

### **R32 Heat Pump Split type**



#### Heating+Cooling+Demostic hot water



### DC Inverter Technology, High Energy Efficient

The compressor speed is controlled according to the indoor heating demand, and the output is completely on demand, more comfortable enjoyment: In any case, it can maintain a stable indoor temperature. Soft start to avoid grid impact

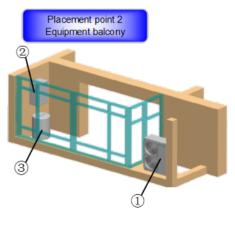
Full DC frequency conversion system, frequency conversion compressor + DC external fan + frequency conversion water pump Leading in the energy efficiency industry, the highest SCOP=5.2(A+++), far exceeding the EU energy efficiency standard by 14.4%

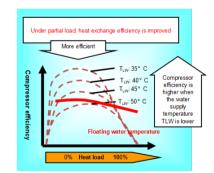
Inverter compresso

Inverter motor

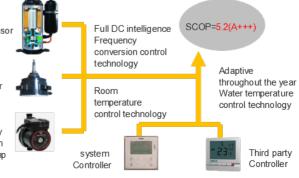
Frequency conversion water pump







Energy efficiency industry leader

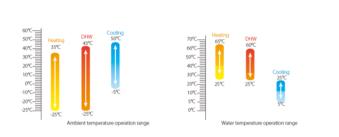


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#### Wide ambient temperature and water temperature operation ranges

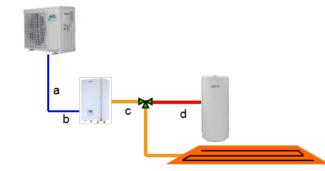
Advanced system design, ultra-standard matching and testing, to achieve a wide operating range of ambient temperature and a wide range of water temperature.



#### Long piping length

Maximum piping length for outdoor unit and hydronic box (a+b) 30m Minimum piping length for outdoor unit and hydronic box (a+b) 3m Maximum piping height for outdoor unit and hydronic box (a) 20m When the water tank is connected,

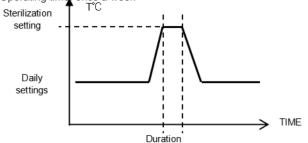
Maximum length between the 3-way valve and hydronic box (c) 3m Maximum length between the water tank and hydronic box (c+d) 10m



#### Sterilization function

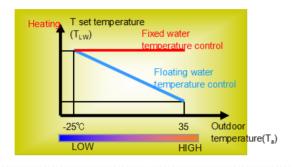
With sterilization function, the use of domestic hot water is healthier.

Sterilization temperature: about 65°C Duration: Suggest 10 minutes, refers to the time that can be maintained in high temperature water, Operating time: once a week



#### Floating water temperature control more comfort

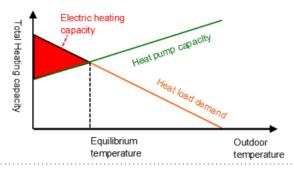
Changes in outdoor air temperature, changes in heat required indoors, But fix water temperature, provide constant heat, overheating, waste



#### Backup electric heating, More economical and more comfortable

Function: As a supplement to the capacity of the heat pump when the outdoor temperature is low

Turn on : Only when the heat pump capacity is slightly insufficient (that is, the outdoor temperature is below the equilibrium temperature). But the opening rate is very low throughout the heating season



#### **User interface**

New type touch key wired controller Real-time check of operating parameters Built-in temperature sensor Built-in wifi module Multiple languages Modbus protocol and network flexibility, etc.



### Specification -R32 50&60HZ

M	odel name			AL-H14/NDR3H(U) AL-H20/NDR3H(U) AL-H27/NDR3H(U) AL-H34/NDR3H(U) AL-H41/SDR3H(U) AL-H48/SDR3H(U) AL-H55/SDR3H(U)										
Compatible hydronic box				6kW 10kW				16kW						
		or Unit	V/Ph/H	220-240/1/50					380-415/3/50					
Power supply	Hydror		V/Ph/H		220-240/1/50 380-415/3/50									
Heatingz	Capa	acity	kW	4.3	6.25	8.4	10	12.2	14.5	16.1				
	Rated	input	kW	0.83	1.3	1.62	2	2.44	3.08	3.57				
		COP		5.2	5	5.2	5	5	4.71	4.51				
Heatings	Сара	acity	kW	4.36	6.4	8.3	10	12	14	16.1				
	Rated		kW	1.47	2.13	2.60	3.23	3.86	4.67	5.53				
	COP			2.96	3	3.19	3.1	3.11	3	2.91				
Cooling4	Capacity		kW	4.5	6.6	8.45	10	12	13.6	15				
	Rated	-	kW	0.81	1.35	1.67	2.08	3	3.78	4.41				
	Nateu	EER	KVV	5.56	4.9	5.06	4.8	4	3.6	3.4				
Coolings			kW		7.05	7.45	8.3		12.8	14				
	Capa			4.75		2.20		11.7						
	Kated	input	kW	1.40	2.35		2.52	4.3	5.00	5.7				
	EER			3.4	3	3.39	3.3	2.75	2.56	2.46				
Seasonal space heating	LWT at 35° C			A+++	A+++	A+++	A+++	A+++	A+++	A+++				
energy efficiency class?	LWT at 55° C			A++	A++	A++	A++	A++	A++	A++				
SCOP <sub>6</sub>	LWT at 35° C			4.86	4.96	5.22	5.2	4.82	4.71	4.63				
	LWT at 55° C			3.32	3.53	3.37	3.5	3.46	3.48	3.43				
MOP(Maximum overcurrent protection)			Α	18	18	19	19	14	14	14				
Compressor Type				Twin rotary DC inverter										
Outdoor fan	Motor type			Brushless DC motor										
	Number of fans			1	1	1	1	1	1	1				
Air side heat exchanger Type			Finned tube											
Refrigerant(R32) Factory charge kg			kg	1.25 1.25 1.65 1.65 1.84 1.84 1.84										
Th	rottle type					Ele	ctronic expansion v	alve	•					
Piping connections	Туре			Flare	Flare	Flare	Flare	Flare	Flare	Flare				
	Liquid/ Ga		mm	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9				
	Min. /Max.	pipe length	m	2/30	2/30	2/30	2/30	2/30	2/30	2/30				
Installation height difference	Outdoor unit	above/below	m	20	20	20	20	20	20	20				
Sound pressure level(1m)s	Outdoo	or Unit	dB	43	44	45	48	49	50	54				
	Hydronic Box		dB	2			31	1						
Net dimensions	Outdoor Unit		mm	350×700×900 395×805×970 420×860×990										
	(W×H×D) Hydronic Box		mm		420×790×270 420×790×270 420×790×270									
Packed dimensions	Outdoor Unit		mm		430×770×1020 495×895×1105 530×880×1085									
(W×H×D)			mm	515×985×355		515×985×355		515×985×355						
	Outdoor Unit		kg		/40	51/55	65/69	100/112						
Net/Gross weight	Hydronic Box		kg		37/43 38/44 39/45									
	Cooling		° C	10 to 48										
Operating temperature range	Heating		° Č		-25 to 35									
	DHW		° Č		-25 to 43									
	Cooling		°C	5~25										
Setting water temperature range	Heating		°C	25~65										
	DHW(tank)		°C	30~60										
Water circuit	Piping connections		inch	R1*										
	Safety valve set pressure		MPa	0.3										
	Flow switch		m³/h	0.36 0.6										
	Drainage pipe connection		mm	DN25										
	Volume		L	8										
	Expansion Max. water tank pressure		MPa		0.3									
			MPa		0.1									
	Water side Type			Plate type										
			1.000		10			0/3 0/3/9						
	Capacity of t Water pu	the back-up	kW m	0	/3		9.5	0/3/9						

#### Note:

Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811:2013; (EU) No 813:2013; OJ 2014/C 207/02:2014.

2. Outdoor air temperature 7° C DB, 85% R.H.; EWT 30° C, LWT 35° C.

3. Outdoor air temperature 7° C DB, 85% R.H.; EWT 47° C, LWT 55° C.

4. Outdoor air temperature 35° C DB; EWT 23° C, LWT 18° C.

5. Outdoor air temperature 35° C DB; EWT 12° C, LWT 7° C.

6. Seasonal space heating energy efficiency class tested in average climate conditions.

7. Test standard: EN12102-1

8. Sound pressure level is the maximum value tested under the two conditions of Notes2 and Notes5.



