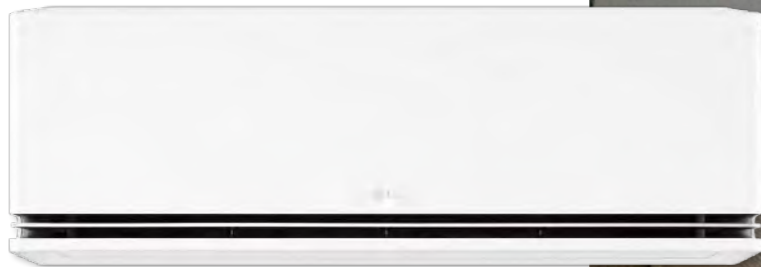


LG DUALCOOL™ AI HeatPump 074



DUALCOOL PREMIUM
DUALCOOL DELUXE




RESIDENTIAL

DUALCOOL HEATPUMP (WALL MOUNTED)

○ Single Split Only

MODEL	kBTu		9	12
	kW		2.6	3.5
LG DUALCOOL™ Heatpump AI air Premium		 	○ NH09SP2.NS2	○ NH12SP2.NS2
			○ NH09SP.NS1	○ NH12SP.NS1

MODEL	kBTu		9	12
	kW		2.6	3.5
LG DUALCOOL™ Heatpump AI air Premium		 	○ NH09SP2.U24A	○ NH12SP2.U24A
			○ NH09SP.U24A	○ NH12SP.U24A

○ : Applied to only Single

Category	LG DUALCOOL™				
	AI Air Premium		AI Air Deluxe		
Product Grade Naming					
BTU	9K	12K	9K	12K	
CORE TECH	DUAL Inverter HeatPump Compressor™	○	○	○	○
	AI Air	○	○	○	○
	Pre-Cool & Heat*	○	○	○	○
COMFORT	ThinQ UP	○	○	○	○
	Soft Air	○	○	○	○
	DUALVane™	○	○	○	○
	FirePlace	○	○	○	○
	Sleep Timer+	○	○	○	○
ENERGY SAVING	Comfort Humidity Control	○	○	○	○
	kW Manager	○	○	○	○
	Human Detecting Sensor	○	○	○	○
	Window Open Detection	○	○	○	○
	Low Heating	○	○	○	○
HEALTH	Active Energy Control	○	○	○	○
	All Cleaning	○	○	○	○
	Auto Clean+	○	○	○	○
	Freeze Cleaning™	○	○	○	○
	Plasmaster™ Ionizer ⁺⁺	○	○	○	○
SMART	Allergy Filter	○	○	○	○
	Auto Cleaning	○	○	○	○
	Embedded Wi-Fi	○	○	○	○
	Voice Control	○	○	○	○
	Low Refrigerant Detection	○	○	○	○
DURA-BILITY	Smart Diagnosis	○	○	○	○
	Mobile LGMV	○	○	○	○
	Gold Fin™	○	○	○	○

* The feature is planned to be released in only Italy, the Netherlands and Germany in December 2025, and the rest of the EU country is also preparing to release it accordingly.

※ ThinQ UP feature is under development and is scheduled to be launched step by step and may vary by country and model.

※ For our policy of continuous product improvement, specification, design and feature are subject to change without prior notice.

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Developed for Nordic Climate

100% Performance at -25°C
and Successfully Tested in -35°C

Outdoor Air Temperature (°C)	Indoor Air Temperature : 20°C							
	Deluxe 9k		Deluxe 12k		Premium 9k		Premium 12k	
	*TC (kW)	*PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)	TC (kW)	PI (kW)
-25	3.66 (*114%)	2.24	4.00 (100%)	2.47	3.64 (114%)	2.17	4.06 (102%)	2.48
-20	4.18	2.39	4.57	2.64	4.27	2.23	4.76	2.55
-15	4.46	2.31	4.87	2.55	4.53	2.14	5.05	2.44
-10	4.99	2.54	5.45	2.80	5.20	2.49	5.80	2.85
-5	5.01	2.35	5.47	2.59	5.94	2.81	6.62	3.21
0	5.28	2.06	5.77	2.27	6.11	2.40	6.82	2.75
7	5.70	1.66	6.20	1.83	6.40	1.84	7.10	2.10

* TC : Total Capacity / PI : Power Input
* % : vs Rated Capacity

Reliable Technology for Nordic Climate

1 EU Heat Pump Consortium & Test Lab of Cold Climate (Oslo, Norway)

Nordic cold climate test Boiler / RAC / AWHP Etc

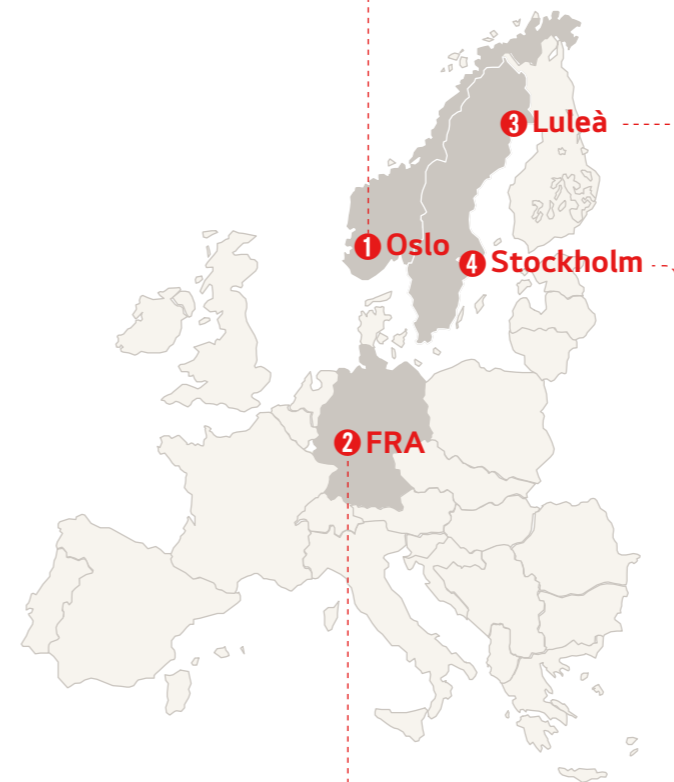


Open & Signing ceremony: '24 June

'24 Nov ~

RAC (S1)

AWHP + Floor Heating + FCU



3 Field Test Site (Luleå, Sweden)



4 Field Test Site (Stockholm, Sweden)



2 EU Eco Solution R&D Lab. (Frankfurt, Germany)

Establishment of real-local conditions and water piping test facilities
Water pipes such as heating and chillers Multi-V, Single/Multi
Implement smart, net-zero solution test environments
AWHP, RAC, ESS, EVC interlocking control technology Smart grid, energy management content development



Opening ceremony: '24 June

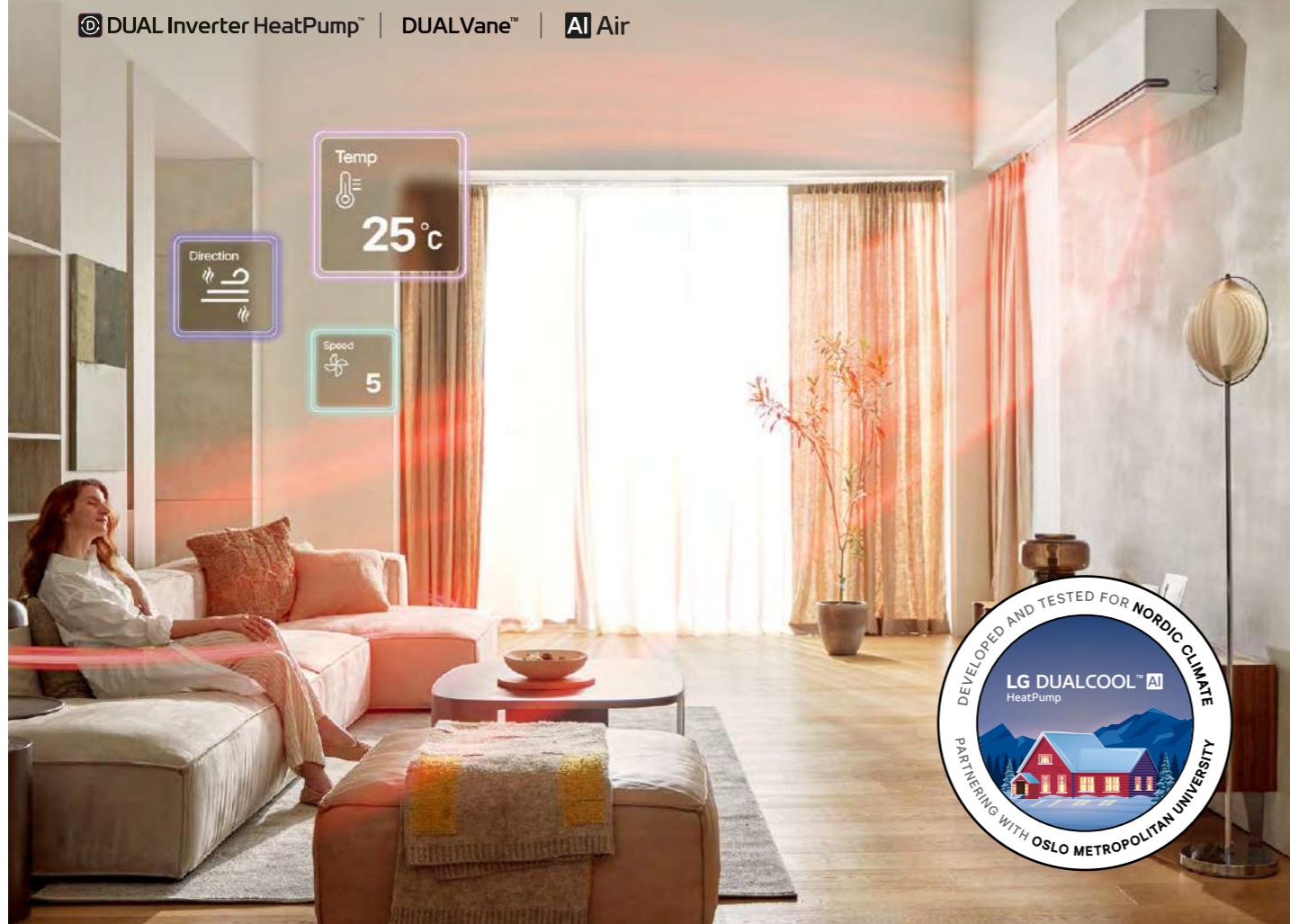
MULTI V + Indoor Unit

Outdoor Test

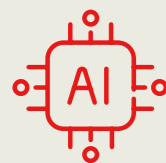
Intelligent heating, perfectly tuned

LG DUALCOOL™ AI HeatPump

© DUAL Inverter HeatPump™ | DUALVane™ | AI Air



LG DUALCOOL™ HeatPump for Nordic Climate



AI Comfort Control

- AI Air (by AI-powered control)
- DUAL Vane
- Sleep Timer+ (by AI-powered control)
- Soft Air
- Comfort Humidity Control



Proactive Energy Saving

- Fireplace
- Low Heating
- kW Manager
- Human Detecting Sensor
- Window Open Detection



Hygienic Air Care

- Total Air Care
- All Cleaning
- Freeze Cleaning



Nordic-Climate Ready

- Max Heating : 7 kW
- (Indoor Temp : 20°C / Ambient : 7°C)
- Heating Operation : -35 ~ 20°C
- 100% heating Temperature : -25°C

Reliable Heating Performance

Stay Warm through Extreme Cold



Fireplace Function

Keep Warm Air Circulating Efficiently other Heating Source in the Room

In heating mode, when the temperature set by the customer is reached, the compressor stops working and automatically switches to fan mode to operate as a multi-heating device that spreads the heat generated from a fireplace etc.



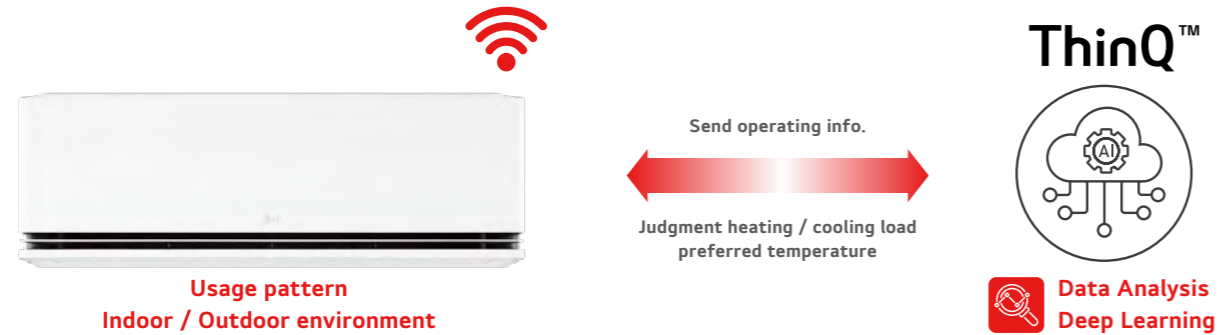
AI Air (by AI-powered control)

Smart operation with lower energy consumption

Smarter Heating & Cooling with AI Analysis of Space, Location of People

How It Works

ThinQ analyzes not only the customer's air conditioning usage patterns but also periodically analyzes indoor environmental information to automatically set the operating mode of the product and provide customized heating / cooling.



Benefit

Stay Comfortable Wherever You Are

Enjoy personalized comfort, no matter where you are in the room. Advanced radar sensors detect your location, delivering the perfect breeze for your needs—direct cooling when you're hot and gentle, indirect cooling when you've cooled down.

No Matter Where You Are, Comfort Follows You

With AI Air, comfort is always within reach. Advanced AI-driven space analysis ensures your environment is perfectly adjusted to your needs.

Cooling Soft Air

Say goodbye to temperature extremes. The system eliminates the discomfort of being too cold when it's on or too hot when it's off. Whether you're lounging in bed or relaxing elsewhere, the radar sensor detects your location and adapts.

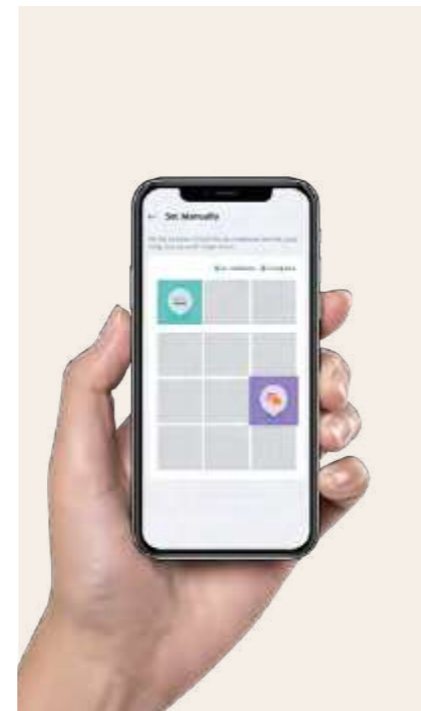
Strong Breeze when It's Hot or Cold.

Gentle, soft airflow as the room warms up or cools down. Experience a perfectly balanced atmosphere tailored just for you, every moment of the day.



Adjust Exactly as You Want

With the ThinQ app, easily set the location of your air conditioner and specify the areas where you spend most of your time. This allows you to enjoy a fully customized airflow, tailored to your unique preferences for the ultimate comfort.



※ The AI Air function is available only in heating and cooling modes. When the AI Air function is activated, it automatically operates in one of three modes (Direct Fast, Indirect Fast, Soft Air) using the "Human Detecting Sensor" or ThinQ settings to occupant's location. And wind direction and speed are adjusted automatically based on the indoor environment and the location of the occupant. When there are multiple occupants in the space, only the location of the nearest occupant is taken into account.

※ The model without a "Human Detecting Sensor (Radar Sensor)" can use the AI Air function by setting the positions of products and furniture in ThinQ. Based on the set positions, the airflow, wind direction, and product performance are adjusted, but tracking functionality is not provided.

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※ Specifications may vary for each model.

DUALVane™

6% faster heating and 22% longer range

DUAL Vane spreads airflow up or down, further and faster, for ideal comfort in any season.

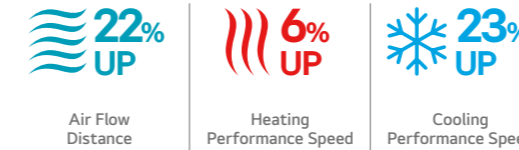


Longer Stream Wind

The innovative DUAL Vane system combines two separate vanes into one long, unified vane, allowing airflow to reach further than traditional models. This extended airflow ensures more effective and consistent heating / cooling throughout the room, enhancing comfort in every corner.

Indirect Flow

The DUAL Vane system offers an indirect airflow mode for a more comfortable experience than traditional single vane. Cold air flows gently from above your head, while warm air rises from beneath your feet, minimizing the discomfort of direct wind contact and creating a more balanced and pleasant environment.



Faster Heating & Cooling

DUAL Vane can provide optimized airflow that single vane can not achieve. It enables cooling up to 23% faster and heating up to 6% faster than single vane.



※ Performance comparison vs Single Vane

- 1) Date 2024.12, Measurement results in LG air conditioner R&D Center, installation height 2.0 m, Fan mode. Using a wind speed probe, the height range from 0.1 to 1.7 m is measured in 0.2 m increments. Measures the maximum distance reached by airflow more than 0.25 m/s speed from the products.
- 2) Date 2023.10 LG air conditioner home environment testing chamber, 20.9 m³/50.1 m³, Jet Mode, Indoor DB (33±0.3)°C / RH (60±5)%, Outdoor DB (35±0.3)°C / RH (50±5)% 18°C setting on cooling mode, Indoor DB (12±0.3)°C / RH (60±5)%, Outdoor DB (7±0.3)°C / RH (87±5)% 30°C setting on heating mode, measured the time took reduce 5°C (for Cooling) / rise 5°C (for heating), from the initial average room temperature. Test Model : S3-M12KL2MB (SK), S3-M12L1C0 (S1 New Platform)
- 3) The performance result may vary depending on actual usage conditions.

Quick & Easy Installation

Up to 40% faster installation

LG air conditioners are designed for easy and efficient installation, making it possible to install several units in a short period of time.





DUAL Inverter™ HeatPump



LG participates in the ECP programme for EUROVENT AC program. Check ongoing validity of certification : www.eurovent-certification.com

Single Combination

SET UNIT			NH09SP2.SS2	NH12SP2.SS2
Heating	Capacity	Min - Rated - Max	0.9 - 3.2 - 6.4	0.9 - 4.0 - 7.1
		Max (-7 °C)	4.7	5.1
	Power Input	Min - Rated - Max	190 - 590 - 1,600	190 - 800 - 2,000
	Running Current	Min - Rated - Max	1.7 - 4.8 - 9.0	1.7 - 6.3 - 10.0
	COP		5.42	5.00
	SCOP	Average	5.1	5.1
	P design H		3.8	3.8
Energy Label Grade (A+++ to D Scale)	Average	A+++	A+++	
Annual Energy Consumption		1,043	1,043	
Cooling	Capacity	Min - Rated - Max	0.9 - 2.5 - 4.0	0.9 - 3.5 - 4.35
	Power Input	Min - Rated - Max	200 - 475 - 1,500	200 - 774 - 1,600
	Running Current	Min - Rated - Max	1.8 - 3.8 - 8.1	1.8 - 6.0 - 9.0
	EER		5.26	4.52
	SEER		8.8	8.7
	P design C		2.5	3.5
	Energy Label Grade (A+++ to D Scale)		A+++	A+++
Annual Energy Consumption		99.4	140.8	
INDOOR UNIT			NH09SP2.NS2	NH12SP2.NS2
Dimensions (W × H × D)	Net	mm	1,050 x 307 x 235	1,050 x 307 x 235
	Shipping	mm	1,122 x 383 x 296	1,122 x 383 x 296
Weight	Net	kg	12.3	12.3
Air Filter Type			Allegry Filter / Pre Filter (Washable)	Allegry Filter / Pre Filter (Washable)
Air Flow Rate	Cooling	L / M / H / SH	m ³ /min	5.7 / 8.1 / 10.5 / 13.6
	Heating	L / M / H / SH	m ³ /min	5.7 / 8.1 / 10.5 / 14.2
Sound Pressure Level	Cooling	SL / L / M / H / SH	dB(A)	19 / 27 / 35 / 40 / 47
	Heating	L / M / H / SH	dB(A)	27 / 35 / 40 / 48
Sound Power Level			60	60
Moisture Removal		l/h	1.3	1.3
Drain Hose Size	O.D, I.D	mm	21.5, 16	21.5, 16
OUTDOOR UNIT			NH09SP2.U24A	NH12SP2.U24A
Dimensions (W × H × D)	Net	mm	870 x 650 x 330	870 x 650 x 330
	Shipping	mm	1,026 x 683 x 446	1,026 x 683 x 446
Weight	Net	kg	43.8	43.8
Air Flow Rate	Max	m ³ /min	49.0	49.0
Sound Pressure Level	Cooling	Rated	dB(A)	49
	Heating	Rated	dB(A)	51
Sound Power Level	Rated	dB(A)	65	65
Operation Range	Cooling	°C DB	-15 - 48	-15 - 48
	Heating	°C DB	-35 - 24	-35 - 24
Power Supply		Ø, V, Hz	1, 220 - 240, 50	1, 220 - 240, 50
Circuit Breaker		A	25	25
Power Supply Cable		No. × mm ²	3 × 2.5	3 × 2.5
Power and Communication Cable		No. × mm ²	4 x 10 (Including Earth)	4 x 10 (Including Earth)
	Type / GWP (Global Warming Potential)		R32 / 675	R32 / 675
	Pre Charged Amount / t-CO ₂ eq	kg	1.150 / 0.776	1.150 / 0.776
	Chargeless	m	7.5	7.5
Refrigerant	Additional Charge	g/m	20	20
	Size	Liquid	mm	Ø 6.35
Piping	Gas	mm	Ø 9.52	Ø 9.52
	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20
Piping Connection	No Charge (Chargeless)	m	12.5	12.5
	Max. Elevation Difference	m	10	10
Compressor	Type		DualCool HeatPump Inverter	DualCool HeatPump Inverter
ACCESSORIES & OTHERS				
Multi Compatible			-	-
PI485			Yes	Yes
Dry Contact			Yes	Yes
Wired Remote Controller			Yes	Yes

* : Sound Pressure is not a value declared on Eurovent Program.
 ※ This product contains Fluorinated greenhouse gases (R32).
 ※ S : Sleep / L : Low / M : Medium / H : High
 ※ GWP : Global warming potential
 ※ t-CO₂eq : F-gas(kg)*GWP/1,000
 ※ Y : Available or Applied / - : Not Available or Not Applied
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DUAL Inverter™ HeatPump



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Single Combination

SET UNIT			NH09SP.SS1	NH12SP.SS1
Heating	Capacity	Min - Rated - Max	0.9 - 3.2 - 5.7	0.9 - 4.0 - 6.2
		Max (-7 °C)	4.5	5.0
	Power Input	Min - Rated - Max	190 - 610 - 1,600	190 - 830 - 2,000
	Running Current	Min - Rated - Max	1.7 - 4.8 - 9.0	1.7 - 6.3 - 10
	COP		5.25	4.82
	SCOP	Average	4.6	4.6
	P design H		3.8	3.8
Energy Label Grade (A+++ to D Scale)	Average	A++	A++	
Annual Energy Consumption		1,156	1,156	
Cooling	Capacity	Min - Rated - Max	0.9 - 2.5 - 4.0	0.9 - 3.5 - 4.9
	Power Input	Min - Rated - Max	200 - 460 - 1,500	200 - 770 - 1,600
	Running Current	Min - Rated - Max	1.8 - 3.8 - 8.1	1.8 - 6.0 - 9.0
	EER		5.43	4.55
	SEER		9.7	9.4
	P design C		2.5	3.5
	Energy Label Grade (A+++ to D Scale)		A+++	A+++
Annual Energy Consumption		90.2	130.3	
INDOOR UNIT			NH09SPNS1	NH12SPNS1
Dimensions (W × H × D)	Net	mm	895 x 307 x 235	895 x 307 x 235
	Shipping	mm	967 x 383 x 296	967 x 383 x 296
Weight	Net	kg	12.6	12.6
Air Filter Type			Allegry Filter / Pre Filter (Washable)	Allegry Filter / Pre Filter (Washable)
Air Flow Rate	Cooling	L / M / H / SH	m ³ /min	6.5 / 10.5 / 14.0 / 16.0
	Heating	L / M / H / SH	m ³ /min	6.5 / 10.5 / 14.0 / 16.5
Sound Pressure Level	Cooling	SL / L / M / H / SH	dB(A)	21 / 30 / 37 / 43 / 47
	Heating	L / M / H / SH	dB(A)	30 / 37 / 43 / 48
Sound Power Level			60	60
Moisture Removal		l/h	1.15	1.3
Drain Hose Size	O.D, I.D	mm	21.5, 16	21.5, 16
OUTDOOR UNIT			NH09SPU24A	NH12SPU24A
Dimensions (W × H × D)	Net	mm	870 x 650 x 330	870 x 650 x 330
	Shipping	mm	1,026 x 683 x 446	1,026 x 683 x 446
Weight	Net	kg	43.8	43.8
Air Flow Rate	Max	m ³ /min	49	49
Sound Pressure Level	Cooling	Rated	dB(A)	49
	Heating	Rated	dB(A)	51
Sound Power Level	Rated	dB(A)	65	65
Operation Range	Cooling	°C DB	-15 - 48	-15 - 48
	Heating	°C DB	-35 - 24	-35 - 24
Power Supply		Ø, V, Hz	1, 220 - 240, 50	1, 220 - 240, 50
Circuit Breaker		A	25	25
Power Supply Cable		No. × mm ²	3 × 2.5	3 × 2.5
Power and Communication Cable		No. × mm ²	4 x 10 (Including Earth)	4 x 10 (Including Earth)
	Type / GWP (Global Warming Potential)		R32 / 675	R32 / 675
	Pre Charged Amount / t-CO ₂ eq	kg	1.150 / 0.776	1.150 / 0.776
	Chargeless	m	12.5	12.5
Refrigerant	Additional Charge	g/m	15	15
	Size	Liquid	mm	Ø 6.35
Piping	Gas	mm	Ø 9.52	Ø 9.52
	Piping Length	Min / Standard / Max	m	3 / 7.5 / 20
Piping Connection	No Charge (Chargeless)	m	7.5	7.5
	Max. Elevation Difference	m	10	10
Compressor	Type		DualCool HeatPump Inverter	DualCool HeatPump Inverter
ACCESSORIES & OTHERS				
Multi Compatible			-	-
PI485			Yes	Yes
Dry Contact			Yes	Yes
Wired Remote Controller			Yes	Yes

* : Sound Pressure is not a value declared on Eurovent Program.
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