

Gipson

Heating and Cooling Products



ITALIAN TYPE

AIR COOLED SCROLL CHILLER

Badban Tahviah Parsian Co.

2022-23 General Catalogue
Commercial Air Conditioning



Introduction



Compressor

The combination of COPELAND Semi-Hermetic Scroll type
With highly efficient performance
Anti Vibration Joint
Oil heater System (optional)
Dehumidifier filter dryer
Safety valve for protect compressor at high Pressure
Liquid Line Solenoid Valve
Liquid Line Pressure Switch and Pressure Transmitter

Condenser

Flat shaped style considering the optimization of the
amount of space
With high efficiency and low pressure drop
Fin and Tube series
3/8" copper tube with up to 450 PSI compressive strength
12FPI number of Fin per Inch
Adiabatic Cooling system for Reducing of power input,
that is based on the natural thermodynamic properties of
water (optional)

Evaporator

Shell and tube type including steel pipe for shell and
copper tubes with 3/8 inch internal groove and
compressive strength of 300 PSI
Tested in accordance ASME section VIII standard
Special design for low pressure drop and optimized
heat transfer
Water Strainer
Anti Freeze System

Fan

Axial low noise model
Variable frequency drive for saving energy and
reducing sound level (optional)
Sound reduction diffuser (optional)
EUROVENT trademark with "IP54" grading

Electrical and safety equipment

SIEMENS PLC
Ability to synchronize with BMS
Compatible with network connection protocols
DANFOSS trademark high pressure and low pressure sensor
Switch cabinet with IP54
Switch cabinet with SIEMENS trademark;
Main switching (optional), Phase control, Contactor, MSPS
UPS buffered controller to prevent damage during
operating (optional)
Light and socket in the switch cabinet
Alarm system for faults

Body

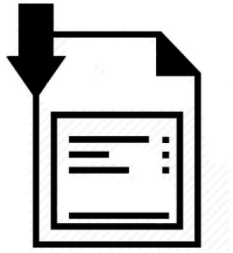
Galvanized steel sheet with electrostatic paint coated
Sound insulation for reducing sound level
Manufactured with NC & CNC machines
Air arteries on the columns of body to allow more air
to pass through the condenser

PLC Programming

Automatic troubleshooting
Display the performance status of all control
parameters
Display operating hours
Display number of start times of compressors
separately
Complete observance of the operation schedule of the
compressors
Recording of the latest errors that have occurred

Liquid Line Equipment

DANFOSS TEV
CASTEL trademark sight glass and filter dryer for
dehumidification refrigerant
Liquid receiver with Rotolock valve



Nomenclature

H P S D 15 B 2 S C X X X X X

* Option codes will be added to the end of the nomenclature respectively.

Compressor Manufacturer

C = COPELAND
D = DANFOSS
P = PANASONIC

Evaporator

B = Brazed Heat Exchanger
S = Shell and Tube Heat Exchanger

Number of Compressor

1
2

Number of Circuit

A = 1
B = 2

Capacity (HP)

15	26
20	32
24	

Refrigerant

C = R22
D = R407C
E = R134a

Manufacturing Series

N	R
S	G
A	

Model

Q = Quantum T = Typhon
P = Pro (Scroll Compressor Series)
TL = Tesla

Unit Type

H = Air Cooled M = Micro
W = Water Cooled
A = Absorption

Standard Features

- This table contains a complete explanation of each parts used in units.

Item	Description	Product's Brand
Control Panel	<ul style="list-style-type: none"> ▪ Controlling the unit circuit for the required closed loop. ▪ Providing the preview and the configuration of controlling system parameters to the user. ▪ Equipped with the advanced communication interfaces. ▪ Compatible with grid connection protocols. ▪ Displaying errors. 	SIEMENS
Phase Control	<p>Phase sequence and phase loss sensors are designed for the following measures:</p> <ul style="list-style-type: none"> ▪ Protecting three-phase electric motors. ▪ Controlling the phase sequence, zero control in zero-based series, controlling each single phase with adjacent phase, and controlling each phase and zero to provide standard electricity input. ▪ Detecting the defections leading motor damages such as voltage failure in one or more phases or voltage imbalance between them. ▪ Preventing rotation of the motor the wrong way. 	SIEMENS
Terminals	<ul style="list-style-type: none"> ▪ Acting as a connector or separator between electrical panel tray and other components of the device (in terms of electrical performance). 	KLEMSAN
Contactors	<ul style="list-style-type: none"> ▪ Connecting and disconnecting the electric current of the circuit. 	SIEMENS
MSPS	<p>Motor Safety Protection System to performs an electric motor:</p> <ul style="list-style-type: none"> ▪ isolation. ▪ motor protection against overload and short circuit. ▪ control of the motor. 	SIEMENS
Liquid Line	<p>Includes:</p> <ul style="list-style-type: none"> ▪ Sight Glass, Filter Dryer, Safety Valve, Bulb Valve. 	CASTEL
Sensors	<p>Includes:</p> <ul style="list-style-type: none"> ▪ Pressure Switch, Pressure Transmitter, Temperature Sensor. 	DANFOSS
TEV	<p>Thermal Expansion Valve:</p> <ul style="list-style-type: none"> ▪ Ensuring accurate control of refrigerant injection into the evaporator. 	DANFOSS

- All models are supplied with COPELAND scroll compressor trademark. Contact us for more data about other brands.

Standard Features

Item	Description	Product's Brand
Condenser ¹	<ul style="list-style-type: none"> ▪ Fin and tube with 12FPI number of Fin per Inch including 3/8" copper tube and compressive strength of 450 PSI. 	GIPSON
Evaporator ¹	<ul style="list-style-type: none"> ▪ Shell and tube type including steel pipe for shell and copper tubes with 3/8-inch internal groove and compressive strength of 300 PSI. ▪ Equipped with water flow switch, water strainer, Anti Freeze System. ▪ Tested in Accordance "ASME Section VIII" Standard. ▪ IT Trademark Insulator. 	REFKAR
Liquid Receiver	<ul style="list-style-type: none"> ▪ Eliminating gas refrigerant. ▪ Ensuring that pure liquid refrigerant enters the expansion valve. ▪ Equipped with Rotolock valve for easier operation and maintenance. 	GIPSON

1. Powered by UNILAB

- All models are supplied with COPELAND scroll compressor trademark. Contact us for more data about other brands.

Options

- This table includes information of equipment that their installation enhances the unit's efficiency.

Item	Description	Product's Brand
1. Soft Starter	<ul style="list-style-type: none"> ▪ Reducing the mechanical stress and shocks caused by starts and stops to the compressor ▪ Controlling the consuming current of compressors and protecting them from the electrical overload ▪ Having the minimum amount of reactive power ▪ To perform a safe boot, three asynchronous phases are used ▪ Consistently controlling of the compressor voltage source in the operating stage ▪ The compressor is aligned with load behavior to accelerate the mechanical equipment's operation ▪ Increasing the life span 	SIEMENS
2. VFD Controller	<ul style="list-style-type: none"> ▪ Controlling the fan speed. ▪ Reducing the fan sound level. ▪ Balancing the refrigerant pressure in the condenser. ▪ Increasing the compressor's life span. ▪ Preventing the frequent start / stops that damage the equipment. 	SIEMENS
3. Main Switch	<ul style="list-style-type: none"> ▪ Power Switch (On/Off). ▪ Controlling the input current to the device. 	SIEMENS
4. Oil Heater	<ul style="list-style-type: none"> ▪ Preventing the mix of the refrigerant and the compressor oil. 	-
5. Oil Separator	<ul style="list-style-type: none"> ▪ Preventing the compressor oil discharge. ▪ Returning the oil to the compressor leading an automatic lubrication for the compressor's parts. ▪ Preventing the mix of the oil and the refrigerant which makes acid in the system. ▪ Protecting from corrosion. ▪ Protecting the compressor from damage. 	CASTEL
6. Accumulator	<ul style="list-style-type: none"> ▪ Preventing the liquid refrigerant to enter the compressor. ▪ Reevaporating of collected refrigerant in Accumulator to enhance the compressor's efficiency. ▪ Protecting the compressor from damage. 	CASTEL

- Option codes must be added to the end of the nomenclature and it is mandatory in the registration process.

Options

- This table includes information of equipment that their installation enhances the unit's efficiency.

Item	Description	Product's Brand
7. Economizer	<ul style="list-style-type: none"> ▪ Increasing the efficiency by creating a sub-circuit. ▪ Improving the system performance. ▪ Energy saving. ▪ Utilizing brazed plate heat exchanger. 	KELVION (Heat Exchanger)
8. Adiabatic Cooling system	<ul style="list-style-type: none"> ▪ 10cm Thickness cellulose pads waterfall system with semi-closed circuit and controlling ambient air temperature system to prevent water loss. ▪ The air temperature reduction can reach as much as 15 °C depending on the ambient air enthalpy conditions. 	GIPSON
9. Switch Cabinet	<p>A. UPS buffered controller to prevent damage during operating.</p> <p>B. Cooling system specially for switch cabinet.</p>	-
10. Fan	<ul style="list-style-type: none"> ▪ Sound reduction diffuser. 	EUROVENT

In general, all refrigerant types are characterised by two numbers: Ozone Depletion Potential (ODP) and Global Warming Potential (GWP).



ODP values range from 0 to 1: the closest the ODP value is to 1, the more harmful the refrigerant is for the ozone layer. CFCs are generally characterised by a big ODP value, because they contain chlorine, which is accused of heavily contributing to the Ozone Depletion phenomenon. As a result, CFCs have been phased out of use nowadays.



GWP values range from 0 to several thousands: the bigger the GWP value is, the more harmful the refrigerant is for the global warming effect. In general, HCFCs have also been phased out since 2005, and only the chlorine free (zero ozone depletion) HFCs are allowed for use nowadays.



The table includes refrigerant properties that using in refrigeration circuit.

ASHRAE Number	Type	Molecular Formula	ODP	GWP (100yr)
R-407C	HFC	23±2% CH ₂ F ₂ 25±2% C ₂ HF ₅ 52±2% C ₂ H ₂ F ₄	0	1774
R-134a	HFC	C ₂ H ₂ F ₄	0	1300
R-22	HCFC	CHClF ₂	0.055	1760

- Powered by [Wikipedia.org](https://www.wikipedia.org)





Technical Data

Model No.			HPSD15B2SC	HPSD20B2SC	HPSD24B2SC
1	Cooling capacity	KW	42	54.6	63
		RT	11.9	15.5	17.9
	Total input power	KW	13.7	19.1	21.2
	Total rated current	A	29.8	35.4	38.4
	EER	-	3.10	2.86	3.00
2	Cooling capacity	KW	38.8	51	58.2
		RT	11	14.5	16.5
	Total input power	KW	15.4	21.1	23.4
	Total rated current	A	31.8	38.1	41.4
	EER	-	2.50	2.42	2.50
ESEER		-	4.13	3.81	3.96
Evaporator	Type	-	Shell and tube		
	Brand	-	REFKAR		
	Water flow rate	gpm	32.1	41.4	50
		m ³ /h	7.3	9.4	11.4
	Water pressure drop	kPa	10.1	8	12
	Max design pressure	Mpa	0.8		
Condenser	Type	-	Flat shape		
	Brand	-	GIPSON		
	Heat exchanger	-	Aluminium fin		
	Number of rows	-	2	3	
	Fins per inch	FPI	12		
Fan	Type	-	Axial fan		
	Brand	-	EUROVENT		
	Number	-	2		
	Speed	rpm	1350	900	
	Diameter	mm	600	800	
	Air flow rate	m ³ /h	10000	22000	
	Discharge	Side/Top	Top		
Compressor	Type	-	Semi-Hermetic Scroll		
	Brand	-	COPELAND		
	Model	-	ZR94KCE-TFD	ZR125KCE-TFD	ZR144KCE-TFD
	Combination	Pieces	2		
	Oil type	-	POE RL32-3MAF		
	Oil charge amount	L	2.65	3.25	
	Oil heater	-	• (Optional)		
Refrigerant	Type	-	R407C		
Ambient temp. range	°C	21 ~ 46			
Command control system	Type	-	SIEMENS PLC		
Sound pressure level		dB(A)	~ 65		
Power supply		∅, V, Hz	3, 400, 50		
Dimension	WxHxD	mm	972x1209x1576	972x1265x2171	
Net weight		kg	~ 800		

1 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 35 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

2 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 40 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

- Evaporating SST : 4.1 °C
 - Water side fouling factor : 0.000018 m² . °C / KW
 - ESEER calculations is based on European standard.
 - Measuring sound pressure level at 3m away and ±3dB tolerance.
 - The characteristics of water flow rate and water pressure drop are given based on case "1".

Model No.			HPSD26B2SC	HPSD32B2SC	
1	Cooling capacity	KW	67.4	79.6	
		RT	19.2	22.6	
	Total input power	KW	23.6	27.6	
	Total rated current	A	43.8	55.5	
EER		-	2.86	2.88	
2	Cooling capacity	KW	62	73.6	
		RT	17.6	20.9	
	Total input power	KW	26.2	30.6	
	Total rated current	A	47.1	59.1	
EER		-	2.37	2.41	
ESEER		-	3.91	3.88	
Evaporator	Type	-	Shell and tube		
	Brand	-	REFKAR		
	Water flow rate	gpm	51.1	60.3	
		m ³ /h	11.6	13.7	
	Water pressure drop	kPa	12.2	16.8	
Max design pressure	Mpa	0.8			
Condenser	Type	-	Flat shape		
	Brand	-	GIPSON		
	Heat exchanger	-	Aluminium fin		
	Number of rows	-	3		
	Fins per inch	FPI	12		
Fan	Type	-	Axial fan		
	Brand	-	EUROVENT		
	Number	-	2		
	Speed	rpm	900		
	Diameter	mm	800		
	Air flow rate	m ³ /h	22000		
	Discharge	Side/Top	Top		
Compressor	Type	-	Semi-Hermetic Scroll		
	Brand	-	COPELAND		
	Model	-	ZR160KCE-TFD	ZR190KCE-TFD	
	Combination	Pieces	2		
	Oil type	-	POE RL32-3MAF		
	Oil charge amount	L	3.37	3.38	
	Oil heater	-	• (Optional)		
Refrigerant	Type	-	R407C		
Ambient temp. range	°C	21 ~ 46			
Command control system	Type	-	SIEMENS PLC		
Sound pressure level	dB(A)	~ 70	~ 72		
Power supply	Ø, V, Hz	3, 400, 50			
Dimension	WxHxD	972x1265x2171			
Net weight	kg	~ 800			

1 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 35 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

2 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 40 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

- Evaporating SST : 4.1 °C
 - Water side fouling factor : 0.000018 m² . °C / KW
 - ESEER calculations is based on European standard.
 - Measuring sound pressure level at 3m away and ±3dB tolerance.
 - The characteristics of water flow rate and water pressure drop are given based on case "1".

According to our innovation policy , some specifications may be change without prior notification.

Model No.			HPSC15B2SC	HPSC20B2SC	HPSC24B2SC
1	Cooling capacity	KW	43.2	57	64.8
		RT	12.3	16.2	18.4
	Total input power	KW	13.4	19.2	21.2
	Total rated current	A	29	35	38.2
	EER	-	3.20	3.00	3.10
2	Cooling capacity	KW	39.9	53.8	60.8
		RT	11.3	15.3	17.3
	Total input power	KW	14.8	21.2	23.4
	Total rated current	A	31	37.6	41.2
	EER	-	2.70	2.50	2.60
ESEER		-	4.2	3.84	3.99
Evaporator	Type	-	Shell and tube		
	Brand	-	REFKAR		
	Water flow rate	gpm	32.8	43.3	49.2
		m ³ /h	7.5	9.8	11.2
	Water pressure drop	kPa	12.5	9.2	13.9
Max design pressure	Mpa	0.8			
Condenser	Type	-	Flat shape		
	Brand	-	GIPSON		
	Heat exchanger	-	Aluminium fin		
	Number of rows	-	2	3	
	Fins per inch	FPI	12		
Fan	Type	-	Axial fan		
	Brand	-	EUROVENT		
	Number	-	2		
	Speed	rpm	1350	900	
	Diameter	mm	600	800	
	Air flow rate	m ³ /h	10000	22000	
	Discharge	Side/Top	Top		
Compressor	Type	-	Semi-Hermetic Scroll		
	Brand	-	COPELAND		
	Model	-	ZR94KCE-TFD	ZR125KCE-TFD	ZR144KCE-TFD
	Combination	Pieces	2		
	Oil type	-	POE RL32-3MAF		
	Oil charge amount	L	2.65	3.25	
	Oil heater	-	● (Optional)		
Refrigerant	Type	R22			
Ambient temp. range	°C	21 ~ 46			
Command control system	Type	SIEMENS PLC			
Sound pressure level	dB(A)	~ 65			
Power supply	Ø, V, Hz	3, 400, 50			
Dimension	WxHxD	mm	972x1209x1576	972x1265x2171	
Net weight	kg	~ 800			

1 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 35 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

2 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 40 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

- Evaporating SST : 4.1 °C
 - Water side fouling factor : 0.000018 m² . °C / KW
 - ESEER calculations is based on European standard.
 - Measuring sound pressure level at 3m away and ±3dB tolerance.
 - The characteristics of water flow rate and water pressure drop are given based on case "1".

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Model No.			HPSC26B2SC	HPSC32B2SC	
1	Cooling capacity	KW	70	83	
		RT	19.9	23.6	
	Total input power	KW	23.4	27.6	
	Total rated current	A	43	53.6	
EER		-	3.00	3.00	
2	Cooling capacity	KW	65.2	77.4	
		RT	18.5	22.0	
	Total input power	KW	25.6	30.4	
	Total rated current	A	46.4	57.4	
EER		-	2.50	2.50	
ESEER		-	3.9	3.94	
Evaporator	Type	-	Shell and tube		
	Brand	-	REFKAR		
	Water flow rate	gpm	53.2	63.1	
		m ³ /h	12.1	14.3	
	Water pressure drop	kPa	14	19.1	
Max design pressure	Mpa	0.8			
Condenser	Type	-	Flat shape		
	Brand	-	GIPSON		
	Heat exchanger	-	Aluminium fin		
	Number of rows	-	3		
	Fins per inch	FPI	12		
Fan	Type	-	Axial fan		
	Brand	-	EUROVENT		
	Number	-	4		
	Speed	rpm	900		
	Diameter	mm	800		
	Air flow rate	m ³ /h	22000		
	Discharge	Side/Top	Top		
Compressor	Type	-	Semi-Hermetic Scroll		
	Brand	-	COPELAND		
	Model	-	ZR160KCE-TFD	ZR190KCE-TFD	
	Combination	Pieces	2		
	Oil type	-	POE RL32-3MAF		
	Oil charge amount	L	3.37	3.38	
	Oil heater	-	● (Optional)		
	Refrigerant	Type	R22		
Ambient temp. range	°C	21 ~ 46			
Command control system	Type	SIEMENS PLC			
Sound pressure level	dB(A)	~ 70	~ 72		
Power supply	Ø, V, Hz	3, 400, 50			
Dimension	WxHxD	972x1265x2171			
Net weight	kg	~ 800			

1 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 35 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

2 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 40 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

- Evaporating SST : 4.1 °C
 - Water side fouling factor : 0.000018 m² . °C / KW
 - ESEER calculations is based on European standard.
 - Measuring sound pressure level at 3m away and ±3dB tolerance.
 - The characteristics of water flow rate and water pressure drop are given based on case "1".

Model No.			HPSE15B2SC	HPSE20B2SC	HPSE24B2SC
1	Cooling capacity	KW	27.3	37.1	43
		RT	7.8	10.6	12.2
	Total input power	KW	9.6	13.9	15.6
	Total rated current	A	25.2	29	29.6
	EER	-	2.84	2.68	2.76
2	Cooling capacity	KW	25.2	34.8	39.9
		RT	7.2	9.9	11.3
	Total input power	KW	10.6	15	17
	Total rated current	A	26.4	30.2	31.8
	EER	-	2.37	2.32	2.35
ESEER		-	3.77	3.43	3.63
Evaporator	Type	-	Shell and tube		
	Brand	-	REFKAR		
	Water flow rate	gpm	20.7	28.2	32.7
		m ³ /h	4.7	6.4	7.4
	Water pressure drop	kPa	9	9.5	12
Max design pressure	Mpa	0.8			
Condenser	Type	-	Flat shape		
	Brand	-	GIPSON		
	Heat exchanger	-	Aluminium fin		
	Number of rows	-	2	3	
	Fins per inch	FPI	12		
Fan	Type	-	Axial fan		
	Brand	-	EUROVENT		
	Number	-	2		
	Speed	rpm	1350	900	
	Diameter	mm	600	800	
	Air flow rate	m ³ /h	10000	22000	
	Discharge	Side/Top	Top		
Compressor	Type	-	Semi-Hermetic Scroll		
	Brand	-	COPELAND		
	Model	-	ZR94KCE-TFD	ZR125KCE-TFD	ZR144KCE-TFD
	Combination	Pieces	2		
	Oil type	-	POE RL32-3MAF		
	Oil charge amount	L	2.65	3.25	
	Oil heater	-	● (Optional)		
Refrigerant	Type	-	R134a		
Ambient temp. range	°C	-	21 ~ 46		
Command control system	Type	-	SIEMENS PLC		
Sound pressure level	dB(A)	-	~ 65		
Power supply	Ø, V, Hz	-	3, 400, 50		
Dimension	WxHxD	mm	972x1209x1576	972x1265x2171	
Net weight	kg	-	~ 800		

1 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 35 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

2 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 40 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

- Evaporating SST : 4.1 °C
 - Water side fouling factor : 0.000018 m² . °C / KW
 - ESEER calculations is based on European standard.
 - Measuring sound pressure level at 3m away and ±3dB tolerance.
 - The characteristics of water flow rate and water pressure drop are given based on case "1".

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Model No.			HPSE26B2SC	HPSE32B2SC	
1	Cooling capacity	KW	46.2	55.2	
		RT	13.1	15.7	
	Total input power	KW	16.9	20.2	
	Total rated current	A	36.2	48.6	
	EER	-	2.73	2.73	
2	Cooling capacity	KW	43	51.6	
		RT	12.2	14.7	
	Total input power	KW	18.4	22	
	Total rated current	A	38	50.2	
	EER	-	2.34	2.35	
ESEER		-	3.55	3.56	
Evaporator	Type	-	Shell and tube		
	Brand	-	REFKAR		
	Water flow rate	gpm	35.1	42.0	
		m ³ /h	8.0	9.5	
	Water pressure drop	kPa	14.5	18	
Max design pressure	Mpa	0.8			
Condenser	Type	-	Flat shape		
	Brand	-	GIPSON		
	Heat exchanger	-	Aluminium fin		
	Number of rows	-	3		
	Fins per inch	FPI	12		
Fan	Type	-	Axial fan		
	Brand	-	EUROVENT		
	Number	-	2		
	Speed	rpm	900		
	Diameter	mm	800		
	Air flow rate	m ³ /h	22000		
	Discharge	Side/Top	Top		
Compressor	Type	-	Semi-Hermetic Scroll		
	Brand	-	COPELAND		
	Model	-	ZR160KCE-TFD	ZR190KCE-TFD	
	Combination	Pieces	2		
	Oil type	-	POE RL32-3MAF		
	Oil charge amount	L	3.37	3.38	
	Oil heater	-	● (Optional)		
Refrigerant	Type	-	R134a		
Ambient temp. range	°C	21 ~ 46			
Command control system	Type	-	SIEMENS PLC		
Sound pressure level	dB(A)	~ 70	~ 72		
Power supply	∅, V, Hz	3, 400, 50			
Dimension	WxHxD	972x1265x2171			
Net weight	kg	~ 800			

1 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 35 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

2 : Chilled water inlet / outlet : 12 °C / 7 °C
 Outdoor ambient temp. : 40 °C DB
 Sea level : 4000 ft
 Fan input power included
 Pump input power not included

- Evaporating SST : 4.1 °C
 - Water side fouling factor : 0.000018 m² . °C / KW
 - ESEER calculations is based on European standard.
 - Measuring sound pressure level at 3m away and ±3dB tolerance.
 - The characteristics of water flow rate and water pressure drop are given based on case "1".

According to our innovation policy , some specifications may be change without prior notification.



Performance Data

Model No.	Ambient Temp. (°C)	Cooling Capacity (KW)	Power Input (KW)	Rated Current (A)	COP
HPSD15B2SC	30	44.6	12.3	28.2	3.6
	35	42.0	13.7	29.8	3.1
	37	40.8	14.4	30.6	2.8
	40	38.8	15.4	31.8	2.5
	42	37.4	16.1	32.6	2.3
	46	34.4	17.6	34.6	2.0
HPSD20B2SC	30	58.2	17.3	33.2	3.36
	35	54.6	19.1	35.4	2.86
	37	53.2	19.9	36.4	2.68
	40	51.0	21.1	38.1	2.41
	42	49.2	22.0	39.3	2.23
	46	45.8	23.9	41.9	1.92
HPSD24B2SC	30	67.2	19.2	35.8	3.5
	35	63.0	21.2	38.4	3.0
	37	61.0	22.2	39.4	2.7
	40	58.2	23.4	41.4	2.5
	42	56.2	24.6	42.8	2.3
	46	52.0	26.8	46.0	1.9
HPSD26B2SC	30	72.8	21.4	41.1	3.40
	35	67.4	23.6	43.8	2.86
	37	65.6	24.6	45.1	2.67
	40	62.0	26.2	47.1	2.37
	42	59.8	27.3	48.6	2.19
	46	55.2	29.7	51.9	1.86
HPSD32B2SC	30	85.2	25.0	52.6	3.41
	35	79.6	27.6	55.5	2.88
	37	77.4	28.8	56.9	2.69
	40	73.6	30.6	59.1	2.41
	42	71.2	31.9	60.6	2.23
	46	65.8	34.7	64.1	1.90

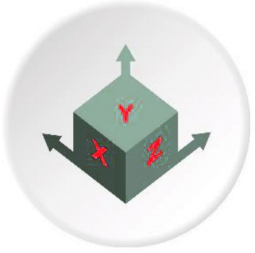
- Chilled water inlet / outlet : 12 °C / 7 °C

Model No.	Ambient Temp. (°C)	Cooling Capacity (KW)	Power Input (KW)	Rated Current (A)	COP
HPSC15B2SC	30	45.2	12.2	27.1	3.7
	35	43.2	13.4	29.0	3.2
	37	41.6	14.0	29.8	3.0
	40	39.9	14.8	31.0	2.7
	42	38.7	15.4	32.0	2.5
	46	36.2	16.8	34.2	2.2
HPSC20B2SC	30	60.0	17.6	32.8	3.4
	35	57.0	19.2	35.0	3.0
	37	55.8	20.0	36.0	2.8
	40	53.8	21.2	37.6	2.5
	42	52.4	22.0	38.6	2.4
	46	49.4	23.8	41.2	2.1
HPSC24B2SC	30	68.6	19.4	35.4	3.5
	35	64.8	21.2	38.2	3.1
	37	63.2	22.0	39.4	2.9
	40	60.8	23.4	41.2	2.6
	42	59.0	24.2	42.6	2.4
	46	55.4	26.2	45.6	2.1
HPSC26B2SC	30	74.4	21.4	40.0	3.5
	35	70.0	23.4	43.0	3.0
	37	68.2	24.3	44.4	2.8
	40	65.2	25.6	46.4	2.5
	42	63.2	26.8	48.0	2.4
	46	58.6	29.0	51.4	2.0
HPSC32B2SC	30	88.2	25.2	50.4	3.5
	35	83.0	27.6	53.6	3.0
	37	80.8	28.8	55.0	2.8
	40	77.4	30.4	57.4	2.5
	42	75.0	31.6	58.9	2.4
	46	69.6	34.2	62.4	2.0

- Chilled water inlet / outlet : 12 °C / 7 °C

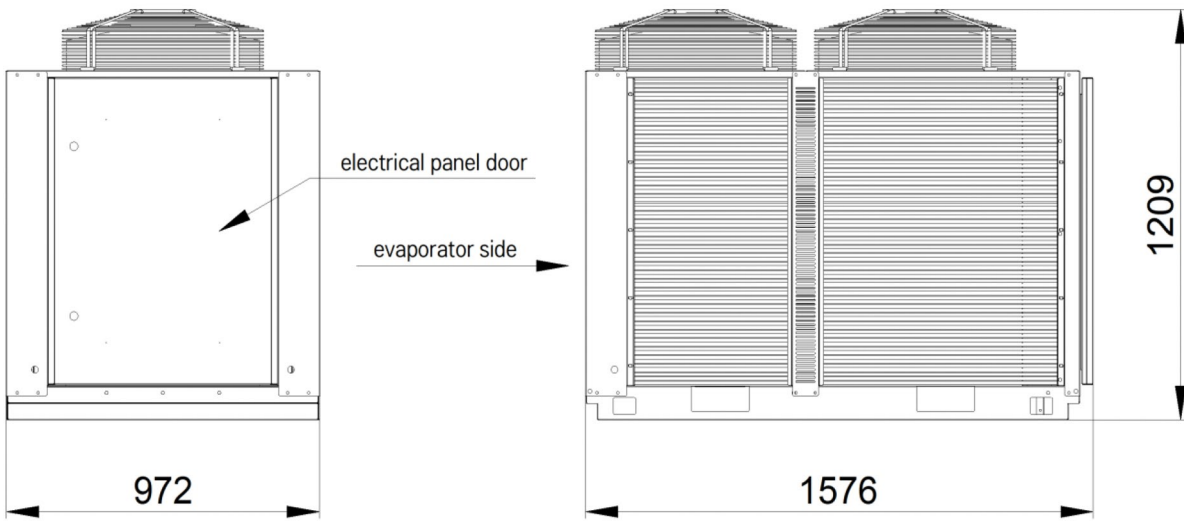
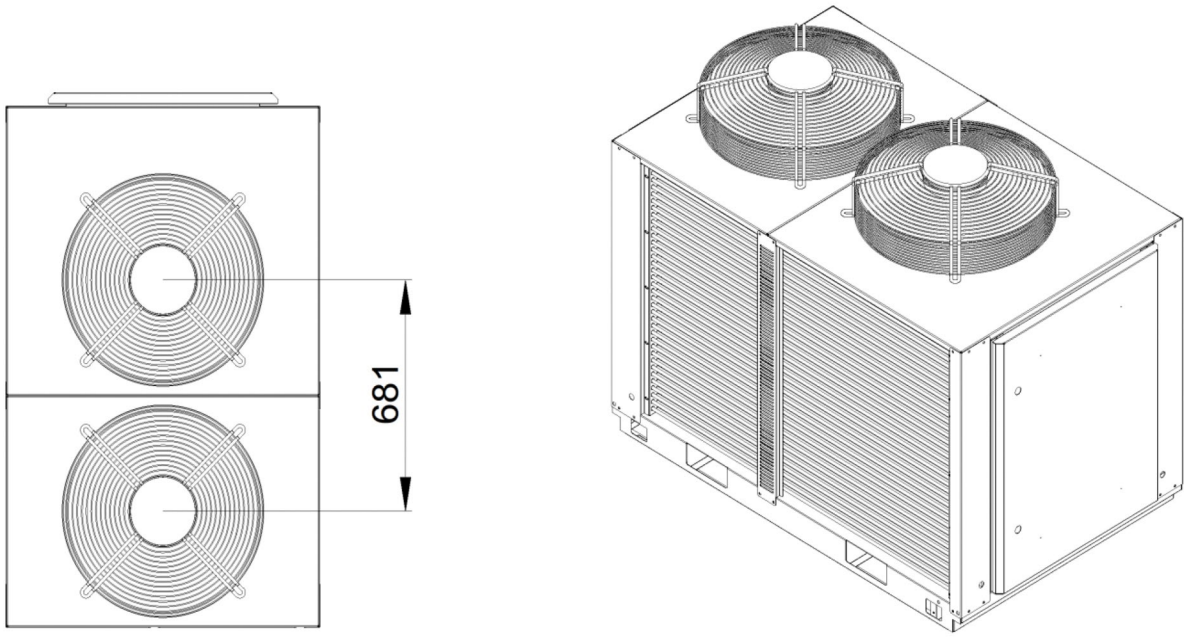
Model No.	Ambient Temp. (°C)	Cooling Capacity (KW)	Power Input (KW)	Rated Current (A)	COP
HPSE15B2SC	30	29.3	8.8	24.4	3.33
	35	27.3	9.6	25.2	2.84
	37	26.5	10.0	25.8	2.65
	40	25.2	10.6	26.4	2.37
	42	24.3	11.1	26.8	2.19
	46	22.5	12.0	27.8	1.88
HPSE20B2SC	30	39.4	12.8	28.0	3.08
	35	37.1	13.9	29.0	2.68
	37	36.2	14.4	29.4	2.51
	40	34.8	15.0	30.2	2.32
	42	33.8	15.5	30.8	2.18
	46	31.8	16.6	32.0	1.92
HPSE24B2SC	30	45.8	14.2	27.8	3.23
	35	43.0	15.6	29.6	2.76
	37	41.8	16.2	30.5	2.58
	40	39.9	17.0	31.8	2.35
	42	38.6	17.6	32.8	2.19
	46	35.9	19.0	34.9	1.89
HPSE26B2SC	30	49.2	15.6	34.8	3.15
	35	46.2	16.9	36.2	2.73
	37	45.0	17.4	37.0	2.59
	40	43.0	18.4	38.0	2.34
	42	41.6	19.2	38.6	2.17
	46	38.8	20.6	40.2	1.88
HPSE32B2SC	30	58.8	18.6	47.2	3.16
	35	55.2	20.2	48.6	2.73
	37	53.8	20.9	49.2	2.57
	40	51.6	22.0	50.2	2.35
	42	50.0	22.8	50.8	2.19
	46	46.8	24.8	52.4	1.89

- Chilled water inlet / outlet : 12 °C / 7 °C



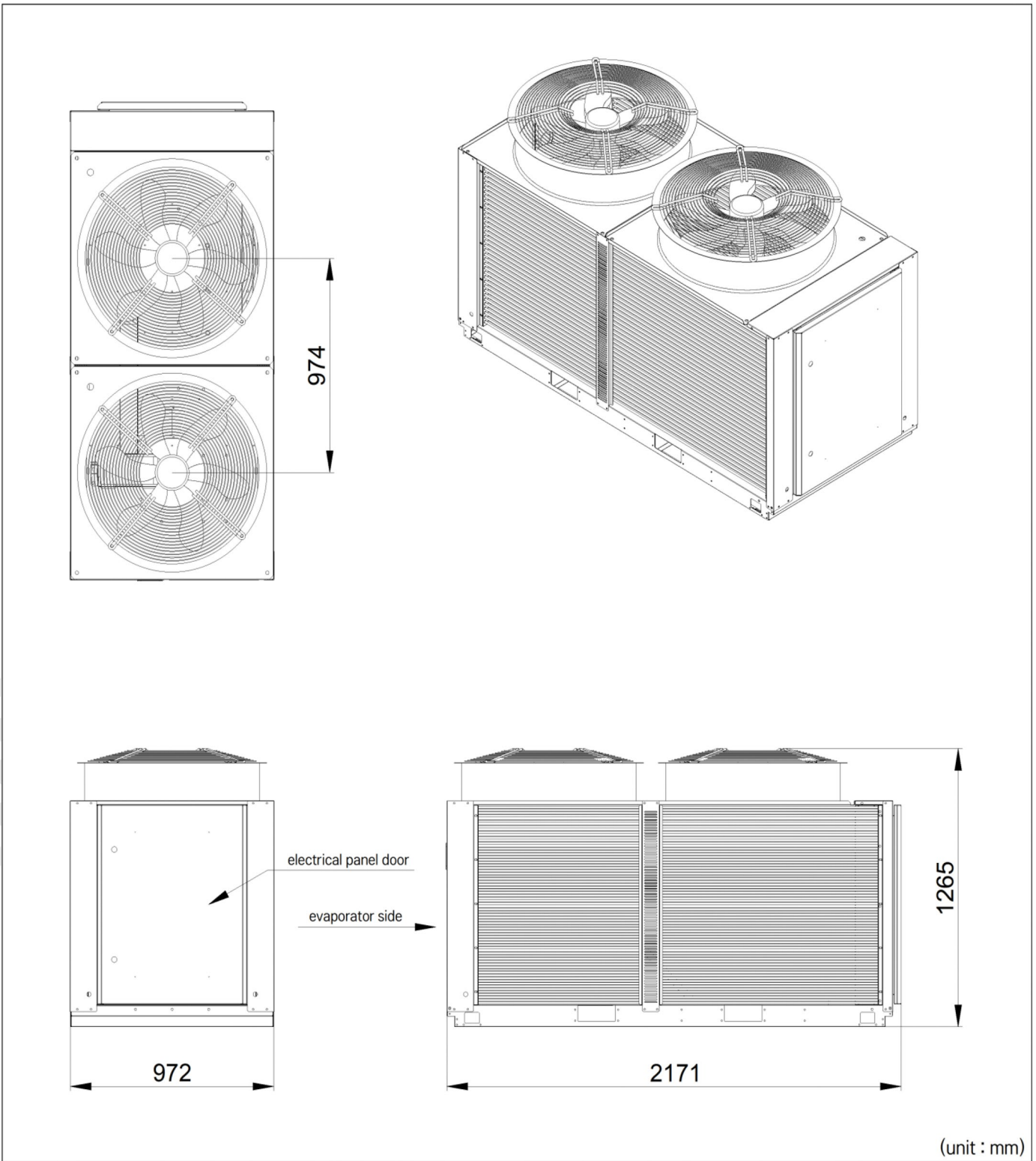
Dimensions

HPSD15B2SC



(unit : mm)

HPSD20B2SC - HPSD24B2SC - HPSD26B2SC - HPSD32B2SC



(unit : mm)



بادبان تهویه پارسیان

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