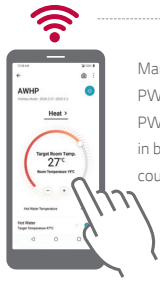




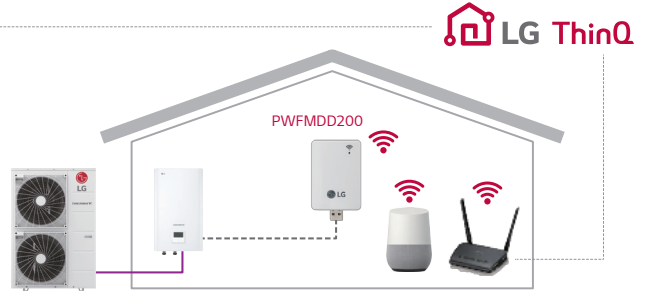
LG ThinQ SEAMLESS CONNECTIVITY

LG ThinQ allows users to monitor and control compatible LG products remotely, so they can set the temperature and regulate the use of their THERMA V anytime, anywhere. LG ThinQ technology also works with voice activation with Google Home.



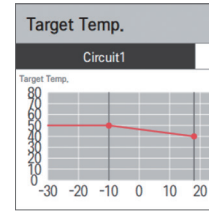
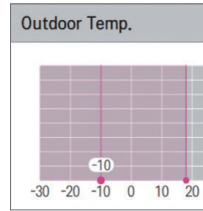
Mandatory accessory:
 PWFMD200 (LG Wi-Fi Modem)
 PWYREW000 (10m extension connect cable
 in between THERMA V indoor and LG Wi-Fi Modem)
 could be required depends on installation condition.

* Search "LG ThinQ" on Google market or App store, then download the app.
 * Google home voice is supported in United Kingdom, France, Germany, Spain, Italy, Austria, Ireland, Portugal.



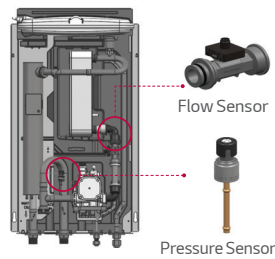
SEASONAL AUTO MODE

In this mode, the target temperature will vary according to the outdoor temperature automatically. This function can be conveniently set using visualised graphics.



WATER CIRCUIT MONITORING

It is possible to monitor via remote controller not only temperature of water circuit but also flow rate and pressure. This information is not only useful to the installer during installation, but also helps to periodically clean the strainer.



Circuit 1	Circuit 2	More Info. 87° 12°
↑ 24° ↓ 65°	↑ 20° ↓ 40°	
DHW: 60°	Inlet / Outlet: 55° / 65°	There is no monitoring information

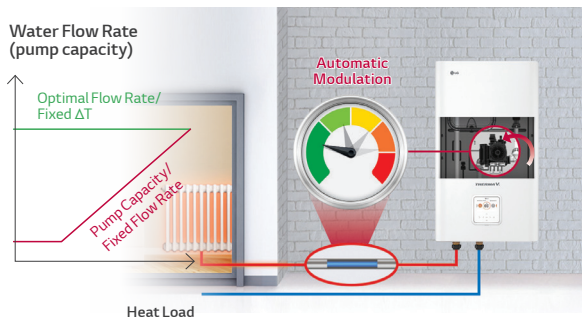
More Info. Back

Flow Rate | 40 LPM (L/min)
 Water Pressure | 1.6 bar



ADVANCED PUMP CONTROL OPTIONS

Various pump control options are possible for the user's convenience. With the the R32 Split & R410A Split, the water flow rate can be changed as per heat load condition, therefore it makes more energy efficient operation during low load condition.



Options	Description	Water Flow Change as per load condition
Pump Capacity	It operates with the capacity set for the water pump. (range 10 - 100%)	No
Fixed Flow Rate	Automatically controlled to maintain the set flow rate. (R32 Split range : 8 - 26 LPM / R410A Split range : 17 - 46 LPM)	No
Fixed ΔT*	Automatically controlled to maintain the set ΔT. (range 5 - 13)	Yes
Optimal Flow Rate (default)	ΔT is changed as per Target Temp.	Yes

SEASONAL ENERGY EFFICIENCY

Description	Indoor Unit	Outdoor Unit	HN091 MR NK5			
			HU051 MR U44	HU071 MR U44	HU091 MR U44	
Space Heating (According to EN14825)	Average Climate Water Outlet 35°C	SCOP	-	4.65	4.65	4.65
		Seasonal Space Heating Efficiency (ηs)	%	183	183	183
		Seasonal Space Heating Eff. Class (A+++ to D Scale)	-	A+++	A+++	A+++
	Average Climate Water Outlet 55°C	SCOP	-	3.23	3.23	3.23
		Seasonal Space Heating Efficiency (ηs)	%	126	126	126
		Seasonal Space Heating Eff. Class (A+++ to D Scale)	-	A++	A++	A++

* 5kW 10 model. * A+++ to D scale.



* EHPA label under development.

PRODUCT SPECIFICATION

R410A Split

INDOOR UNIT

Technical Specification		Indoor Unit		HN1616M NK5	HN1636M NK5
Operation Range (Leaving water temp.)	Heating	Min. - Max.	°C DB	15 - 57	
	Domestic Hot Water	Min. - Max.	°C DB	15 - 80 ²⁾	
Flow Sensor	Measuring Range	Min. - Max.	ℓ/min	5 - 80	
	Flow (Trigger point)	Min.	ℓ/min	15	
Water Pressure Sensor	Measuring Range	Min. - Max.	bar (G)	0 - 20	
Expansion Vessel	Volume	Max.	ℓ	8	
Safety Valve	Pressure Limit	Upper Limit	bar	3	
Piping Connections	Water Circuit	Inlet	mm (Inch)	Male PT 25.4(1)	
		Outlet	mm (Inch)	Male PT 25.4(1)	
	Refrigerant Circuit	Gas	mm (Inch)	Ø 15.88 (5/8)	
		Liquid	mm (Inch)	Ø 9.52 (3/8)	
Sound Power Level	Heating	Rated	dB(A)	44	
Dimensions	Unit	W x H x D	mm	490 x 850 x 315	
Weight	Unit		kg	40	41
Wiring Connections	Power and Communication Cable (Included Earth, H07RN-F)		mm ² x cores	0.75 x 4C	0.75 x 4C
	Type		-	Sheath	Sheath
Back-up Heater	Number of Heating Coil		EA	2	2
	Capacity Combination		kW	3.0 + 3.0	2.0 + 2.0 + 2.0
	Heating Steps		Step	2	2
	Power Supply		V, Ø, Hz	220-240, 1, 50	380-415, 3, 50
	Rated Current		A	25.0	8.7
	Power Supply Cable (included earth, H07RN-F)		mm ² x cores	4.0 x 3C	2.5 x 4C

1) When fan coil unit not used. 2) DHW 50 - 80°C operating is available only when the booster heater is operating.

OUTDOOR UNIT

Technical Specification		OAT	LWT	Indoor Unit		HN1616M NK5 (1Ø) HN1636M NK5 (3Ø)		
				Outdoor Unit	HU121MA U33 (1Ø) HU123MA U33 (3Ø)	HU141MA U33 (1Ø) HU143MA U33 (3Ø)	HU161MA U33 (1Ø) HU163MA U33 (3Ø)	
Nominal Capacity	Heating	7Ø	35Ø	kW	12.00	14.00	16.00	
		7Ø	55Ø	kW	11.00	11.50	12.00	
		2Ø	35Ø	kW	11.00	12.00	13.80	
Nominal Power Input	Heating	7Ø	35Ø	kW	2.64	3.17	3.76	
		7Ø	55Ø	kW	4.31	4.51	4.71	
		2Ø	35Ø	kW	3.04	3.32	3.83	
COP	Heating	7Ø	35Ø	W/W	4.55	4.41	4.26	
		7Ø	55Ø	W/W	2.55	2.55	2.55	
		2Ø	35Ø	W/W	3.62	3.61	3.60	
Operation Range (Outdoor temp.)	Heating	Min. - Max.	°C DB	-25 - 35				
Compressor	Type		-	Hermetic Sealed Scroll				
	Type		-	R410A				
Refrigerant	GWP (Global Warming Potential)		-	2088				
	Precharged Amount		g	2,500				
	t-CO2 eq		-	5,219				
Piping Connections	Outer Diameter	Gas	mm (Inch)	Ø 15.88 (5/8)				
		Liquid	mm (Inch)	Ø 9.52 (3/8)				
	Length	Standard / Max.	m	7.5 / 50				
	Level Difference	Max.	m	30				
	Chargeless-Pipe Length		m	7.5				
Additional Charging Volume			g/m	40				
Rated Water Flow Rate (at LWT 35°C)			ℓ/min	34.50	40.25	46.00		
Sound Power Level	Heating	Rated	dB(A)	63	64	65		
Sound Pressure Level (at 1m)	Heating	Rated	dB(A)	55	56	57		
Dimensions	Unit	W x H x D	mm	950 x 1,380 x 330				
Weight	Unit		kg	1Ø : 84.8, 3Ø : 85.4				
	Voltage, Phase, Frequency		V, Ø, Hz	220-240, 1, 50 / 380-415, 3, 50				
Power Supply	Rated Running Current	Heating	A	1Ø : 11.5, 3Ø : 6.6	1Ø : 13.8, 3Ø : 8.0	1Ø : 16.3, 3Ø : 9.4		
	Recommended Circuit Breaker		A	1Ø : 40, 3Ø : 20	1Ø : 40, 3Ø : 20	1Ø : 40, 3Ø : 20		
Wiring Connections	Power Supply Cable (included earth, H07RN-F)		mm ² x cores	1Ø : 6.0 x 3C, 3Ø : 2.5 x 5C				

1. Due to our policy of innovation some specifications may be changed without notification.

2. Wiring cable size must comply with the applicable local and national codes. And "Electric characteristics" chapter should be considered for electrical work and design. Especially the power cable and circuit breaker should be selected in accordance with that.

3. Sound power level is measured on the rated condition in accordance with ISO 9614 standard. Therefore, these values can be increased owing to ambient conditions during operation.

4. Performances are based on the following conditions (It is according to EN14511):

- Interconnected pipe length is standard length and difference of elevation (outdoor - indoor unit) is 0m.
- 5. This product contains fluorinated greenhouse gases.

Performance Table for Heating Operation

R410A Split

Maximum Heating Capacity (Including Defrost Effect)

HU121MA U33 + HN1616M NK5 / HU123MA U33 + HN1636M NK5

Outdoor Temperature	LWT 30°C	LWT 35°C	LWT 40°C	LWT 45°C	LWT 50°C	LWT 55°C
	TC	TC	TC	TC	TC	TC
-25°C DB	11.25	10.95	10.22	9.85	-	-
-20°C DB	12.00	11.32	10.90	10.32	-	-
-15°C DB	12.00	11.66	11.45	11.16	11.13	-
-7°C DB	12.00	12.00	12.00	12.00	12.00	11.24
-4°C DB	12.00	12.00	12.00	12.00	12.00	11.98
2°C DB	12.00	12.00	12.00	12.00	12.00	12.00
7°C DB	12.00	12.00	12.00	12.00	12.00	12.00
10°C DB	12.00	12.00	12.00	12.00	12.00	12.00
15°C DB	12.00	12.00	12.00	12.00	12.00	12.00
18°C DB	12.00	12.00	12.00	12.00	12.00	12.00
20°C DB	12.00	12.00	12.00	12.00	12.00	12.00
35°C DB	12.00	12.00	12.00	12.00	12.00	12.00

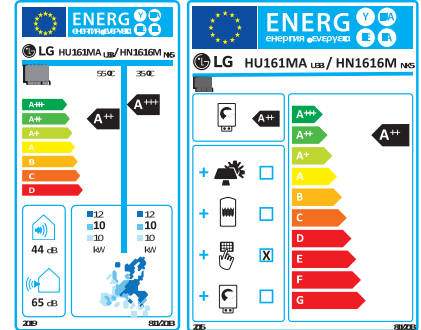
HU141MA U33 + HN1616M NK5 / HU143MA U33 + HN1636M NK5

Outdoor Temperature	LWT 30°C	LWT 35°C	LWT 40°C	LWT 45°C	LWT 50°C	LWT 55°C
	TC	TC	TC	TC	TC	TC
-25°C DB	11.25	11.17	10.79	10.32	-	-
-20°C DB	12.11	11.98	11.54	10.90	-	-
-15°C DB	13.06	12.99	12.77	12.27	12.42	-
-7°C DB	14.00	14.00	14.00	13.64	13.09	11.67
-4°C DB	14.00	14.00	14.00	14.00	14.00	12.67
2°C DB	14.00	14.00	14.00	14.00	14.00	13.98
7°C DB	14.00	14.00	14.00	14.00	14.00	14.00
10°C DB	14.00	14.00	14.00	14.00	14.00	14.00
15°C DB	14.00	14.00	14.00	14.00	14.00	14.00
18°C DB	14.00	14.00	14.00	14.00	14.00	14.00
20°C DB	14.00	14.00	14.00	14.00	14.00	14.00
35°C DB	14.00	14.00	14.00	14.00	14.00	14.00

- Note
1. DB : Dry Bulb Temperature (°C), LWT : Leaving Water Temperature (°C), LPM : Liters Per Minute (l/min), TC : Total Capacity (kW)
 2. Direct interpolation is permissible. Do not extrapolate.
 3. Measuring procedure follows EN-14511.
 - Rated values are based on standard conditions and it can be found on specifications.
 - Above table values may not be matched according to installation condition. Except for rated value, the performance is not guaranteed.
 - In accordance with the test standard (or nations), the rating will vary slightly.
 4. The shaded areas are not guaranteed continuous operation.

SEASONAL ENERGY EFFICIENCY

Description	Indoor Unit		HN1616M NK5 (1Ø) HN1636M NK5 (3Ø)			
	Outdoor Unit		HU121MA U33 (1Ø) HU123MA U33 (3Ø)	HU141MA U33 (1Ø) HU143MA U33 (3Ø)	HU161MA U33 (1Ø) HU163MA U33 (3Ø)	
Space Heating (According to EN14825)	Average Climate	SCOP	-	4.65	4.61	4.56
	Water Outlet 35°C	Seasonal Space Heating Efficiency (ηs)	%	183	182	179
	Water Outlet 55°C	Seasonal Space Heating Eff. Class (A+++ to D Scale)	-	A+++	A+++	A+++
	Average Climate	SCOP	-	3.36	3.37	3.32
	Water Outlet 35°C	Seasonal Space Heating Efficiency (ηs)	%	131	132	130
	Water Outlet 55°C	Seasonal Space Heating Eff. Class (A+++ to D Scale)	-	A++	A++	A++



* 16kW 1Ø model. * A+++ to D scale.



* EHPA and MCS label under development.