## **Heat Pump Series**

Air Source Model Description

SCAR-\_\_\_-XB, Hot Water Only (60 Deg. C)

SCAR-\_\_\_-HB, Hot Water Only (70 Deg. C)

SCAR-\_\_\_-GB, Swimming Pool Water Heating Only

SCAM-\_\_\_-XB, Hot Water, Cooling, Heating of Air Conditioning

SCAW-\_\_\_-RB, Cooling, Heating of Air Conditioning





### Features/Benefits

- R410A Chlorine-free refrigerant
- High-efficient scroll compressor
- Base frame and external panels made of polyester powder coated steel.
- Reverse cycle valve.
- Compact structure and sound control design.
- Top and side maintenance access.
- Intelligent controller and adjustment by quick mind microprocessor with possibility or remote control
- Careful protection functions such as high pressure, low pressure, over heating, overload, anti-freezing, phase order, discharge temperature etc
- Water side equipped with efficient tube in tube heat exchanger.
  Air exchanger with hydrophilic coating fin or copper fin
- Automatic defrosting function
- General testing and operational test carried out for every unit before package in the factory.

### Special advantages

### High Efficiency and Energy Saving

Seacon water heater adopts heat pump technology to produce heat from energy absorb in the air. It produces 400% output energy compared to a standard electric heater. For common electric heater, the output energy is around 95% and for gas heater it is around 60%-80% as compared to the input energy. It can save a high electricity cost when running a heat pump.

#### Comfortable

Heat pumps supply hot water in large capacity and it will not be affected by any weather changes. It can be used for 24 hours a day. Seacon heat pumps are equipped with precise temperature control systems and it can ensure a constant temperature in bath processes.

### **Environmental Friendly**

Seacon heat pump water heater uses either/or of the three clean energy of solar, air heat and electric energy. It does not use oil, coal, gas and other fossil fuels that can cause environmental pollution. During the process, there is no emission of harmful gas. Therefore, users can bath in an enclosed space without the need to worry about health issues.

### Safe and Reliable

Seacon heat pump water heaters use electricity but not electric heater to operate. Water and electricity are totally isolated to ensure safe usage. It will not cause any electric shock, flammable or poisonous gas. It is a safe and reliable hot water supply equipment.

### Long Operational Life

The main spare parts like compressor and four-way valves are from world famous companies. Combined with perfect producing technology and strict quality control, Seacon unit performance is definitely a reliable guarantee and it has a long operational life.

#### Easy to Install

Seacon heat pump has a simple installation process. It is free from environmental constraints. It can be installed on the roof, balcony, garage, kitchen, storage rooms, basements, oil rig, Barges and other places. It does not require any particular care or any special room to set up.

#### Intelligent Operation

Seacon units are designed with a variety of protective measures including automatic anti-freeze and defrost function.

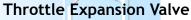
### **Wide Application**

Seacon SCAR series heat pump carries many models. It can meet a wide range of demands of families, factories, schools, hotels, restaurants, hospitals, beauty salons, laundries, baths oil rig, Barges and others. It can provide users with a steady high temperature hot water stream.

## **Branded components**

### Compressor

America Copeland and Japanese Sanyo scroll compressor, special designed for heat pump, with high efficiency and stable running.



Mature thermostatic expansion valve, mechanism structure and no electric engine



Japanese thermostatic water valve, no electric engine and ensured the reliable system running.



Japan Saginomiya four way control valve, flexible direction control, no back flow and block



Spiral tube in tube heat exchanger special for heat pump, and material of molybdenum-bearing finish rolling seamless steel tube

#### Fan and Motor

Big diameter low rotation speed fan and motor, improved efficiency and lowered sound

#### **Evaporator**

Internal thread copper tube casing, antiseptic hydrophilic aluminum fin or copper fin

#### **Control Panel**

Control system from America Group M. with soberly logical and good looking.

















### Air Source Heat Pump - Model SCAR-\_\_\_-XB, Hot Water Only (60 Deg. C)

#### **Product Descriuption**

- Base Frame and external panel made of polyester powder coated steel.
- Extremely compact structurae, easy demountable for access
- High efficiency compressor with R410A refrigerant
- Reverse cycle valve
- Intelligent controller and adjustment by quickmind microprocessor with possibility or remote control
- Carful protection functions such as high pressure, low pressure, overheating, overload, antifreezing, phase order, discharge temp., etc.
- Water side equiped with efficient tube in tube heat exchanger.
- Air heat exchanger (Fin Coil) with hyrophilic coating or copper fin
- Automatic defrosting function include
- Thermostatic expansion valve
- General testing an operational test carried out for every unit before package in factory.

### PERFORMANCE DATA

MODEL	EL SCARXB 005 008 012						020				
		BTUH	16,481	24,226	37,534	51,182	64,831				
Rated heating capacity		TONS	1.37	2.02	3.13	4.27	5.40				
		WATT	4,830	7,100	11,000	15,000	19,000				
Hot water suppl	y	T/h	0.1	0.15	0.23	0.3	0.41				
Heating input p	ower	WATT	1,150	1,700	2,340	3,400	4,100				
Rated heating ir	nput current	Amp.	4.71	7.11	10.10	14.75	17.80				
COP			4.2	4.18	4.6	4.4	4.63				
Output water te	emperature	Deg. C			60 Deg. C						
Dawer Cumply		V/P/Hz	2201//40	P / 50-60Hz	220 / 1P	/ 50-60Hz	3				
Power Supply		V/P/HZ	2207 / 11	7 7 3U-0UFIZ	41	Hz					
Noise level	e level		48	50	53	53	55				
	Width	mm.	930	1000	680	810	810				
Dimension	Height	mm.	280	300	680	780	780				
	Depth	mm.	550	620	830	1,050	1,050				
Weight		KGS.	75	85	120	150	155				
Working temper	rature range	Deg. C		-	20 Deg. C ~ 43 Deg.	C					
Water temp con	trol precise	Deg. C	± 1 Deg. C								
Throttle type			Electronic expansion valves/thermostatic expansion valves								
Refrigerant		Туре	R410A, R407C, R22								
	Туре		Ro	roll							
Compressor	Quantity	PC	1	1	1	1	1				
	Safety functions		Overheat	oltage protection, o	delay-start						
	Туре			Finned h	eat exchanger						
Air source heat	Quantity		1	1	1	1	1				
exchanger	Fan type			A	kial big twist Angle fa	an					
exemanger	Motor power	WATT	40	50	100	200	300				
	Туре			High efficient	spiral tube in tube h	spiral tube in tube heat exchanger					
Hot water side heat exchanger	Water flow	m³/H	0.84	1.22	1.86	2.44	3.27				
	Water pressure	kPa	20	20	27	29	30				
Charles	pipe size	DN	20	20	20	25	25				
Max, working pr	essure	kPa	1,000	1,000	1,000	1,000	1,000				
max. Working pr											

#### NOTES

- Standard heating conditions:
- Air side dry bulb temperature is 20Deg. C. wet bulb temperature is 15Deg. C. initial water temperature 15Deg. C. output water temperature 55Deg. C
- Manufacturer tested noise level showed above, are in laboratory. The noise level of installed unit could be different with above data due to the surrounding conditions.
- Manufacturer have the right to change the technical data due to technical improvement

### **Product Gallary**



SCAR-05~08-XB



SCAR-12~16~20~24~28-XB



SCAR-12~20~25-XB



SCAR-40~60~80~100-XB

SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### Air Source Heat Pump - Model SCAR-\_\_\_-XB, Hot Water Only (60 Deg. C)

### **Product Descriuption**

- Base Frame and external panel made of polyester powder coated steel.
- Extremely compact structurae, easy demountable for access
- High efficiency compressor with R410A refrigerant
- Reverse cycle valve
- Intelligent controller and adjustment by quickmind microprocessor with possibility or remote control
- Carful protection functions such as high pressure, low pressure, overheating, overload, antifreezing, phase order, discharge temp., etc.
- Water side equiped with efficient tube in tube heat exchanger.
- Air heat exchanger (Fin Coil) with hyrophilic coating or copper fin
- Automatic defrosting function include
- Thermostatic expansion valve
- General testing an operational test carried out for every unit before package in factory.

### PERFORMANCE DATA

MODEL		SCARXB	024	028	040	060	080	100				
		BTUH	78,479	92,469	129,661	194,833	259,323	324,153				
Rated heating capacity		Tons	6.54	7.71	10.81	16.24	21.61	27.01				
		WATT	23,000	27,100	38,000	57,100	76,000	95,000				
Hot water supply		T/h	0.46	0.58	0.82	1.23	1.63	2.04				
Heating input po	ower /	WATT	4,680	5,900	8,200	12,200	16,200	20,500				
Rated heating in	out current	Amp.	9.50	11.00	13.34	19.99	26.51	33.10				
СОР			4.7	4.59	4.64	4.68	4.69	4.63				
Max running curr	ent	Amp.	14.5	16	24	36	48	52				
Output water ter	nperature	Deg. C			60 D	eg. C						
Power Supply		V/P/Hz			415-440V / 3	3P / 50-60Hz						
Noise level		dB(A)	55	60	63	66	68	68				
	Width	mm.	810	880	1,450	1,900	1,700	1,800				
Dimension	Height	mm.	780	780	780	1010	900	1,010				
	Depth	mm.	1,050	1,050	1,050	1,050	1,215	1,215				
Weight		KGS.	175	225	280	440	520	580				
Working tempera	ture range	Deg. C	-20 Deg. C ~ 43 Deg. C									
Water temp cont	rol precise	Deg. C	± 1 Deg. C									
Throttle type			Electronic expansion valves/thermostatic expansion valves									
Refrigerant		Туре	R410A, R407C, R22									
	Туре		Hermetically sealed scroll									
Compressor	Quantity	PC	1	1	2	3	4	4				
Compressor	Safety functions		Overheating protection, phase protection, under-voltage protection, delay-start protection and so on									
	Туре			Fi	nned heat excha	nger						
Air source heat	Quantity		1	1	2	2	2	2				
exchanger	Fan type			Axia	al big twist Angle	fan						
	Motor power	WATT	370	370	600	1,200	1,500	1,500				
	Туре			High efficient sp	oiral tube in tube	heat exchanger						
Hot water side	Water flow	m³/H	3.72	4.66	6.53	9.81	13.07	16.3				
heat exchanger	Water pressure	kPa	32	34	36	42	46	48				
	pipe size	DN	25	25	32	40	50	50				
Max. working pre	essure	kPa	1,000	1,000	1,000	1,000	1,000	1,000				
Advised water ta	nk	m³	2.5-4	3.5-5	5-7	8-10	12-14	15-20				

#### NOTES:

- Standard heating conditions:
- Air side dry bulb temperature is 20Deg. C. wet bulb temperature is 15Deg. C. initial water temperature 15Deg. C. output water temperature 55Deg. C
- -Manufacturer tested noise level showed above, are in laboratory. The noise level of installed unit could be different with above data due to the surrounding conditions.
- Manufacturer have the right to change the technical data due to technical improvement

### **Product Gallary**



SCAR-05~08-XB



SCAR-12~16~20~24~28-XB



SCAR-12~20~25-XB



SCAR-40~60~80~100-XB

SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### Air Source Heat Pump - Model SCAR-\_\_\_-HB, Hot Water Only (70 Deg. C)

### **Product Descriuption**

- New compressor special designed for high water temperature.
  Base Frame and external panel made of polyester powder coated steel.
- Water side equiped with efficient tube in tube heat exchanger.
- Reliable compressor with R417A refrigerant.
- Flow switch for water flow protection.
- Intelligent controller and adjustment by quickmind microprocessor with possibility or remote control
- Carful protection functions such as high pressure, low pressure, overheating, overload, antifreezing, phase order, discharge temp., etc.
- Air heat exchanger (Fin Coil) with hyrophilic coating or copper fin
- Automatic defrosting function include
- Thermostatic expansion valve
- General testing an operational test carried out for every unit before package in factory.

### PERFORMANCE DATA

MODEL		SCARHB	012	020	025	040	050	080			
Rated heating capacity		BTUH	27,297	45,723	54,935	90,763	109,189	180,843			
		Tons	2.27	3.81	4.58	7.56	9.10	15.07			
		WATT	8,000	13,400	16,100	26,600	32,000	53,000			
Hot water supply		T/h									
Heating input po	ower /	WATT	2,500	4,150	4,850	8,300	9,700	16,500			
Rated heating in	out current	Amp.	12.3	7.60	8.90	15.20	17.80	30.40			
СОР		KW/KW	3.2	3.2	3.3	3.2	3.3	3.2			
Max running curr	ent	Amp.	17.10	12.00	13.00	24.00	26.00	48.00			
Output water ter	nperature	Deg. C			70 De	eg. C					
Power Supply		V/P/Hz	220/1/50-60		415-	440V / 3P / 50-6	50Hz				
Noise level		dB(A)	53	58	61	63	64	68			
Dimension	Width	mm.	680	810	810	1450	1450	1700			
	Height	mm.	635	780	780	780	780	900			
	Depth	mm.	820	1050	1050	1050	1200	1250			
Weight		KGS.	115	145	155	80	320	570			
Working tempera	ture range	Deg. C	-10 Deg. C ~ 43 Deg. C								
Water temp cont	rol precise	Deg. C	± 1 Deg. C								
Throttle type			Electronic expansion valves/Thermostatic expansion valves								
Refrigerant		Туре	R417A								
	Туре		Rotary / Scroll								
Compressor	Quantity	PC	1	1	1	2	2	4			
Compressor	Safety functions		Overhe	eating protection,	, phase protectio protection		protection, dela	y-start			
	Туре			Fii	nned heat exchar	nger					
Air source heat	Fan type				Axial big tw	ist Angle fan					
exchanger	Motor power		200	300	500	600	600	1500			
	Туре			High efficient	t tube in tube he	at exchanger					
Hot water side	Water flow	m³/H	1.38	2.3	2.77	4.57	5.5	9.11			
heat exchanger	Water pressure	kPa	14	18	21	20	23	25			
	pipe size	Inch.	3/4	1	1	1-1/4	1-1/4	2			
Max. working pre	essure	kPa	1,000	1,000	1,000	1,000	1,000	1,000			
/ /											

#### NOTES:

- Rated hot water working condition: Air source air inlet dry air buld temperature is 20 Deg. C, Wet bulb temperature is 15 Deg. C. - Initial temperature of hot water is 20 Deg. C, Termination temperature of hot water is 70 Deg. C

### **Product Gallary**



SCAR-12~25-HB



SCAR-40~50~80-HB

SPECIFICATIONS AND DESIGN ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### Air Source Heat Pump - Model SCAR-\_\_\_-GB, Swimming Pool Water Heating Only

### **Product Descriuption**

- Base Frame and external panel made of polyester powder coated steel.
- Extremely compact structurae, easy demountable for access
- High efficiency compressor with R410A refrigerant
- Reverse cycle valve
- Intelligent controller and adjustment by quickmind microprocessor with possibility or remote control
- Carful protection functions such as high pressure, low pressure, overheating, overload, antifreezing, phase order, discharge temp., etc.
- Water side equiped with efficient tube in tube heat exchanger.
- Air heat exchanger (Fin Coil) with hyrophilic coating or copper fin
- Automatic defrosting function include
- Thermostatic expansion valve
- General testing an operational test carried out for every unit before package in factory.

### PERFORMANCE DATA

MODEL		SCARGB	012	020	024	040	048	060	080	100
Rated heating capacity		BTUH	40,263	66,878	80,185	133,756	160,712	200,634	267,512	321,424
		Tons	3.36	5.57	6.68	11.15	13.39	16.72	22.29	26.79
			11,800	19,600	23,500	39,200	47,100	58,800	78,400	94,200
Hot water supply		T/h								
Heating input po	ower	WATT	2,260	3,700	4,500	7,400	9,000	11,000	15,100	18,500
Rated heating in	put current	Amp.	9.8	6.7	7.3	13.4	14.6	20.1	26.8	29.2
COP			5.2	5.3	5.2	5.2	5.2	5.3	5.2	5.2
Max running curi	ent	Amp.	17.1	12.0	13.0	24.0	26.0	36.0	48.0	52.0
Power Supply		V/P/Hz	220/3/50			415-44	10V / 3P / 50	)-60Hz		
Noise level		dB(A)	51	53	56	60	65	66	68	68
	Width	mm.	670	810	1450	1450	1450	1700	2006	2206
Dimension	Height	mm.	635	780	640	780	780	900	1030	1030
	Depth	mm.	830	1050	1050	1050	1200	1250	2090	2090
Weight		KGS.	115	135	145	280	305	480	610	720
Throttle type			Elect							
Refrigerant		Туре	R410A, R407C, R22							
	Туре		Rotory / Scroll							
Compressor	Quantity	PC	1	1	1	2	2	3	4	4
Compressor	Safety functions		Overheati							
Heat source	Туре			Finned	heat exchar	nger				
side	Water Resistance	WATT	100	300	600	600	600	900	1500	1500
	Туре				High effic	ient titaniun	tube heat e	exchanger		
Hat water at t	Water flow	m³/H	2.54	4.21	5.05	8.43	10.12	12.64	16.85	20.25
Hot water side	Water pressure	kPa	20	25	30	26	28	40	30	32
	pipe size	Inch.	1-1/2	2	2	2-1/2	2-1/2	3	3	3
Max. working pre	essure	kPa	600	600	600	600	600	600	600	600

- Rated hesting working condition: Air source air inlet dry bulb temperature is 19 Deg. C.
- Water side temperature is 28 Deg. C, outlet temperature is 32 Deg. C.

### **Product Gallary**



SCAR-12~20~24-GB



SCAR-40~48~60-GB



SCAR-80~100-GB

# Air Source Heat Pump - Model SCAM-\_\_\_-XB, Hot Water, Cooling, Heating of Air Conditioning PERFORMANCE DATA

MODEL		SCAMXB	012	020	024	040	060	080	100		
		BTUH	37,534	64,831	75,067	129,661	194,492	259,323	307,093		
	Rated heating capacity	Tons	3.13	5.40	6.26	10.81	16.21	21.61	25.59		
Water		WATT	11,000	19,000	22,000	38,000	57,000	76,000	90,000		
Heater	Hot water supply	T/h	0.24	0.41	0.48	0.82	1.23	1.63	1.94		
	Heating input power	WATT	2,440	4,070	4,880	8,150	12,220	16,740	18,660		
	Rated heating input current	Amp.	11.23	17.76	22.46	15.53	23.28	31.89	34.87		
	СОР		4.51	4.67	4.51	4.66	4.66	4.54	4.82		
		BTUH	25,386	42,311	50,773	84,621	126,898	169,242	225,884		
	Rated cooling capacity	Tons	2.12	3.53	4.23	7.05	10.57	14.10	18.82		
Water	//	WATT	7,440	12,400	14,880	24,800	37,190	49,600	66,200		
Chiller	Water flow	m³/H	1.28	2.13	2.56	4.27	6.40	8.53	11.39		
	Input power	WATT	2,580	4,300	5,160	8,600	12,960	17,300	22,400		
	Rated input current	Amp.	11.87	17.60	23.75	15.20	22.80	30.40	41.00		
	EER		2.88	2.88	2.88	2.88	2.87	2.87	2.96		
	/ 1	BTUH	27,024	45,040	54,048	90,081	135,087	180,161	241,580		
	Rated Heating capacity	Tons	2.25	3.75	4.50	7.51	11.26	15.01	20.13		
Heating		WATT	7,920	13,200	15,840	26,400	39,590	52,800	70,800		
Heating for A/C	Water flow	m³/H	1.36	2.27	2.72	4.54	6.81	9.08	12.18		
	Input power	WATT	2.4	4.00	4.80	8.00	11.97	16.00	22.00		
	Rated input current	Amp.	11.05	7.60	22.09	15.20	22.80	30.40	40.00		
	СОР	KW/KW	3.30	3.30	3.30	3.30	3.31	3.30	3.22		
		BTUH	26,615	44,358	53,229	88,374	132,732	177,090	208,823		
	Rated cooling capacity	Tons	2.22	3.70	4.44	7.36	11.06	14.76	17.40		
		WATT	7,800	13,000	15,600	25,900	38,900	51,900	61,200		
Chiller and	Water flow	m³/H	1.34	2.24	2.68	4.45	6.69	8.93	10.53		
Water	Heating capacity	WATT	10,500	16,500	21,000	33,000	49,500	66,000	77,600		
Heater	Heating Water flow	T/h	1.81	2.84	3.61	5.68	8.51	11.35	13.35		
	Input power	WATT	2,300	3,700	4,600	7,400	11,170	14,900	17,300		
	Rated input current	Amp.	10.59	7.10	21.17	14.2	21.28	28.40	32.00		
	EER + COP		7.96	7.97	7.96	7.96	7.91	7.91	8.02		
Rated Outle	et Temperature	Deg. C	55 Deg. C								
Max. Outlet	Temperature	Deg. C	60 Deg. C 220/1/50-60 415-440/3/50-60 220/1/50-60 415-440/3/50-60								
Power Supply	У	V/P/Hz	220/1/50-60	/3/50-60							
Noise level		dB(A)	50	55	55	55	58	60	60		
	Width	mm.	710	810	1300	1450	1900	2005	2205		
Dimension	Height	mm.	710	780	640	780	1010	1030	1030		
	Depth	mm.	810	1010	740	1010	1160	2090	2090		
Weight		KGS.	110	175	220	340	610	830	930		
Throttle type		_	Electronic expansion valves/thermostatic expansion valves								
Refrigerant		Туре		,		410A					
. //	Туре	200			Rotory / Sci						
Compressor	Quantity	PC	1	1 Overheating	1 protection, phase protect	1 tion, under-voltage	protection, delay-s	1 tart	1		
/ /	Safety functions		Overheating protection, phase protection, under-voltage protection, delay-start protection and so on								
Air source	Туре					at exchange					
heat	Quantity		1	1	1	1 1	1	1	1		
exchanger	Fan type				ial big twist A		1				
	Motor power	WATT	200	300	370	600	1200	1500	1500		
	Туре	2	,		nt tube in tube	1	_				
Hot water	Water flow	m³/H	1.89	3.27	3.78	6.54	9.80	13.07	15.48		
side heat exchanger	Water pressure	kPa	27	32	30	36	42	46	48		
excilatiget	pipe size	inch.	3/4	1	1	1-1/4	1-1/2	2	2		
	Max. working pressure	kPa	1000	1000	1000	1000	1000	1000	1000		
Air cand	Туре				heat exchang			nt tube in tube hear			
Air condi- tion side	Water flow	m³/H	1.34	2.24	2.68	4.45	6.69	8.93	10.53		
heat	Water pressure	kPa	12	13	12	15	40	45	47		
exchanger	pipe size	inch.	3/4	1	1	1-1/4	1-1/2	2	2		
	Max, working pressure	kPa	1000	1000	1000	1000	1000	1000	1000		

### **Product Gallary**



SCAM-12~20~24-XB



SCAM-40~60-XB



SCAM-80~100-XB

#### NOTES:

- Rated hot water working condition: Air source side air inlet dry bulb temperature is 20 Deg. C, Wet bulb temperature is 15 Deg. C. Initial temperature of hot water is 15 Deg. C. termination temperature of hot water is 55 Deg. C
- Rated cooling working condition: Air sou<mark>rce side air inlet</mark> temperature is 35 Deg. C, Use side water inlet temperature is 12 Deg. C, outlet temperature is 7 Deg. C
- Rated heating working condition: Air source side air inlet dry bulb temperature is 7 Deg. C, Wet bulb temperature is 6 Deg. C, Use side water inlet temperature is 40 Deg. C, outlet temperature is 45 Deg. C
- Cooling with heating working condition: Initial temperature of hot water is 15 Deg. C. Termination temperature of hot water is 55 Deg. C. Air condition water side water inlet temperature is 12 Deg. C, outlet temperature is 7 Deg. C.

### Air Source Heat Pump - Model SCAW-\_\_\_-RB, Cooling, Heating of Air Conditioning

#### **Product Descriuption**

- Base Frame and external panel made of polyester powder coated steel.
- Extremely compact structurae, easy demountable for access
- High efficiency compressor with R410A refrigerant
- Reverse cycle valve
- Intelligent controller and adjustment by quickmind microprocessor with possibility or remote control
- Water side equiped with efficient tube in tube heat exchanger.
- Air heat exchanger (Fin Coil) with hyrophilic coating or copper fin
- Automatic defrosting function include
- Thermostatic heating element for evaporator anti-freezing protection.
- Thermostatic expansion valve
- General testing an operational test carried out for every unit before package in factory.

### PERFORMANCE DATA

MODEL	4	SCAWRB	008	009	012	015	018	025	030	040	056
MODEL											
		BTUH	25,523	28,798	41,253	50,158	59,371	82,540	100,351	118,743	165,045
	Capacity	Tons	2.13	2.40	3.44	4.18	4.95	6.88	8.36	9.90	13.75
Cooling		WATT	7,480	8,440	12,090	14,700	17,400	24,190	29,410	34,800	48,370
	Rated Power	WATT	3,230	3,610	4,580	5,660	6,870	9,150	10,910	13,730	18,310
	Rated Current	Amp.	13.2	14.8	8.7	10.8	13.0	17.4	20.7	26.1	34.8
		BTUH	31,392	35,418	50,739	61,692	73,020	101,511	123,417	146,040	202,988
	Capacity	Tons	2.62	2.95	4.23	5.14	6.08	8.46	10.28	12.17	16.92
Heating		WATT	9,200	10,380	14,870	18,080	21,400	29,750	36,170	42,800	59,490
	Rated Power	WATT	3,160	3,530	4,480	5,540	6,730	8,970	10,690	13,470	17,940
	Rated Current	Amp.	12.9	14.5	8.5	10.5	12.8	17.0	20.3	25.6	34.1
Max. Rated Cu	rrent	Amp.	19.2	21.5	13.9	17.2	20.9	27.8	33.2	41.7	55.7
Power Supply		V/P/Hz	220/3/50 415-440V / 3P / 50-60Hz								
Noise level		dB(A)	53	53	55	55	60	63	66	68	68
	Width	mm.	680	810	810	810	1,450	1,450	1,450	1,700	1,700
Dimension	Height	mm.	635	780	780	780	780	780	780	900	900
	Depth	mm.	830	1,050	1,050	1,050	1,050	1,050	1,253	1,215	1,215
Operating Ran	ge	Deg. C	-10 - 43 Deg. C								
Throttle type				El	ectronic ex	pansion va	lves/therm	ostatic exp	ansion valv	es	
Refrigerant		Туре	R410A								
	Туре		Rotory / Scroll								
Camprasar	Quantity	PC	1	1	1	1	2	2	2	4	4
Compressor	Safety functions		Built in pr	otection e\	rice overhe	ating prote de	ction, sequ lay protect		ction, unde	er voltage p	rotection,
	Туре					Finne	d heat exch	nanger			
Air source heat	Quantity		1	1	1	1	1	2	2	2	2
exchanger	Fan type					Axial b	ig twist ar	ngle fan			
	Motor power	WATT	100	180	300	300	600	600	600	1,500	1,500
	Туре				Ef	ficient tube	in tube he	eat exchang	ger		
	Water flow (Summer)	m³/H	1.29	1.45	2.08	2.53	2.99	4.16	5.06	5.99	8.32
Hot water side	Water flow (Winter)	m³/H	1.58	1.79	2.56	3.11	3.68	5.12	6.22	7.36	10.23
heat exchanger	Water pressure	kPa	27	29	30	32	34	36	40	46	48
	pipe size	inch.	3/4	1	1	1	1	1-1/4	1-1/2	2	2
	Max. working pressure	kPa	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

- Rated cooling working condition: Air inlet temperature is 35 Deg. C, Water temperature is 12 Deg. C, Outlet temperature is 7 Deg. C
- Rated heating working condition: Sir inlet dry bulb temperature is 7 Deg. C, Wet bulb temperature is 6 Deg. C, Water inlet temperature is 40 Deg. C, Outler temperature is 45 Deg. C

### **Product Gallary**



SCAW-12~20~25-RB



SCAW-40~60-RB



SCAW-80~100-RB

### Air Source Heat Pump - Model SCAW-\_\_\_-RB, Cooling, Heating of Air Conditioning

### **Product Descriuption**

- Base Frame and external panel made of polyester powder coated steel.
- Extremely compact structurae, easy demountable for access
- High efficiency compressor with R410A refrigerant
- Reverse cycle valve
- Intelligent controller and adjustment by quickmind microprocessor with possibility or remote control
- Water side equiped with efficient tube in tube heat exchanger.
- Air heat exchanger (Fin Coil) with hyrophilic coating or copper fin
- Automatic defrosting function include
- Thermostatic heating element for evaporator anti-freezing protection.
- Thermostatic expansion valve
- General testing an operational test carried out for every unit before package in factory.

### PERFORMANCE DATA

MODEL	1	SCAWGB	066	132	198	264	331	397	463	530	
		BTUH	225,884	451,768	677,651	903,535	1,129,419	1,355,303	1,581,186	1,807,070	
/	Capacity	Tons	18.82	37.65	56.47	75.29	94.12	112.94	131.77	150.59	
Cooling		WATT	66,200	132,400	198,600	264,800	331,000	397,200	463,400	529,600	
	Rated Power	WATT	22,400	44,800	67,200	89,600	121,200	134,400	156,800	179,200	
	Rated Current	Amp.	41.0	82.0	123.0	164.0	205.0	246.0	287.0	328.0	
		BTUH	241,580	483,159	724,739	966,318	1,207,898	1,449,478	1,691,057	1,932,637	
	Capacity	Tons	20.13	40.26	60.39	80.53	100.66	120.79	140.92	161.05	
Heating		WATT	70,800	141,600	212,400	283,200	354,000	424,800	495,600	566,400	
	Rated Power	WATT	22,000	44,000	66,000	88,000	110,000	132,000	154,000	176,000	
	Rated Current	Amp.	40.0	80.0	120.0	160.0	200.0	240.0	280.0	320.0	
Max. Rated Cu	rrent	Amp.	54.0	108.0	162.0	216.0	270.0	324.0	378.0	432.0	
Power Supply		V/P/Hz	415-440V / 3P / 50-60Hz								
Noise level		dB(A)	68	71	74	77	79	81	84	85	
	Width	mm.	2,205	2,205	2,205	2,205	22,050	2,205	2,205	22,050	
Dimension	Height	mm.	1,110	2,140	3,170	4,200	5,230	6,260	7,290	8,320	
	Depth	mm.	2,090	2,090	2,090	2,090	2,090	2,090	2,090	2,090	
Operating Rang	ge	Deg. C	-10 - 43 Deg. C								
Throttle type			Electronic expansion valves/thermostatic expansion valves								
Refrigerant		Type	R410A								
	Туре					Sci	roll				
Compressor	Safety functions		Built in protection evice overheating protection, sequence protection, under voltage protect delay protection							protection,	
Air source heat	Туре					Finned hea	t exchanger				
exchanger	Fan type				A	xial big tw	ist angle fa	n			
	Туре				She	ell and tube	heat exchan	ger			
	Water flow (Summer)	m³/H	11.38	22.77	34.15	45.54	56.92	68.31	79.69	91.07	
Hot water side	Water flow (Winter)	m³/H	12.18	24.35	36.53	48.70	60.88	73.05	85.23	97.40	
heat exchanger	Water pressure Drop	kPa				30	- 70				
	pipe size	inch.	4	4	4	5	5	5	6	6	
	Max. working pressure	kPa	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	

#### NOTES:

- Rated cooling working condition: Air inlet temperature is 35 Deg. C, Water temperature is 12 Deg. C, Outlet temperature is 7 Deg. C
- Rated heating working condition: Sir inlet dry bulb temperature is 7 Deg. C, Wet bulb temperature is 6 Deg. C, Water inlet temperature is 40 Deg. C, Outler temperature is 45 Deg. C

## **Product Gallary**



SCAW-12~20~25-RB



SCAW-40~60-RB



SCAW-80~100-RB