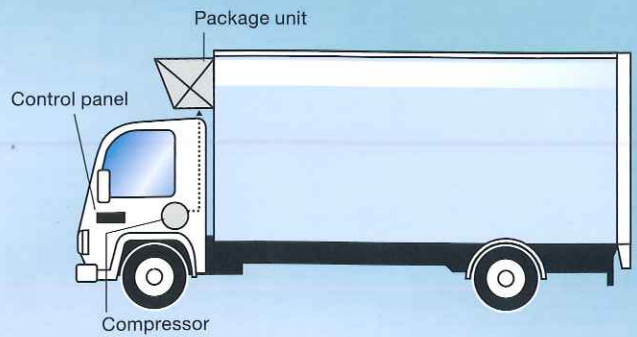


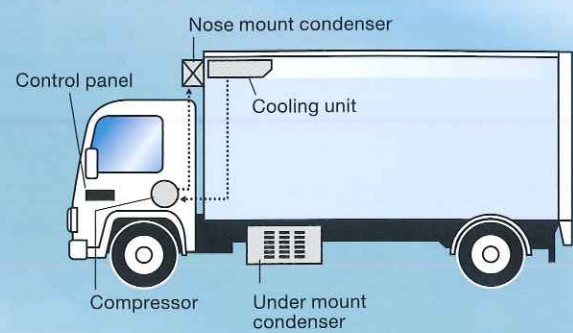
HOW TO LOOK AT MODEL CODE

S	S	2	2	L	N -	S2	F	M	N	1
Digital Panel	Refrigerant	Vehicle grade	Voltage	Temperature range	Option	Cooling Unit	Rear chamber fan control (for 2 rooms)	Condenser	Installation position of condenser	Compressor
S ... Liquid crystal touching type F ... LED Sliding type	<input type="checkbox"/> HFC134a S ... R404A	0 MINI 1 1t 2 2t 3 3t 4 4t~	1 12V 2 24V	C Cooling (+5~+20°C) (0~+20°C) M Middle temp. (-5~+20°C) L Low Temp. (-30~+20°C)	N None	1 C 12 F12 S1 SF1 S2 SF2 S3 SF3 S4 SF4 P2 PF2 P3 PF3 P4 PF4 EP3 EJ4 EP4 EJ6 EP8 EJ10	<input type="checkbox"/> None E2 SF2 E3 SF3 EH2 SH2 F Cooling fan	E E Condenser S S Condenser M M Condenser L L Condenser	N Nose mount U Under mount	1 10PA17 2 10PA20

PACKAGE SERIES



SEPARATE SERIES

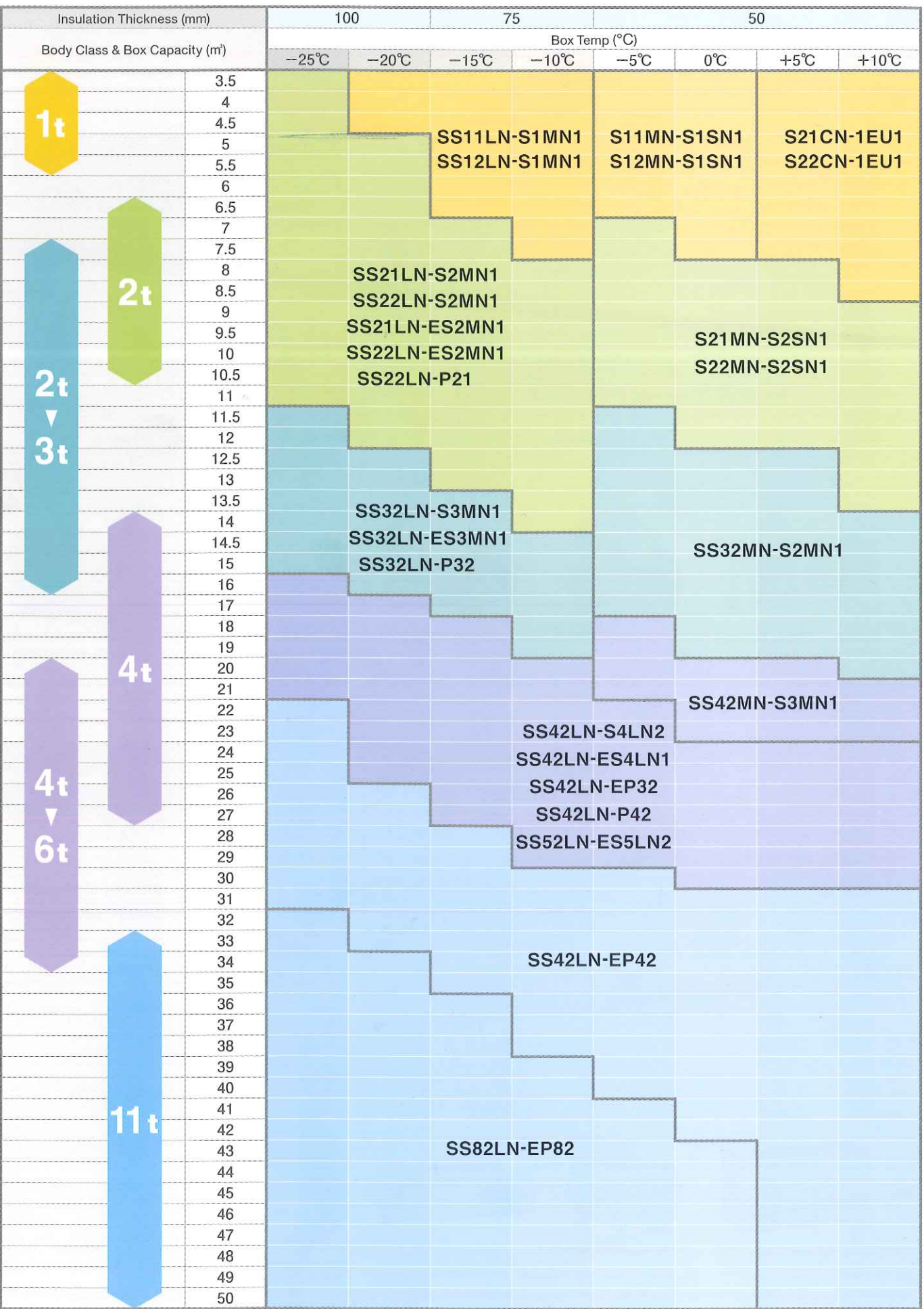


Check list of Refrigeration unit model select

Below Items are needed at Refrigerator type selection.

- Chassis maker • Model type and model year? ()
- What is type of the cargo? ()
- What is the carrying the cargo temperature? (About °C~ About °C)
- How much the cargo weight? (About kg)
- How often the cargo is loading and un loading, and how many minutes takes per loading and unloading in transportation? (times) (minutes/loading and unloading)
- Body type? (Van / Wing body)
Inside dimensions (W mm / H mm / L mm)
Insulator thin (mm) side door (Right side • Left side • None)
Rear door (Double doors • Shutter • Other)
- Eva house type body? (Yes / No)

APPLICATION CHART



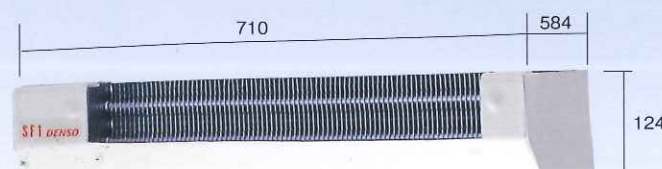
*The figures in the above table are for your reference only.
*The insulator is made of foamed polyurethane.

SF1 type

Frozen

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type SF1



CONDENSER type M (Nose)



COMPRESSOR 10PA17



CONTROL PANEL

Model	SS11LN-S1MN1 <SS12LN-S1MN1> (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 2800W(2410kcal)
	-18°C 1400W(1200kcal)
	-25°C 850W(730kcal)
Voltage (V)	12
Power Consumption	210
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.85 Under type:1.0
Weight (kg)	Cooling Unit 14
	Condenser 21
	Compressor 8
	Others 9
	Total Weight 52
Defrosting Mode	Hot gas

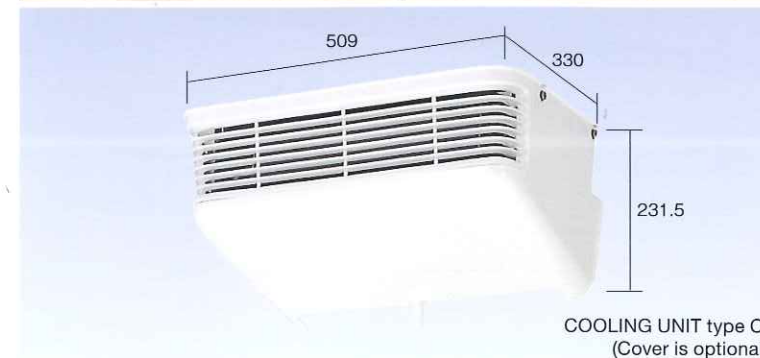
*Ambient temperature 35°C

C type

Cooling

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type C
(Cover is optional)



CONDENSER type E



COMPRESSOR 10PA17



CONTROL PANEL

Model	S21CN-1EU1 (Cooling)
Spec Item	
Box Temp. Range (°C)	+5~+20
Refrigerating Capacity (kw)	20°C 2130W(1830kcal)
	10°C 1630W(1400kcal)
	0°C —
	-18°C —
	-25°C —
Voltage (V)	12
Power Consumption	183
Refrigerant	HFC-134a
Refrigerant Quantity (kg)	0.9
Weight (kg)	Cooling Unit 4
	Condenser 7
	Compressor 8
	Others 12
	Total Weight 31
Defrosting Mode	Off-cycle

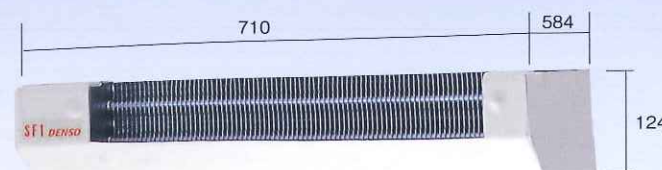
*Ambient temperature 35°C

SF1 type

Chiller

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type SF1



CONDENSER type S



COMPRESSOR 10PA17



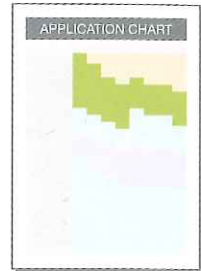
CONTROL PANEL

Model	S11MN-S1SN1 <S12MN-S1SN1> (Chiller)
Spec Item	
Box Temp. Range (°C)	-5~+20
Refrigerating Capacity (kw)	20°C —
	10°C 2200W(1890kcal) <2460W(2120kcal)>
	0°C 1700W(1460kcal) <1900W(1630kcal)>
	-18°C —
	-25°C —
Voltage (V)	12<24>
Power Consumption	163
Refrigerant	HFC-134a
Refrigerant Quantity (kg)	1.0
Weight (kg)	Cooling Unit 14
	Condenser 13
	Compressor 8
	Others 9
	Total Weight 44
Defrosting Mode	Off-cycle

*Ambient temperature 35°C

2t type

TRANSPORT REFRIGERATORS



PF2type Frozen

PACKAGE SERIES

EXPANSION VALVE



PACKAGE UNIT type PF2



COMPRESSOR 10PA17



CONTROL PANEL

Model	SS22LN-P21 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C
	10°C
	0°C
	-18°C
	-25°C
Voltage (V)	24
Power Consumption	335
Refrigerant	R404A
Refrigerant Quantity (kg)	0.95
Weight (kg)	Cooling Unit
	Condenser
	Compressor
	Others
	Total Weight
Defrosting Mode	Hot gas

*Ambient temperature 35°C

SF2type Frozen

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type SF2



CONDENSER type M (Nose)



COMPRESSOR 10PA17



CONTROL PANEL

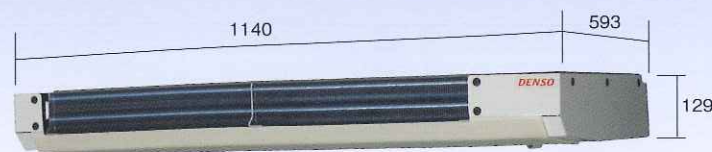
Model	SS21LN-S2MN1 <SS22LN-S2MN1> (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C
	10°C
	0°C
	-18°C
	-25°C
Voltage (V)	12
Power Consumption	284
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.9 Under type:1.05
Weight (kg)	Cooling Unit
	Condenser
	Compressor
	Others
	Total Weight
Defrosting Mode	Hot gas

*Ambient temperature 35°C

ESF2type Frozen

SEPARATE SERIES

EJECTOR



COOLING UNIT type ESF2



CONDENSER type M (Nose)



COMPRESSOR 10PA15



CONTROL PANEL

Model	SS21LN-ES2MN1 <SS22LN-ES2MN1> (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C
	10°C
	0°C
	-18°C
	-25°C
Voltage (V)	12
Power Consumption	286
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.85 Under type:0.95
Weight (kg)	Cooling Unit
	Condenser
	Compressor
	Others
	Total Weight
Defrosting Mode	Hot gas

*Ambient temperature 35°C

SF2type Chiller

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type SF2



CONDENSER type S



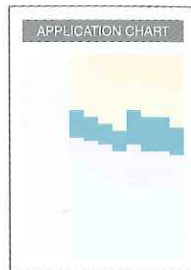
COMPRESSOR 10PA17



CONTROL PANEL

Model	S21MN-S2SN1 <S22MN-S2SN1> (Chiller)
Spec Item	
Box Temp. Range (°C)	-5~+20
Refrigerating Capacity (kw)	20°C
	10°C
	0°C
	-18°C
	-25°C
Voltage (V)	12<24>
Power Consumption	163
Refrigerant	HFC-134a
Refrigerant Quantity (kg)	1.0
Weight (kg)	Cooling Unit
	Condenser
	Compressor
	Others
	Total Weight
Defrosting Mode	Off-cycle

*Ambient temperature 35°C



PF3_{type} Frozen

PACKAGE SERIES	EXPANSION VALVE
 <p>1560 563 806</p>	
  <p>COMPRESSOR 10PA20 CONTROL PANEL</p>	

Model	SS32LN-P32 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 4500W (3870kcal)
	-18°C 2600W (2240kcal)
	-25°C 1850W (1590kcal)
Voltage (V)	24
Power Consumption	335
Refrigerant	R404A
Refrigerant Quantity (kg)	0.95
Weight (kg)	Cooling Unit PACKAGE UNIT
	Condenser 75
	Compressor 8
	Others 7
	Total Weight 90
Defrosting Mode	Hot gas

*Ambient temperature 35°C

SF3_{type} Frozen

SEPARATE SERIES	EXPANSION VALVE
 <p>1307 590 124</p>	
   <p>CONDENSER type M (Nose) COMPRESSOR 10PA17 CONTROL PANEL</p>	

Model	SS32LN-S3MN1 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 4420W (3800kcal)
	-18°C 2540W (2180kcal)
	-25°C 1820W (1570kcal)
Voltage (V)	24
Power Consumption	400
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.95 Under type:1.1
Weight (kg)	Cooling Unit 24
	Condenser 21
	Compressor 8
	Others 9
	Total Weight 62
Defrosting Mode	Hot gas

*Ambient temperature 35°C

ESF3_{type} Frozen

SEPARATE SERIES	EJECTOR
 <p>1140 593 129</p>	
   <p>CONDENSER type M (Nose) COMPRESSOR 10PA17 CONTROL PANEL</p>	

Model	SS32LN-ES3MN1 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 4500W (3870kcal)
	-18°C 2600W (2240kcal)
	-25°C 1850W (1600kcal)
Voltage (V)	24
Power Consumption	412
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.85 Under type:0.95
Weight (kg)	Cooling Unit 24
	Condenser 19.5
	Compressor 7.5
	Others 9
	Total Weight 60
Defrosting Mode	Hot gas

*Ambient temperature 35°C

SF2_{type} Chiller

SEPARATE SERIES	EXPANSION VALVE
 <p>1107 590 124</p>	
   <p>CONDENSER type M (Nose) COMPRESSOR 10PA17 CONTROL PANEL</p>	

Model	SS32MN-S2MN1 (Chiller)
Spec Item	
Box Temp. Range (°C)	-5~+20
Refrigerating Capacity (kw)	20°C —
	10°C 5110W(4390kcal)
	0°C 4080W(3510kcal)
	-18°C —
	-25°C —
Voltage (V)	24
Power Consumption	400
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.9 Under type:1.05
Weight (kg)	Cooling Unit 21
	Condenser 21
	Compressor 8
	Others 9
	Total Weight 59
Defrosting Mode	Hot gas

*Ambient temperature 35°C

4t ▶ 6t type

TRANSPORT REFRIGERATORS



EJ4_{type} Frozen

PACKAGE SERIES EJECTOR



PACKAGE UNIT type EJ4



COMPRESSOR 10PA20



CONTROL PANEL

Model	SS42LN-EP32 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 5000W (4300kcal)
	-18°C 3000W (2580kcal)
	-25°C 2250W (1940kcal)
Voltage (V)	24
Power Consumption	328
Refrigerant	R404A
Refrigerant Quantity (kg)	1.0
Weight (kg)	Cooling Unit PACKAGE UNIT
	Condenser 84
	Compressor 8
	Others 7
	Total Weight 99
Defrosting Mode	Hot gas

*Ambient temperature 35°C

ESF5_{type} Frozen

SEPARATE SERIES EJECTOR



COOLING UNIT type ESF5



CONDENSER type L



COMPRESSOR 10PA20



CONTROL PANEL

Model	SS52LN-ES5LN2 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 5400W (4650kcal)
	-18°C 3250W (2800kcal)
	-25°C 2400W (2070kcal)
Voltage (V)	24
Power Consumption	428
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.95 Under type:1.05
Weight (kg)	Cooling Unit 33
	Condenser 23
	Compressor 8
	Others 9
	Total Weight 73
Defrosting Mode	Hot gas

*Ambient temperature 35°C

PF4_{type} Frozen

PACKAGE SERIES EXPANSION VALVE



PACKAGE UNIT type PF4



COMPRESSOR 10PA20



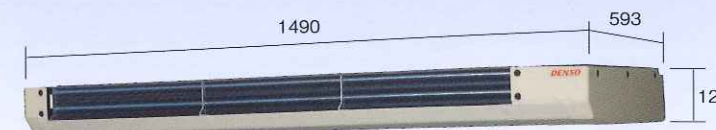
CONTROL PANEL

Model	SS42LN-P42 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 5000W (4300kcal)
	-18°C 3000W (2580kcal)
	-25°C 2250W (1940kcal)
Voltage (V)	24
Power Consumption	406
Refrigerant	R404A
Refrigerant Quantity (kg)	1.1
Weight (kg)	Cooling Unit PACKAGE UNIT
	Condenser 99
	Compressor 8
	Others 7
	Total Weight 114
Defrosting Mode	Hot gas

*Ambient temperature 35°C

ESF4_{type} Frozen

SEPARATE SERIES EJECTOR



COOLING UNIT type ESF4



CONDENSER type L



COMPRESSOR 10PA17



CONTROL PANEL

Model	SS42LN-ES4LN1 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 5000W (4300kcal)
	-18°C 3000W (2580kcal)
	-25°C 2250W (1940kcal)
Voltage (V)	24
Power Consumption	428
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.95 Under type:1.05
Weight (kg)	Cooling Unit 33
	Condenser 23
	Compressor 8
	Others 9
	Total Weight 73
Defrosting Mode	Hot gas

*Ambient temperature 35°C

4t
▶
6t
type

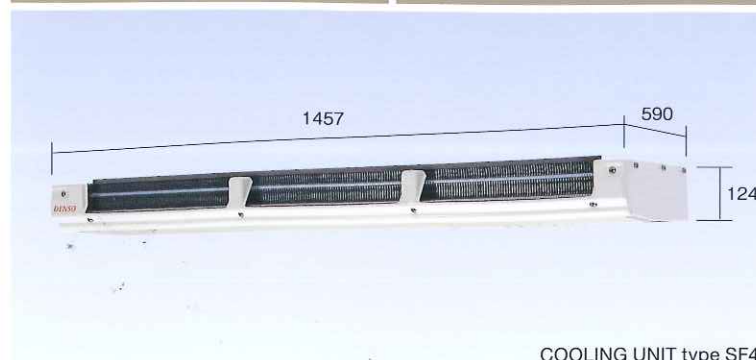
4t → 6t type

TRANSPORT REFRIGERATORS

SF4_{type} Frozen

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type SF4



CONDENSER type L

COMPRESSOR 10PA20

CONTROL PANEL

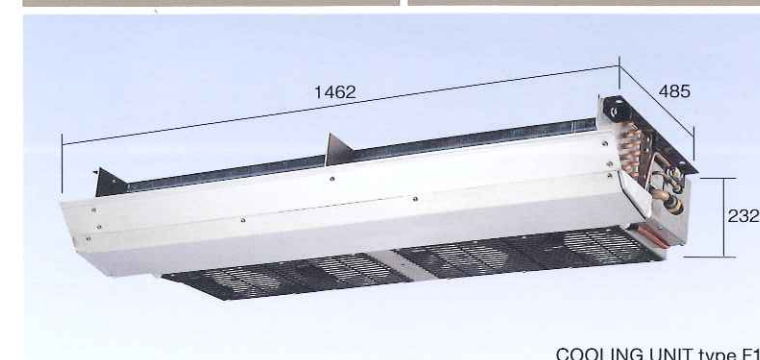
Model	SS42LN-S4LN2 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 5000W (4300kcal)
	-18°C 3000W (2580kcal)
	-25°C 2250W (1940kcal)
Voltage (V)	24
Power Consumption	416
Refrigerant	R404A
Refrigerant Quantity (kg)	1.05
Weight (kg)	Cooling Unit 27
	Condenser 24
	Compressor 8
	Others 9
Total Weight	68
Defrosting Mode	Hot gas

*Ambient temperature 35°C

F12_{type} Frozen

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type F12



CONDENSER type L

COMPRESSOR 10PA17

CONTROL PANEL

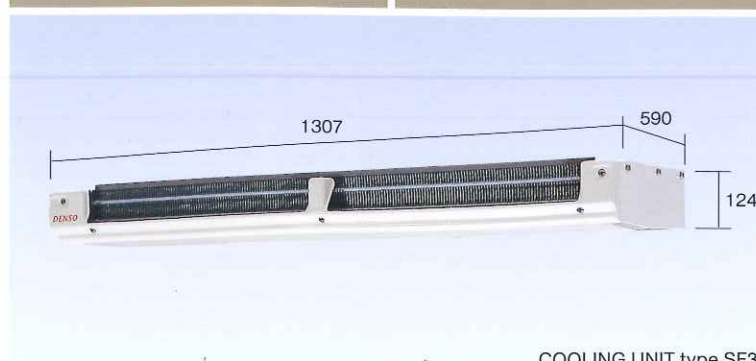
Model	FS42LN-12LU1 (Frozen)
Spec Item	
Box Temp. Range (°C)	-25~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 5170W (4450kcal)
	-18°C 3000W (2580kcal)
	-25°C 2150W (1850kcal)
Voltage (V)	24
Power Consumption	416
Refrigerant	R404A
Refrigerant Quantity (kg)	1.9
Weight (kg)	Cooling Unit 29
	Condenser 35
	Compressor 8
	Others 15
Total Weight	87
Defrosting Mode	Hot gas

*Ambient temperature 35°C

SF3_{type} Chiller

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type SF3



CONDENSER type M (Nose)

COMPRESSOR 10PA17

CONTROL PANEL

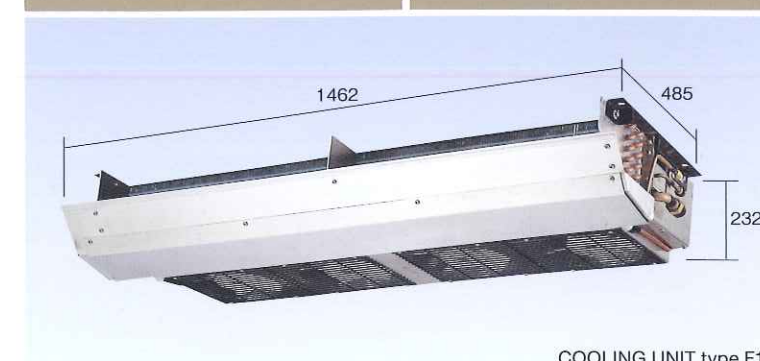
Model	SS42MN-S3MN1 (Chiller)
Spec Item	
Box Temp. Range (°C)	-5~+20
Refrigerating Capacity (kw)	20°C —
	10°C 5530W (4760kcal)
	0°C 4420W (3800kcal)
	-18°C —
	-25°C —
Voltage (V)	24
Power Consumption	400
Refrigerant	R404A
Refrigerant Quantity (kg)	Nose type:0.95 Under type:1.1
Weight (kg)	Cooling Unit 24
	Condenser 21
	Compressor 8
	Others 9
Total Weight	62
Defrosting Mode	Hot gas

*Ambient temperature 35°C

F12_{type} Chiller

SEPARATE SERIES

EXPANSION VALVE



COOLING UNIT type F12



CONDENSER type M (Under)

COMPRESSOR 10PA17

CONTROL PANEL

Model	F42MN-12MU1 (Chiller)
Spec Item	
Box Temp. Range (°C)	-5~+20
Refrigerating Capacity (kw)	20°C —
	10°C 5080W (4370kcal)
	0°C 3840W (3300kcal)
	-18°C —
	-25°C —
Voltage (V)	24
Power Consumption	416
Refrigerant	HFC-134a
Refrigerant Quantity (kg)	1.6
Weight (kg)	Cooling Unit 29
	Condenser 21
	Compressor 8
	Others 15
Total Weight	73
Defrosting Mode	Hot gas

*Ambient temperature 35°C



4t
▼
6t
type



EJ10_{type}

Frozen

PACKAGE SERIES

EJECTOR



PACKAGE UNIT type EJ10



COMPRESSOR 10PA20



COMPRESSOR 10PA20



CONTROL PANEL

Model	SS82LN-EP82 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 10000W (8610kcal)
	-18°C 6500W (5600kcal)
	-25°C 4800W (4100kcal)
Voltage (V)	24
Power Consumption	960
Refrigerant	R404A
Refrigerant Quantity (kg)	2.8
Weight (kg)	Cooling Unit PACKAGE UNIT
	Condenser 150
	Compressor 8x2=16
	Others 19 [29]
	Total Weight 185 [357]
Defrosting Mode	Hot gas

*Ambient temperature 35°C

EJ6_{type}

Frozen

PACKAGE SERIES

EJECTOR



PACKAGE UNIT type EJ6



COMPRESSOR 10PA20



CONTROL PANEL

Model	SS42LN-EP42 (Frozen)
Spec Item	
Box Temp. Range (°C)	-30~+20
Refrigerating Capacity (kw)	20°C —
	10°C —
	0°C 6300W (5420kcal)
	-18°C 3750W (3230kcal)
	-25°C 2800W (2410kcal)
Voltage (V)	24
Power Consumption	402
Refrigerant	R404A
Refrigerant Quantity (kg)	1.45
Weight (kg)	Cooling Unit PACKAGE UNIT
	Condenser 106
	Compressor 8
	Others 10
	Total Weight 124
Defrosting Mode	Hot gas

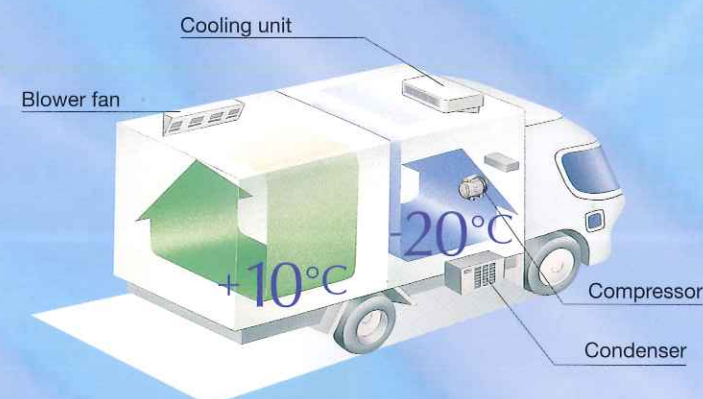
*Ambient temperature 35°C

OPTIONS CAN BE CHOSEN FOR VARIOUS NEEDS

2 rooms type refrigeration unit

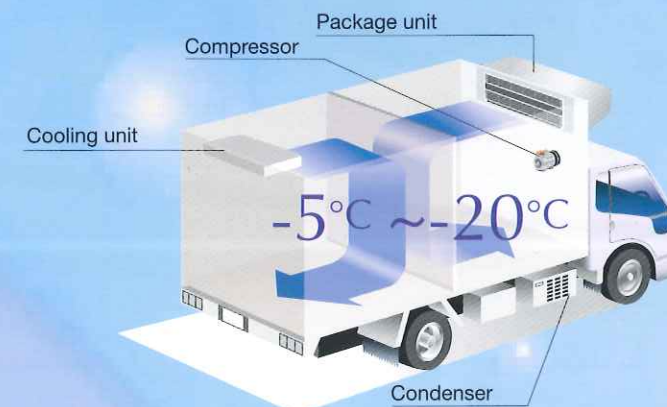
1 compressor with blower fan type refrigeration unit

The system is suitable to deliver multi temps requirements cargo together. Both room temperature can be controlled by 1 control panel. The low cost edition that can cool down rear room by blower fan.



1 compressor with 2 evaporators type refrigeration unit*

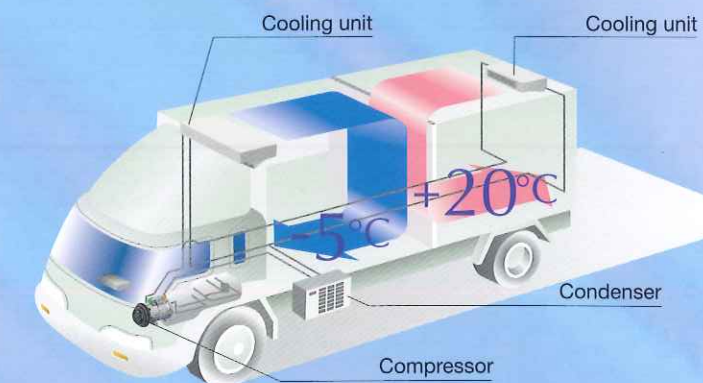
The system is suitable to deliver multi temps requirements cargo together. Both room temperature can be controlled by 1 control panel. *The Heating system also can be installed.



Refrigeration unit with Heating system

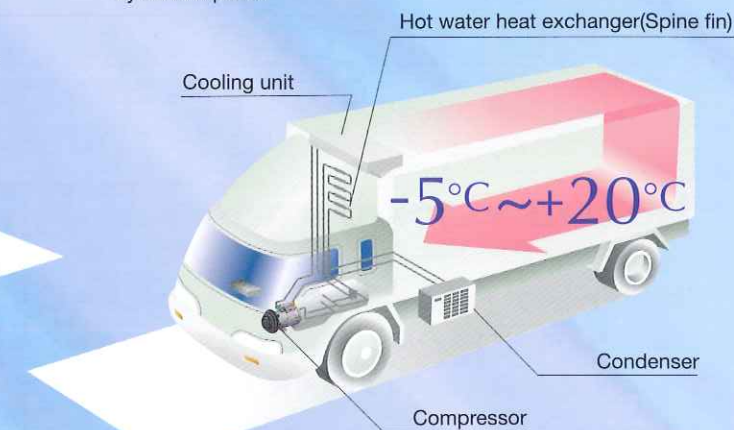
Built in type

Heating system by engine hot water is built into cooling unit. Cooling mode and Heating mode can be switched by control panel. Front and rear room set temp can be changed flexibly.



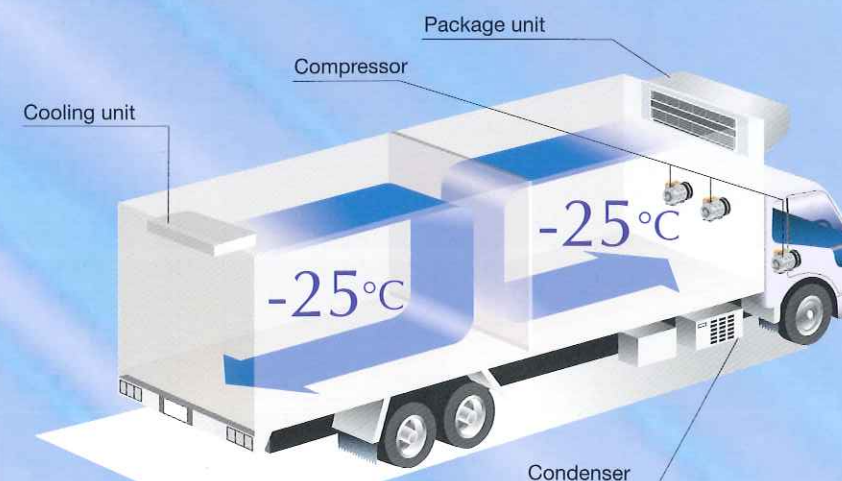
External type

Heating system by engine hot water is equipped with Refrigeration system separately. Cooling mode and Heating mode can be switched by control panel.



3 compressors type refrigeration unit*

2 independent refrigeration units cool down 2 rooms independently. *The system can be installed only over 6t class and a part of 4t- class.



Installation example

