mm (49.6W x 23.2D x 7.3H inch)



## **Condenser Unit**

## PLATE FIN TYPE

Two axial fans - diam. 280 mm

Weight : 32.9 kg (72.5 lbs)

Overall Size : 1080W x 510D x 375H mm (42.5W x 20D x 14.8H inch)



## PLATE FIN & TUBE TYPE

Two turbo fans - diam. 255 mm x 3ea - 2,180 m<sup>3</sup>/h Weight : 23.3 kg (51.3 lbs) Overall Size : 1251L x 743W x 207H mm



## Capacity

Evaporator tempe			R-404a refrig oad Operatio		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3870	4500	15354	3135	3645	12437
-20	-4	2202	2560	8735	-	-	-

\* Specifications can be changed without notice in advance

## Compressor

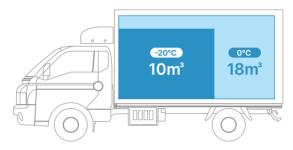
Model : VALEO / TM-16 Displacement : 162.9 cc Cylinder : 6 cylinders Model : SANDEN / SD-7H15 Displacement : 154 cc Cylinder : 7 cylinders

## Box volume



-20°C

Ambient 30°C



## Others

Refrigerants : R404a or R134a

Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

Condenser Case : Frame : GI - steel / Grill : ABS

Evaporator Case : ABS SLIM

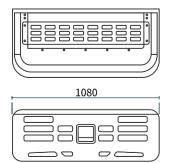
## AC standby (option)

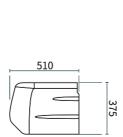
AC220/240V = 50/60HZ : QHD-36K = 35.7



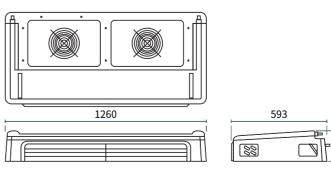
## Dimension

(mm)





(mm)



185

## RX-700 / RX-700ES Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of 18~25 m<sup>3</sup> storage volume.

## Description

A refrigerator system exclusively designed for fresh and frozen appllications on medium and large truck. The compressor is directly driven by the vehicles engine. This is a split system which consists of condenser with three plastic axial fans and evaporator with three plastic axial fans sepatately.



## **Condenser Unit**

## PLATE FIN TYPE

Three axial fans - diam. 280 mm

Weight: 36 kg (79.4 lbs)

Overall Size : 1280W x 516D x 378H mm (50.4W x 20.3D x 14.9H inch)



## **Evaporator Unit**

## PLATE FIN TYPE

Three axial fans - diam. 250 mm - 2100m<sup>3</sup>/h

Weight : 27 kg (59.5 lbs)

Overall Size : 1498W x 855D x 208H mm (54.7W x 24.1D x 7.2H inch)



## Capacity

Evaporator tempe			R-404a refrig Road Operatio		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	5418	6300	21496	4389	5103	17411
-20	-4	3096	3600	12283	-	-	-

\* Specifications can be changed without notice in advance

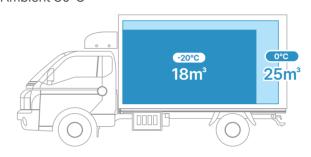
## Compressor

Model : VALEO / TM-21 Displacement : 214.7 cc Cylinder : 6 cylinders

## Box volume



Ambient 30°C



## Others

Refrigerants : R404a or R134a

Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

Condenser Case : Frame : GI - steel / Grill : ABS

516

Evaporator Case : ABS SLIM

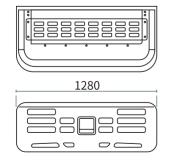
## AC standby (option)

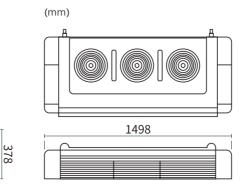
AC220/240V = 50/60HZ : QHD-36K = 35.7

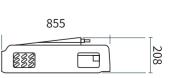


## Dimension

(mm)







## RX - 500 TATA DAEWOO OEM PRODUCT ONLY

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of 10~18m<sup>3</sup> storage volume.

## Description

Rooftop mounted refrigerator for vans

Compressor driven by vehicle engine

Separated composition

- 2 plastic axial fan condenser and 2 turbo fan evaporator



## **Condenser Unit**

### **PLATE FIN TYPE**

Two plastic axial fans - diam. 280 mm Weight: 32.9 kg Overall Size : 1080W x 510D x 375H mm



## **Evaporator Unit**

## PLATE FIN TYPE

Two turbo fans - diam. 230 mm - 1650m<sup>3</sup>/h Weight: 23.3 kg Overall Size : 1260W x 593D x 185H mm



## Capacity

Evaporator tempe			R-404a refrig Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3870	4500	15354	3135	3645	12437
-20	-4	2202	2560	8735	-	-	-

\* Specifications can be changed without notice in advance

## Compressor

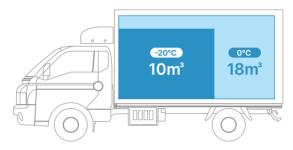
Model : VALEO / TM-16 Displacement : 162.9 cc Cylinder : 6 cylinders Model : SANDEN / SD-7H15 Displacement : 154 cc Cylinder : 7 cylinders

## Box volume



-20°C

Ambient 30°C



## Others

Refrigerants : R404a or R134a

Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

Condenser Case : Frame : GI - steel / Grill : ABS

Evaporator Case : ABS SLIM

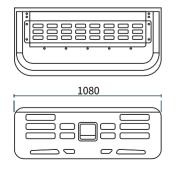
## AC standby (option)

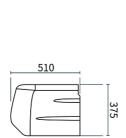
AC220/240V = 50/60HZ : QHD-36K = 35.7



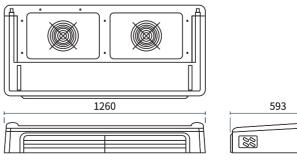
## Dimension

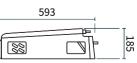
(mm)





(mm)





## RX - 700 TATA DAEWOO OEM PRODUCT

OEM PRODUCT ONLY

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium truck in range of 18~25 m<sup>3</sup> storage volume.

## Description

A refrigerator system exclusively designed for fresh and frozen appllications on medium sized truck. The compressor is directly driven by the vehicles engine. This is a split system which consists of condenser with three AL axial fans and evaporator with three plastic axial fans sepatately.



## **Condenser Unit**

## PLATE FIN TYPE

Three axial fans - diam. 280 mm

Weight: 36 kg (79.4 lbs)

Overall Size : 1280W x 516D x 378H mm (50.4W x 20.3D x 14.9H inch)



## **Evaporator Unit**

## PLATE FIN TYPE

Three axial fans - diam. 250 mm - 2100m<sup>3</sup>/h

Weight: 27 kg (59.5 lbs)

Overall Size : 1498W x 855D x 208H mm (54.7W x 24.1D x 7.2H inch)



## Capacity

Evaporator tempe			R-404a refrig oad Operatio		HFC R-134a refrigeran Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	5418	6300	21496	4389	5103	17411
-20	-4	3096	3600	12283	-	-	-

\* Specifications can be changed without notice in advance

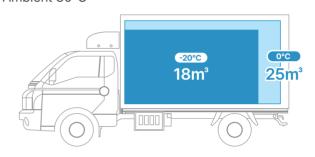
## Compressor

Model : VALEO / TM-21 Displacement : 214.7 cc Cylinder : 6 cylinders

## Box volume



Ambient 30°C



## Others

Refrigerants : R404a or R134a

Defrosting : Hot gas auto-defrost

Operation : Digital Display, Simple Operation Automatic on/off system

Condenser Case : Frame : GI - steel / Grill : ABS

516

Evaporator Case : ABS SLIM

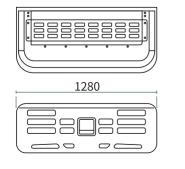
## AC standby (option)

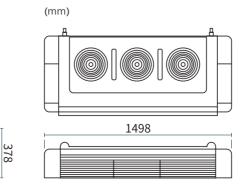
AC220/240V = 50/60HZ : QHD-36K = 35.7

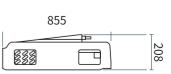


## Dimension

(mm)







## RX-800HL / RX-800HLes Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of 18~ 25m<sup>3</sup> storage volume.



## Description

A slim dynamic small truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of performance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with three plastic axial fan and evaporator with three plastic axial fans separately.

## Condenser

#### Ultra slim micro-channel heat exchanger Type

Three Plastic Axial Fan - diam. 305mm x 3ea Weight : 36.9Kg Overall Size : 1,446L x 528W x 390H (mm)



## **Evaporator**

#### **PLATE FIN & TUBE TYPE**

Three Plastic Axial Fan - diam. 255mm x 3ea - 2,180m<sup>3</sup>/h Weight : 32.3Kg Overall Size : 1,251L x 743W x 207H (mm)



## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 2.3 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth

## Compressor

Engine Driven / 2,400rpm VALEO TM-21 215cc Oil Charge SW-32 POE 450cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 33.1Amp (OPTION - DC24V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity

Evaporator tempe			R-404a refrig Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	5418	6300	21496	4389	5103	17411
-20	-4	3096	3600	12283	-	-	-

\* Specifications can be changed without notice in advance

## **RX-900**

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of  $20 \sim 30 \text{m}^3$  storage volume.



## Description

A refrigerator system exclusively designed for fresh and frozen applications on medium truck. The compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with four plastic axial fans and evaporator with four plastic axial fans separately.

## Condenser

#### Ultra slim micro-channel heat exchanger Type

Four Plastic Axial Fan - diam. 280mm x 4ea

Weight: 39.9Kg

Overall Size: 1,760L x 548W x 440H (mm)



## **Evaporator**

#### **PLATE FIN & TUBE TYPE**

Four Plastic Axial Fan - diam. 255mm x 4ea - 2,930m<sup>3</sup>/h

Weight: 43.5Kg

Overall Size: 1,738L x 694W x 207H (mm)



## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 2.3 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth



## Compressor

Engine Driven / 2,400rpm VALEO TM-21 215cc VALEO TM-31 313cc ( Option ) Oil Charge SW-32 POE 450cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 35.5Amp (OPTION - DC24V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity (When using TM-21)

Evaporator tempe			R-404a refrig Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	6450	7500	25590	5225	6075	20728
-20	-4	3784	4400	15013	-	-	-

\* Specifications can be changed without notice in advance

## **RX - 1000**

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for large size truck in range of 25~38m<sup>3</sup> storage volume.



## Description

A slim dynamic small truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of performance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with four plastic axial fan and evaporator with four plastic axial fans separately.

## Condenser

#### Ultra slim micro-channel heat exchanger Type

Four Plastic Axial Fan - diam. 305mm x 3ea

Weight: 38.9 Kg

Overall Size: 1,450L x 583W x 390H (mm)



## **Evaporator**

#### **PLATE FIN & TUBE TYPE**

Four Plastic Axial Fan - diam. 255mm x 4ea - 2,930m<sup>3</sup>/h

Weight: 43.5Kg

Overall Size: 1,738L x 694W x 207H (mm)



## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 3.0 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth

## Compressor

Engine Driven / 2,400rpm VALEO TM-31 313cc Oil Charge SW-32 POE 450cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 33.1Amp (OPTION - DC24V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity

	Evaporator return air temperature		HFC R-404a refrigerant Road Operation		HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	6450	7500	25590	5225	6075	20728
-20	-4	3784	4400	15013	-	-	-

\* Specifications can be changed without notice in advance



## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of 20~ 30m<sup>3</sup> storage volume.



## Description

A slim dynamic small truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of performance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with four plastic axial fan and evaporator with four plastic axial fans separately.

## Condenser

### Ultra slim micro-channel heat exchanger Type

Four Plastic Axial Fan - diam. 280mm x 4ea

Weight: 39.9Kg

Overall Size : 1,760L x 548W x 440H (mm)

## **Evaporator**

### **PLATE FIN & TUBE TYPE**

Two Plastic Axial Fan - diam. 230mm x 2ea - 1,650m<sup>3</sup>/h

Overall Size : 1,260L x 593W x 192H (mm) Weight : 23.3Kg





## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 2.3 kg / 2.0kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth



## Compressor

Engine Driven / 2,400rpm VALEO TM-21 215cc (1 ZONE) VALEO TM-16 163cc (2 ZONE) Oil Charge SW-32 POE 450cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC24V / 35.5Amp (OPTION - DC12V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity (When using TM-21)

Evaporator tempe			<b>R-404a refrig</b> <b>Operation</b> (1 Z		HFC R-404a refrigerant Road Operation(2 ZONE)		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3870	4500	15354	3870	4500	15354
-20	-4	2202	2560	8735	2202	2560	8735

\* Specifications can be changed without notice in advance



## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of 20~ 30m<sup>3</sup> storage volume.



## Description

A refrigerator system exclusively designed for fresh and frozen applications on medium truck. The compressors are directly driven by the vehicle's engine. This is a split system which consists of condenser with four plastic axial fans and evaporator with three plastic axial fans as well as additioanl two plastic axial fans seperately.

## Condenser

### Ultra slim micro-channel heat exchanger Type

Four Plastic Axial Fan - diam. 280mm x 4ea

Weight: 39.9Kg

Overall Size : 1,760L x 548W x 440H (mm)



## **Evaporator**

### **PLATE FIN & TUBE TYPE**

Three Plastic Axial Fan - diam. 230mm x 3ea - 1,910m<sup>3</sup>/h Overall Size : 1,389L x 613W x 185H (mm) Weight : 27.0Kg

Two Plastic Axial Fan - diam. 230mm x 2ea - 1,650m<sup>3</sup>/h Overall Size : 1,260L x 593W x 192H (mm) Weight : 23.3Kg



## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 2.3 kg / 2.0kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth



#### Compressor

Engine Driven / 2,400rpm VALEO TM-21 215cc (1 ZONE) VALEO TM-16 163cc (2 ZONE) Oil Charge SW-32 POE 450cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC24V / 35.5Amp (OPTION - DC12V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity (When using TM-21)

Evaporator return air temperature		HFC R-404a refrigerant Road Operation(1 ZONE)			HFC R-404a refrigerant Road Operation(2 ZONE)		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	4558	5300	18084	3870	4500	15354
-20	-4	2666	3100	10577	2202	2560	8735

\* Specifications can be changed without notice in advance



## **VEHICLE ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium and large truck in range of  $20 \sim 30 \text{m}^3$  storage volume.



## Description

A refrigerator system exclusively designed for fresh and frozen applications on medium & large size truck. The compressors are directly driven by the vehicle's engine. This is a split system which consists of condenser with four plastic axial fans and evaporator with four plastic axial fans as well as additioanl two plastic axia fans separately.

## Condenser

## Ultra slim micro-channel heat exchanger Type

Four Plastic Axial Fan - diam. 280mm x 4ea

Weight: 39.9Kg

Overall Size : 1,760L x 548W x 440H (mm)



## Evaporator

### **PLATE FIN & TUBE TYPE**

Four Plastic Axial Fan - diam. 255mm x 4ea - 2,930m<sup>3</sup>/h Overall Size : 1,738L x 694W x 207H (mm) Weight : 43.5Kg

Two Plastic Axial Fan - diam. 230mm x 2ea - 1,650m<sup>3</sup>/h Overall Size : 1,260L x 593W x 192H (mm) Weight : 23.3Kg



## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 2.3 kg / 2.0kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth



### Compressor

Engine Driven / 2,400rpm VALEO TM-21 215cc (1 ZONE) VALEO TM-16 163cc (2 ZONE) Oil Charge SW-32 POE 450cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC24V / 35.5Amp (OPTION - DC12V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity (When using TM-21)

Evaporator return air temperature		HFC R-404a refrigerant Road Operation(1 ZONE)			HFC R-404a refrigerant Road Operation(2 ZONE)		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	5160	6000	20472	3870	4500	15354
-20	-4	3392	3944	13457	2202	2560	8735

\* Specifications can be changed without notice in advance

## RT-200HL / RT-200HLes Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

Roof type high performance refrigeration unit for small van of 3 ~ 6m<sup>3</sup> storage volume.

## Description

A slim dynamic small van truck refrigeration system exclusively designed for fresh and frozen products. Roof Top Mount Type are avaiable with high efficiencies of performance.



## Condenser

#### Ultra slim micro-channel heat exchanger Type

One Plastic Axial Fan - diam. 380mm x 1ea

Weight: 25.0Kg

Overall Size : 792L x 729W x 200H (mm)



## **Evaporator**

#### **PLATE FIN & TUBE TYPE**

One Plastic Axial Fan - diam. 305mm x 1ea - 8 Weight : 14.7Kg Overall Size : 752L x 743W x 207H (mm)

## Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 1.0 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth

## Engine Driven / 2,400rpm

Compressor

VALEO TM-15 147cc Oil Charge SW-32 POE 400cc



## Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 23.5Amp (OPTION - DC24V)

## Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



## Capacity

Evaporator return air temperature		HFC R-404a refrigerant Road Operation			HFC R-134a refrigerant Road Operation		
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	2597	3020	10304	1212	1409	4809
-20	-4	1496	1740	5937	-	-	-

\* Specifications can be changed without notice in advance

## RT-400HL / RT-400HLes Optional

## **VEHICLE ENGINE DRIVEN REFRIGERATION**

Roof type high performance refrigeration unit for van of  $5 \sim 10 \text{m}^3$  storage volume.

## Description

A slim dynamic medium truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of perfprmance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with two plastic axial fan and evaporator with two plastic axial fans separately.





## Ultra slim micro-channel heat exchanger Type

Two Plastic Axial Fan - diam. 305mm x 2ea

Weight: 29.1Kg

Overall Size : 1,085L x 739W x 197H (mm)



## Evaporator

#### **PLATE FIN & TUBE TYPE**

Two Plastic Axial Fan - diam. 255mm x 2ea - 1,410m³/h

Weight: 23.6Kg

Overall Size: 1,039L x 694W x 207H (mm)

#### Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 1.3 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth



#### Compressor

Engine Driven / 2,400rpm VALEO TM-15 147cc Oil Charge SW-32 POE 400cc



#### Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 29.3Amp (OPTION - DC24V)

#### Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



#### Capacity

	Evaporator return air temperature		HFC R-404a refrigerant Road Operation			R-134a refrige Road Operation	
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3025	3518	12003	1539	1790	6108
-20	-4	1901	2210	7541	-	-	-

\* Specifications can be changed without notice in advance

## RT-500HL / RT-500HLes Optional

#### **VEHICLE ENGINE DRIVEN REFRIGERATION**

Roof type high performance refrigeration unit for van of  $8 \sim 16 \text{m}^3$  storage volume.

#### Description

A slim dynamic medium truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of perfprmance, etc., the compressor is directly driven by the vehicle's engine. This is a split system which consists of condenser with two plastic axial fan and evaporator with two plastic axial fans separately.



#### Condenser

#### Ultra slim micro-channel heat exchanger Type

Two Plastic Axial Fan - diam. 305mm x 2ea

Weight: 29.1Kg

Overall Size: 1,085L x 739W x 197H (mm)



#### Evaporator

#### **PLATE FIN & TUBE TYPE**

Two Plastic Axial Fan - diam. 305mm x 2ea - 1,630m<sup>3</sup>/h

Weight: 27.9Kg

Overall Size: 1,251L x 743W x 207H (mm)

#### Refrigerant

HFC R-134a or R-404a or R-452a

Refrigerant charge - 1.6 kg (R-404a)

Option \_ Low GWP R-452a We use Eco-Friendly Refrigerant to save earth



#### Compressor

Engine Driven / 2,400rpm VALEO TM-15 147cc Oil Charge SW-32 POE 400cc



#### Others

#### Option

Oil separator, SPR valve, Heater, Temperature Recorder

Defrost

Automatic hot gas defrost initiated and terminated by cab controller

#### Heating system

When the ambient is lower than the temperature in the truck body then, heating system is used to protect the products from frozen.

Current Draw : DC12V / 33.1Amp (OPTION - DC24V)

#### Controller

In-cab control system

Automatic start / stop engine operation by setting temperature

Automatic temperature display with easier control system

Option \_ IoT 4G ( LTE ) & GPS



#### Capacity

	Evaporator return air temperature		HFC R-404a refrigerant Road Operation			R-134a refrige Road Operation	
°C	°F	Kcal/h	Watts	Btu/h	Kcal/h	Watts	Btu/h
0	32	3715	4320	14740	1714	1993	6799
-20	-4	2116	2460	8394	-	-	-

\* Specifications can be changed without notice in advance

## AT-700S / AT-700ES Optional

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium truck in range of 24~29 m<sup>3</sup> storage volume. Box length in 6.5 meters.

#### Description

One of AT THEROM's self-powered engine driven units in AT series is refrigerator system with professionally designed and manufactured for fresh and frozen applications medium truck.

#### Condenser

**PF TYPE & FIN & TUBE TYPE** Fan drive : Driven by engine belt

#### Compressor

Model : BOCK FKX30 - 235TK / Germany Displacement : 235 cc

#### Engine

Model : KUBOTA / D 1105 / Japan Displacement : 1123 cc



#### **Refrigerant**

HFC R-404a Chlorine - Zero Refrigerant charge : 3.8 kg +/- 100 g

#### Electric standby

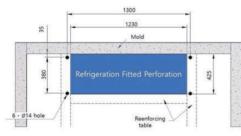
3.5kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

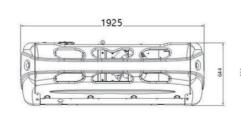
#### **Evaporator Unit**

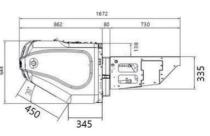
#### PLATE FIN TYPE

3 fans - diam. 280 mm Air Volume : 2730 m<sup>3</sup>/h Designed Air speed : 6 m/s

#### Dimension







#### Defrost control

Manual Defrost : controlled by pushing button manually Auto Defrost : controlled by pressure difference Timer Defrost : controlled by pre set-up cycling time of timer

#### System protection

Engine cut off at low oil pressure Engine cut off at high coolant temperature Compressor cut off at high or low pressure of system Compressor cut off at high temperature of comp. body



#### Option

Electric standby Specification Use electric motor to operate refrigerator while engine is not being used Heating System : To obtain warm temperature for the chamber at low ambient. temperature Two different tempature room Separate room for normal and low temperature room

#### Capacity

	Engine	Driven	Electric Moto	r Driven(option)	Weight
R404A	0°C	-20°C	0°C	-20°C	
Watts	7000	4900	5200	3500	170 kg
Kcal/h	6022	4216	4474	3011	473 kg
BTU/h	23884	16719	17753	11942	

\* Specifications can be changed without notice in advance

## AT-800S / AT-800ES Optional

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for medium truck in range of 25~36 m<sup>3</sup> storage volume. Box length in 7.5 meters.

#### Description

One of AT THEROM's self-powered engine driven units in AT series is refrigerator system with professionally designed and manufactured for fresh and frozen applications medium truck.

#### Condenser

PF TYPE & FIN & TUBE TYPE

Fan drive : Driven by engine belt

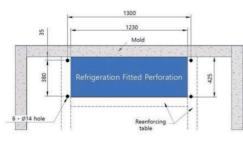
#### Compressor

Model : BOCK-FKX30/275 TK/Germany Displacement : 275 cc

#### Engine

Model : KUBOTA / D-1105 / Japan Cylinder : 3 cylinders Weight : 93 kg Capacity : 1,123 cc

#### Dimension





#### Refrigerant

HFC R-404a Chlorine - Zero Refrigerant charge : 3.8 kg +/- 100 g

#### Electric standby

8.5kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

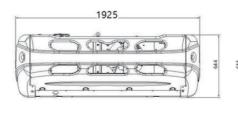
#### **Evaporator Unit**

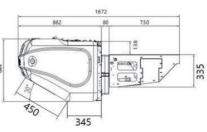
#### PLATE FIN TYPE

3 fans - diam. 280 mm Air Volume : 2900 m<sup>3</sup>/h Designed Air speed : 6.5 m/s

#### Defrosting

HOT GAS Electric automatic defrost / 3 Manual defrost controlled by controller





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## All in one - type



#### **Evaporator**

PLATE FIN TYPE 3 Fans - diam. 280 mm Air Volume : 2910 m<sup>3</sup>/h Designed Air Speed : 7.8 m/s

### Wall - type



#### **Evaporator**

#### **FIN & TUBE TYPE** Fan drive : DC 12V / (14.5AMP 3350 RPM) x 3ea

Size : 1740W x 948D x 166H

#### **Capacity**

	Engine	Driven	Electric Moto	or Driven(option)	Weight
R404A	0°C	-20°C	0°C	-20°C	
Watts	7300	5100	5600	3900	470 400
Kcal/h	6281	4388	4818	3355	473 kg
BTU/h	24908	17401	19107	13307	

\* Specifications can be changed without notice in advance

## AT-900S / AT-900ES Optional

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for large truck in range of 30~40m<sup>3</sup> storage volume. Box length in 8.5 meters.

#### Description

Refrigeration system for large truck Compressor driven by sub diesel engine Separated composition

#### Condenser

**PF TYPE & FIN & TUBE TYPE** Fan drive : Driven by engine belt

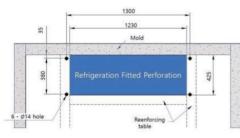
#### Compressor

Model: BOCK-FKX30/325 TK/Germany Displacement : 325 cc

#### Engine

Model : KUBOTA / D-1105 / Japan Cylinder : 3 cylinders Weight : 93 kg Capacity : 1,123 cc

#### Dimension





#### Refrigerant

HFC R-404a Chlorine - Zero Refrigerant charge : 3.9 kg +/- 100 g

#### Electric standby

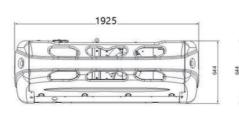
9kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

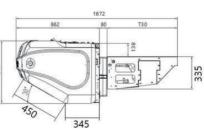
#### **Evaporator Unit**

#### PLATE FIN TYPE

3 fans - diam. 280 mm Air Volume : 3200 m<sup>3</sup>/h Designed Air speed : 7 m/s

#### Defrosting







## All in one - type



#### **Evaporator**

FIN & TUBE TYPE Fan drive : DC 12V \*8.0Amp \*2,400 RPM x 3ea

## Wall - type



#### **Evaporator**

FIN & TUBE TYPE Fan drive : DC 12V / (14.5Amp 3350 RPM) x 3ea

### Slim - type



#### **Evaporator**

FIN & TUBE TYPE

Fan drive : DC 12V / (12Amp 2700 RPM) x 3ea

#### Capacity

	Engine	Driven	Electric Moto	<b>r Driven</b> (option)	Weight
R404A	0°C	-20°C	0°C	-20°C	
Watts	8500	5700	7000	5000	EGO ka
Kcal/h	8173	5764	6022	4302	560 kg
BTU/h	32415	22861	23884	17060	

\* Specifications can be changed without notice in advance

## AT-1000S / AT-1000ES / AT-1000MT

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for large truck in range of 35~40 m<sup>3</sup> storage volume. Box length in 9 meters.

#### Description

Refrigeration system for large truck Compressor driven by sub diesel engine Separated composition

#### Condenser

PF type & Fin & Tube type Fan drive : Driven by engine belt Size : 1938W x 1683D x 651H

#### Compressor

Model : BOCK-FKX40/390 TK/Germany Displacement: 390 cc

#### Engine

Model : KUBOTA / D-1105 / Japan Cylinder : 3 cylinders Weight : 93 kg Capacity : 1,123 cc

#### Dimension



#### Refrigerant

HFC R-404a Amount : 4 kg

#### Electric standby

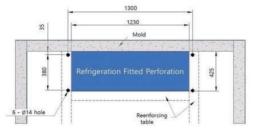
9kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

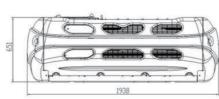
#### **Evaporator Unit**

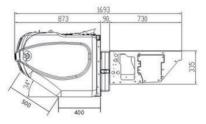
#### PLATE FIN TYPE

3 fans - diam. 280 mm Air Volume : 3200 m<sup>3</sup>/h Designed Air speed : 8 m/s

#### Defrosting



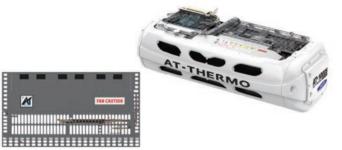




# All in one - type



### Wall - type



## Slim - type

M



### **Evaporator**

**FIN & TUBE TYPE** 

Size : 1174W x 730D x 398H

**FIN & TUBE TYPE** Fan drive : DC 12V / (14.5Amp 3350 RPM) x 3ea Size : 1740W x 948D x 166H

Fan drive : DC 12V / (10Amp 2500 RPM) x 3ea



#### **FIN & TUBE TYPE**

Fan drive : DC 12V / (12Amp 2700 RPM) x 3ea

#### Capacity

	Engine	Driven	Electric Moto	r Driven(option)	Weight
R404A	0°C	-20°C	0°C	-20°C	
Watts	8500	6300	8000	5700	ECO ka
Kcal/h	7310	5418	6880	4902	560 kg
BTU/h	29002	21495	27296	19448	

\* Specifications can be changed without notice in advance

## AT-1200S / AT-1200ES / AT-1200MT

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for large truck in range of 40~45 m<sup>3</sup> storage volume. Box length in 9.5 meters.

#### Description

Refrigeration system for large truck Compressor driven by sub diesel engine Separated composition

#### Condenser

PF type & Fin & Tube type Fan drive : Driven by engine belt Size : 1938W x 1683D x 651H

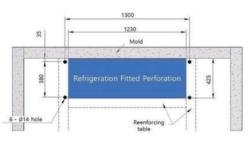
#### Compressor

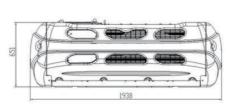
Model : BOCK- FKX40 / 470TK/ Germany Displacement: 470 cc

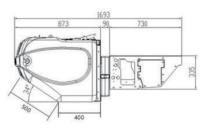
#### Engine

Model : KUBOTA / D-1305 / Japan Cylinder : 3 cylinders Weight : 93 kg Capacity : 1,123 cc

#### Dimension









#### Refrigerant

HFC R-404a Amount : 4.2 kg

#### Electric standby

11kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

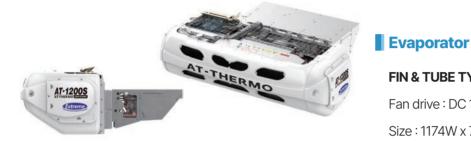
#### Evaporator Unit

PLATE FIN TYPE

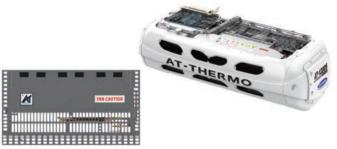
3 fans - diam. 280 mm Air Volume : 3300 m<sup>3</sup>/h Designed Air speed : 9m/s

#### Defrosting

## All in one - type



### Wall - type



## Slim - type

M



#### **Evaporator**

#### **FIN & TUBE TYPE**

**FIN & TUBE TYPE** 

Size : 1174W x 730D x 398H

Fan drive : DC 12V / (14.5Amp 3350 RPM) x 3ea Size : 1740W x 948D x 166H

Fan drive : DC 12V / (10Amp 2500 RPM) x 3ea



#### **FIN & TUBE TYPE**

Fan drive : DC 12V / (12Amp 2700 RPM) x 3ea

#### Capacity

	Engine	Driven	Electric Moto	<b>r Driven</b> (option)	Weight
R404A	0°C	-20°C	0°C	-20°C	
Watts	9500	7200	7000	5000	ECO ka
Kcal/h	8170	6192	6020	4300	560 kg
BTU/h	32414	24566	23884	17060	

\* Specifications can be changed without notice in advance

## AT-1500S / AT-1500ES / AT-1500MT

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for large truck in range of 40~45 m<sup>3</sup> storage volume. Box length in 9.5 meters.

#### Description

Refrigeration system for large truck Compressor driven by sub diesel engine Separated composition

#### Condenser

PF type & Fin & Tube type Fan drive : Driven by engine belt Size : 1940W x 830D x 652H

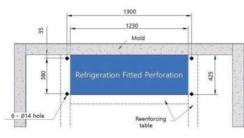
#### Compressor

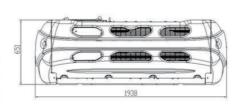
Model : BOCK- FKX40 / 560 TK / Germany Displacement: 560 cc

#### Engine

Model : KUBOTA / D-1305 / Japan Cylinder : 3 cylinders Weight : 95 kg Capacity : 1,261 cc

#### Dimension







Refrigerant

HFC R-404a Amount : 4.2 kg

#### Electric standby

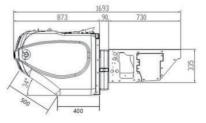
11kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

#### **Evaporator Unit**

#### PLATE FIN TYPE

3 fans - diam. 280 mm Air Volume : **3400** m<sup>3</sup>/h Designed Air speed : **10**m/s

#### Defrosting





## All in one - type





#### **Evaporator**

FIN & TUBE TYPE

Fan drive : DC 12V \*12Amp \*2,500 RPM x 3ea

## Slim - type



#### **Evaporator**

#### FIN & TUBE TYPE

Fan drive : DC 12V / (12Amp 2700 RPM) x 4ea



#### **Capacity**

	Engine	Driven	Electric Moto	<b>r Driven</b> (option)	Weight
R404A	0°C	-20°C	0°C	-20°C	
Watts	9500	7200	7000	5000	ECO ka
Kcal/h	8170	6192	6020	4300	560 kg
BTU/h	32414	24566	23884	17060	

\* Specifications can be changed without notice in advance

## AT-2000S/AT-2000ES / AT-2000MT

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

High performance refrigeration unit for large truck in range of 50~55 m3 storage volume. Box length in 11 meters.

#### Description

Refrigeration system for large truck Compressor driven by sub diesel engine Separated composition

#### Condenser

PF type &Fin &Tube type Fan drive : Driven by engine belt Size : 1940W x 830D x 652H

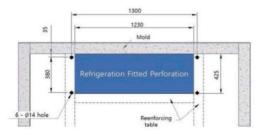
#### Compressor

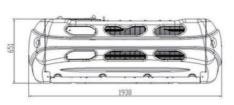
Model : BITZER / 4NFRY Cylinder : 4 cylinders Displacement : 647 cc

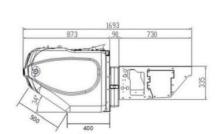
#### Engine

Model : KUBOTA / D-1305 Cylinder : 3 cylinders Weight : 95 kg Capacity : 1,261 cc

#### Dimension









#### Refrigerant

HFC R-404a Amount : 4.2 kg

#### Electric standby

11kw, High Performance AC Motor 220V / 380V / 415V, 3-Phase, 50 / 60 Hz

#### Evaporator Unit

#### PLATE FIN TYPE

3 fans - diam. 280 mm Air Volume : 3400 m³/h Designed Air speed : 10m/s

#### Defrosting









#### **Evaporator**

Fin &Tube type

Fan drive : DC 12V / (12Amp 2700 RPM) x 4 ea

#### Capacity

	Engine	Driven	Electric Moto		Weight
R404A	<b>0°C</b>	-20℃	0°C	-20℃	
Watts	12000	8500	9000	6700	F60 kg
Kcal/h	10325	7313	7743	5764	560 kg
BTU/h	40945	29003	30709	22861	

\* Specifications can be changed without notice in advance

## AT-1000U AT-1000Ues Optional

#### **DIESEL ENGINE DRIVEN REFRIGERATION**

TRU-1000s is a separated diesel engine driven unit installed with under mount type.



#### Description

Refrigeration system for medium size truck. Compressor driven by sub diesel engine Separated composition - under mounted condenser and wall-type evaporator

#### Condenser

Type, Fan : diam. 420\*6B x 1ea Fan type : Driven by engine belt

#### Refrigerants

Type : R-404a Amount : 4.4 kg +/- 100g

#### Defrosting

Hot gas auto defrost or manual defrost

#### Compressor

Pully : Magnet clutch Model : BITZER / 4TFRY Cylinder : 4 cylinders Displacement : 475 cc or BOCK-FKX40/470 TK/Germany Displacement: 470 cc

#### Heating

COOLANT auto control
Hot gas operating simultaneously

#### Engine

Model : KUBOTA / D-1105 Cylinder : 3 cylinders Capacity : 1,105 cc

#### Operation

Temperature controller (LED display) Temperature setting & Automatic on/off system

\* Specifications can be changed without notice in advance

## Wall - type

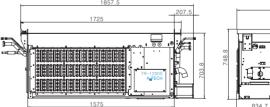


### Evaporator

**Type, Fan** Wall-type evaporator (1620L x 170W x 820H)

**Fan type** DC 12V double blower fan motor x 3ea

#### Dimension



### Slim - type



#### **Evaporator**

**Type, Fan** Slim-type evaporator (1620L x 170W x 820H)

**Fan type** DC 12V double blower fan motor x 3ea

#### 56



#### **DIESEL ENGINE DRIVEN REFRIGERATION**

TRU-1200s is a separated diesel engine driven unit installed with under mount type.



#### Description

Refrigeration system for medium size truck. Compressor driven by sub diesel engine Separated composition - under mounted condenser and wall-type evaporator

#### Condenser

#### Defrosting

Type, Fan : diam. 420\*6B x 1ea Fan type : Driven by engine belt

Refrigerants

Type : R-404a Amount : 4.4 kg +/- 100g

### Compressor

manual defrost

Hot gas auto defrost or

Pully : Magnet clutch Model : BITZER / 4PFRY Cylinder : 4 cylinders Displacement : 558 cc BOCK- FKX40/560 TK/Germany Displacement: 560 cc

#### Heating

COOLANT auto control
Hot gas operating simultaneously

#### Engine

Model : KUBOTA / D-1105 Cylinder : 3 cylinders RPM : 2000~2400 RPM Capacity : 1,105 cc

#### Operation

Temperature controller (LED display) Temperature setting & Automatic on/off system

\* Specifications can be changed without notice in advance

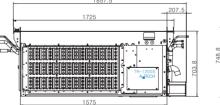
## Wall - type

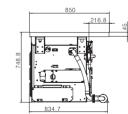
#### Evaporator

**Type, Fan** Wall-type evaporator (1620L x 170W x 820H)

**Fan type** DC 12V double blower fan motor x 3ea

#### Dimension





### Slim - type



#### Evaporator

**Type, Fan** Slim-type evaporator (1620L x 170W x 820H)

**Fan type** DC 12V double blower fan motor x 3ea

# EV - 300 / EV - 400

(Under Development)

#### **Full Electric Refrigeration Unit**

Roof Mounting Type high performance refrigeration unit for

- \* EV-300 : Small Sized Vans & Trucks
- \* EV-400 : Medium Sized Vans & Trucks



#### Description

A slim dynamic small truck refrigeration system exclusively designed for fresh and frozen products. With high efficiencies of performance, etc., Compressor for electric vehicles only is used and directly driven by the battery. This is a split system which consists of condenser with two plastic axial fan and evaporator with two plastic axial fans separately.

#### Condenser

Ultra slim micro-channel heat exchanger Type One Plastic Axial Fan - diam. 380mm x 1ea Weight : 40.0Kg Overall Size : 1,085L x 739W x 197H (mm)



#### Evaporator (EV-300)

Plate fin & tube Type One Plastic Axial Fan - diam. 305mm x 1ea - 850m³/h Weight : 14.7Kg Overall Size : 752L x 743W x 207H (mm)



#### Capacity(RV-300\_)

	r return air erature		HFC R-134a refrigerant Road Operation	
°C	°F	Kcal/h	Watts	Btu/h
0	32	2391	2, 780	9485
-20	-4	-	-	-

\* Specifications can be changed without notice in advance