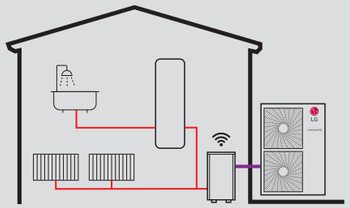
HIGH TEMPERATURE



Excellent Performance & Efficiency

- R1 compressor
- Cascade 2 stage compression
- Wide operation range (up to 80°C)
- Black Fin heat exchanger
- Smart grid (energy state)

User Convenience

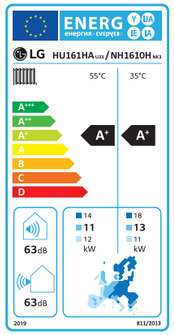
- Intuitive interface
- LG ThinQ
- Energy monitoring
- Seasonal auto mode
- Suitable for old radiator

Easy Installation & Maintenance

- Flexible piping design

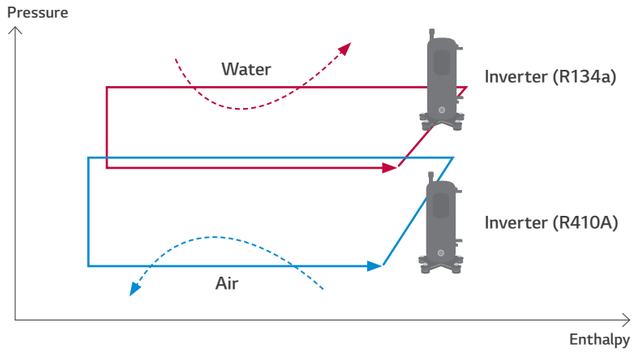
* Detailed description for each function is presented on page 26 ~ 43.

Energy Labeling



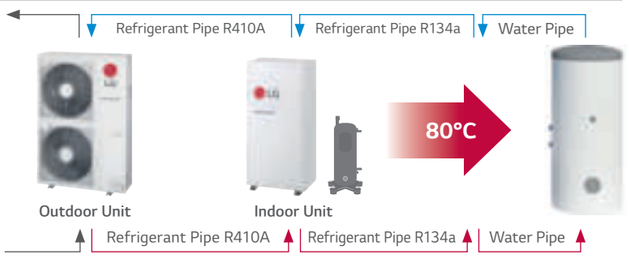
* 16kW 1Ø model.
* A+++ to D scale.

THERMA V High Temperature Cycle



High Temperature Concept

The LG THERMA V High Temperature is a split type unit that consists of a separate indoor and outdoor unit. With cascade 2 stage compression technology, it can supply a high leaving water temperature of up to 80°C, while maintaining high energy efficiency.



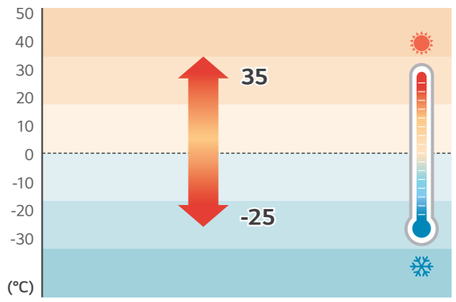
Capacity Range (Heating)

High Temperature Model

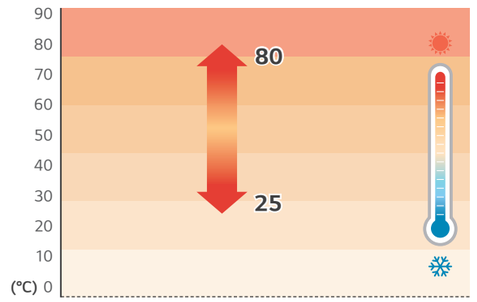
Capacity Range [kW]	16
Heating Capacity	● (16.0)

Operation Range (Heating)

Ambient Temperature



Leaving Water Temperature

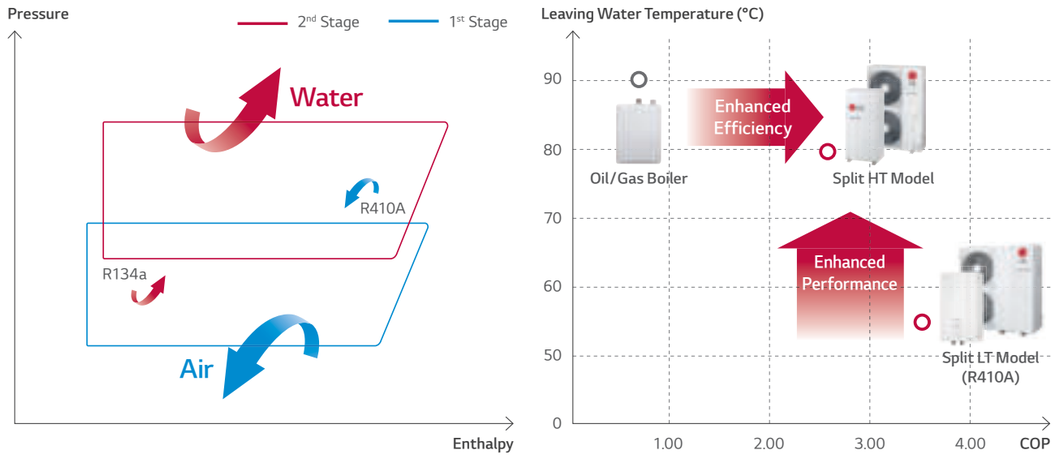


PRODUCT FEATURES

Cascade 2 Stage Compression Technology

The THERMA V High Temperature unit can produce up to 80°C hot water with high efficiency through cascade 2 stage compression (from R410A to R134a) technology, making it an optimized replacement for a boiler heating system which demands hot water supply.

High Temperature through Cascade Cycle Technology



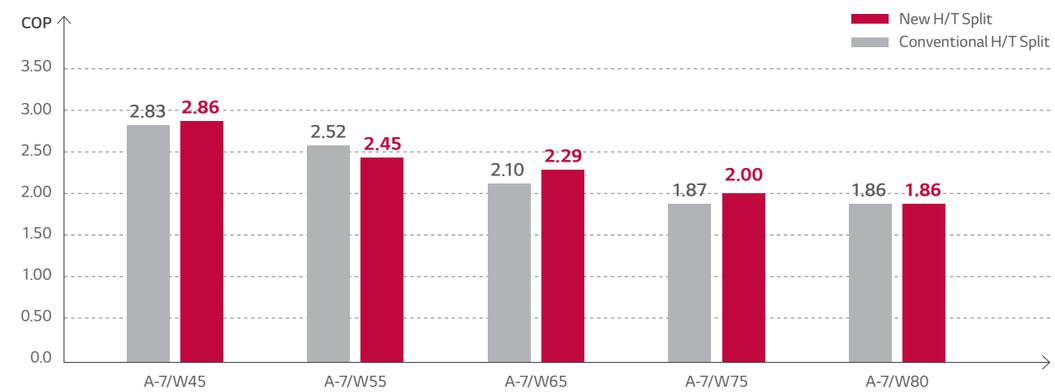
* Condition for HT model : Outdoor air temp. 18°C, Entering water temp. 70°C
* Condition for LT model : Outdoor air temp. 18°C, Entering water temp. 55°C

Note
1. OAT : Outdoor Air Temperature, EWT : Entering Water Temperature, LWT : Leaving Water Temperature

High Energy Efficiency

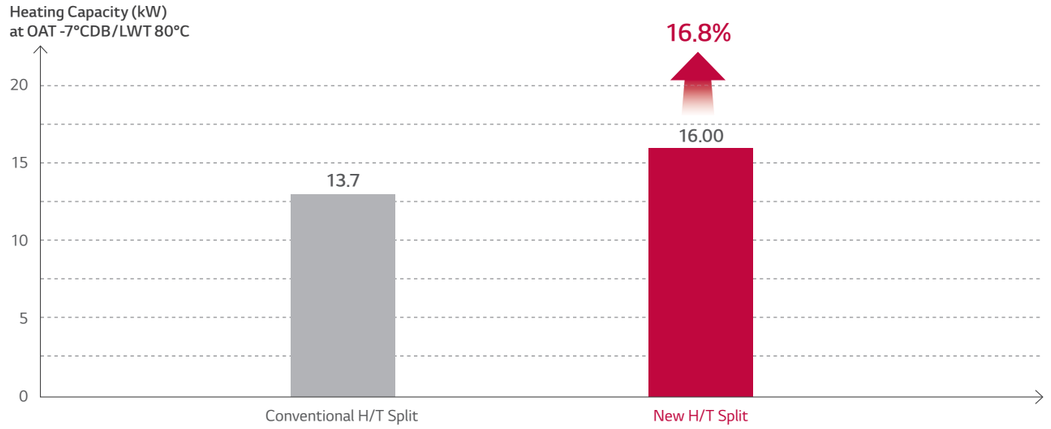
Through the application of an efficient compressor and optimally designed structure, the unit can provide optimized energy savings and therefore, lower operating cost for a faster return on investment.

Heating COP at -7°C Outdoor Temperature



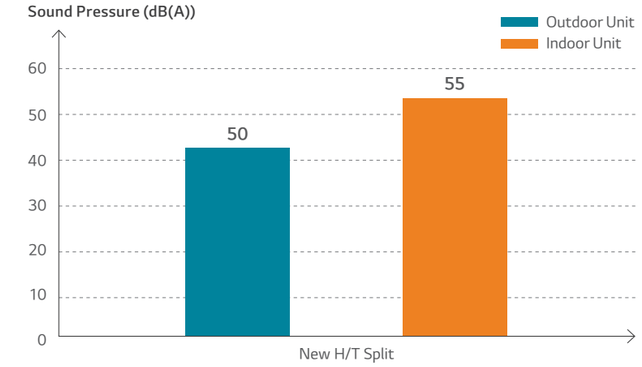
Excellent Performance at LAT

The new THERMA V High Temperature provides excellent heating performance – especially at low ambient temperature. Even at outside temperatures of -7°C and LWT of 80°C, New H/T Split is able to provide 16kW heating capacity improved by 16.8% compared to the previous models.



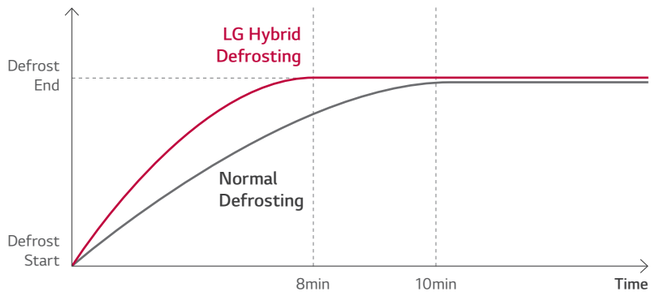
Low Noise Level

Due to the DC inverter's cutting edge technology, the operational noise level of both the indoor and outdoor units have been reduced for optimized comfort.



Quick Defrosting

Through the LG-patented R134a compressor controlling technology, the necessary time for the defrost operation has been minimized.



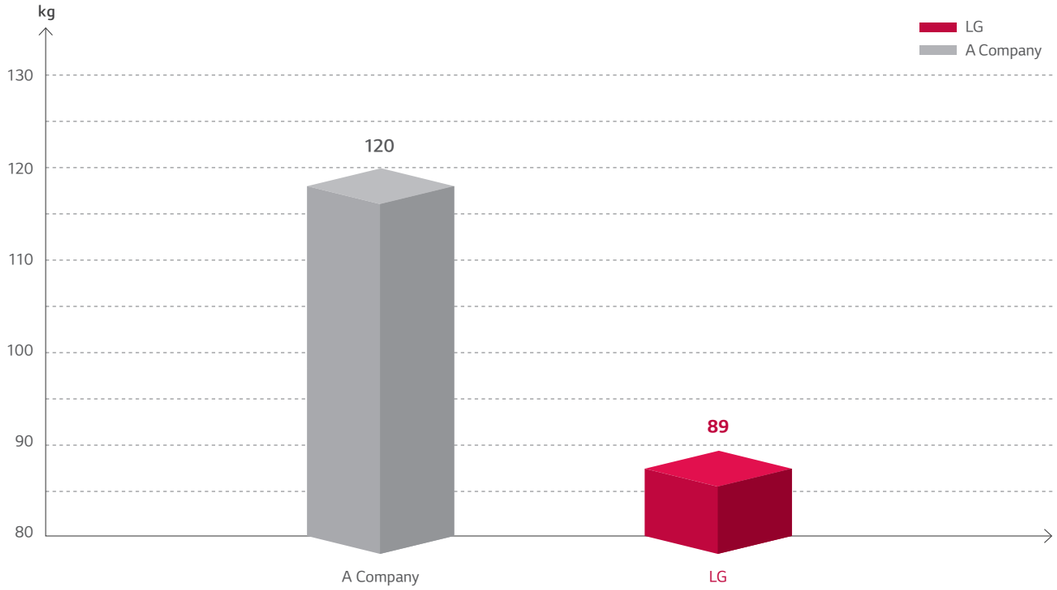
PRODUCT FEATURES

Suitable for Old Radiator

The LG THERMA V High Temperature product is suitable for houses with poor insulation, an existing radiator heating system, or are required to meet sanitary water regulation needs at high temperatures.

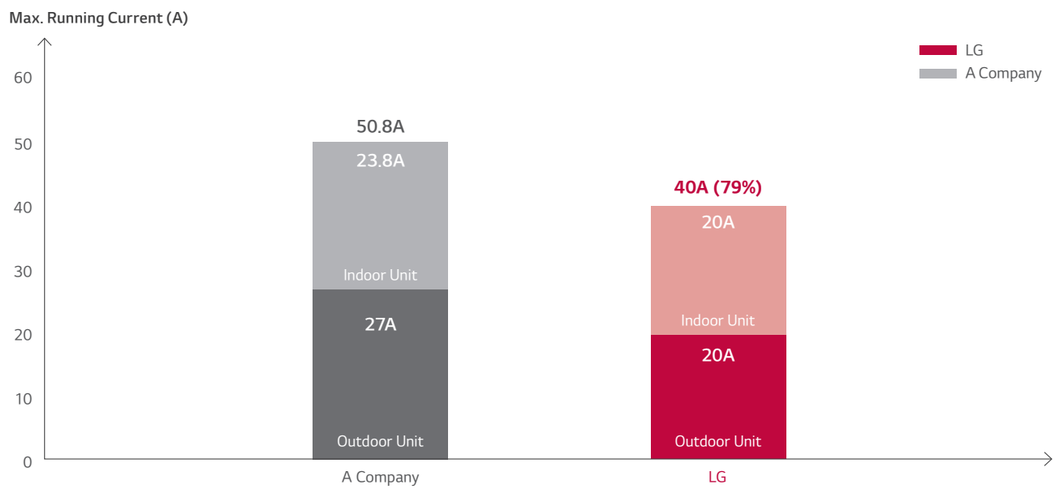
Light Weight

Light weight allows for easy installation.



Low Current Level

THERMA V High Temperature can be easily installed without any incurring any additional costs to the electrical connections.



PRODUCT SPECIFICATION

High Temperature

IDU
HN1610H NK3
ODU
HU161HA U33

011-1W0336

R410A/ R134a

80°C

R1 Compressor™ Black Fin LG ThinQ

Features

- High energy efficiency
- Maximum 80°C LWT
- Only for heating (no cooling)
- Suitable for old radiator
- Black Fin heat exchanger
- LG ThinQ
- Excellent performance at low ambient temperature (100% @ -7°C)
- Wide operation range (ambient : -25 ~ 35°C / water side : 25 ~ 80°C)
- Cascade 2 stage compression
- R1 scroll compressor (for outdoor unit)
- Efficient & flexible design
- KEYMARK / MCS / Eurovent certification

Model Line-up

Category	Unit	Model Name Capacity (kW) 16.0
1 Phase Model 220 ~ 240V, 1Ø, 50Hz	Outdoor Unit	HU161HA U33
	Indoor Unit	HN1610H NK3

Seasonal Energy

Description			Outdoor Unit Indoor Unit	HU161HA U33 HN1610H NK3
Space Heating (according to EN14825)	Average Climate Water Outlet 35°C	SCOP	-	3.23
		Seasonal Space Heating Efficiency (η_s)	%	126
		Seasonal Space Heating Eff. Class (A+++ to D scale)	-	A+
	Average Climate Water Outlet 55°C	SCOP	-	3.01
		Seasonal Space Heating Efficiency (η_s)	%	117
		Seasonal Space Heating Eff. Class (A+++ to D scale)	-	A+

Nominal Capacity and Nominal Power Input

Description		OAT (DB)	LWT (DB)	Outdoor Unit Indoor Unit	HU161HA U33 HN1610H NK3
Nominal Capacity	Heating	7°C	35°C	kW	16.00
		7°C	55°C		14.00
		2°C	35°C		16.00
Nominal Power Input	Heating	7°C	35°C	kW	4.89
		7°C	55°C		5.00
		2°C	35°C		4.92
COP	Heating	7°C	35°C	W/W	3.27
		7°C	55°C		2.78
		2°C	35°C		3.25

Product Specification (Outdoor Unit)

Description			Unit	HU161HA U33
Operation Range (outdoor temp.)	Heating	Min. ~ Max.	°CDB	-25 ~ 35
Compressor	Quantity		EA	1
	Type		-	Hermetic Sealed Scroll
Refrigerant	Type		-	R410A
	GWP (global warming potential)		-	2087.5
	Precharged Amount		g	3,800
	t-CO_2 eq		-	7.933
Piping Connections	Outer Diameter	Gas	mm (inch)	Ø15.88 (5/8)
		Liquid	mm (inch)	Ø9.52 (3/8)
	Length	Standard	m	7.5
		Max.	m	50
	Level Difference	Max.	m	30
	Chargeless-Pipe Length		m	7.5
	Additional Charging Volume		g/m	40
Sound Power Level	Heating	Rated	dB(A)	63
Sound Pressure Level (at 1m)	Heating	Rated	-	55
Dimensions	Unit	W x H x D	mm	950 x 1,380 x 330
Weight	Unit		kg	89.0
Power Supply	Voltage, Phase, Frequency		V, Ø, Hz	220 ~ 240, 1, 50
	Rated Running Current		A	11.9
	Recommended Circuit Breaker		A	20
Wiring Connections	Power Cable (included earth)		mm^2 x cores	4.0 x 3C (H07RN-F)

Product Specification (Indoor Unit)

Description			Unit	HN1610H NK3
Operation Range (leaving water)	Heating, DHW	Min. ~ Max.	°CDB	25 ~ 80
Compressor	Quantity		EA	1
	Type		-	Hermetic Sealed Twin Rotary
Refrigerant	Type		-	R134a
	GWP (global warming potential)		-	1430.0
	Precharged Amount		g	1,800
	t-CO_2 eq		-	2.574
Heat Exchanger	Water Circuit	Type	-	Brazed Plate HEX
		Water Volume	ℓ	1
	Refrigerant Circuit	Type	-	Brazed Plate HEX
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)	Ø15.88 (5/8)
		Liquid	mm (inch)	Ø9.52 (3/8)
Rated Water Flow Rate (at LWT 35°C)			LPM	46
Sound Power Level	Heating	Rated	dB(A)	58 / 63[1)]
Sound Pressure Level (at 1m)	Heating	Rated	dB(A)	50
Dimensions	Unit	W x H x D	mm	520 x 1,080 x 330
Weight	Unit		kg	84.0
Electrical Specification			**Unit**	**HN1610H NK3**
Power Supply	Voltage, Phase, Frequency		V, Ø, Hz	220 ~ 240, 1, 50
	Rated Running Current		A	9.8
	Recommended Circuit Breaker		A	25
Wiring Connections	Power Cable (included earth)		mm^2 x cores	4.0 x 3C (H07RN-F)
	Communication Cable (included earth)		mm^2 x cores	1.0 ~ 1.5 x 2C (VCTF-SB)
Accessory Kit of the Indoor Unit			**Unit**	**HN1610H NK3**
Remote Controller			-	RS3
Water Tank Temperature Sensor with Holder	Sensor Size		Ø	7
	Resistance		kΩ	5
Strainer	Mesh Size / Material		-	28 mesh / Stainless Steel

1) This sound power level (63dB(A)) is when cooling fan is operated.

Note
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 level values are measured at noise measuring chamber accordance with standard. Therefore, these values depend on the ambient conditions and values are normally higher in actual operation.
4. Performances are based on the following conditions (It is according to EN14511):
   - Heating : inlet/outlet water temp. 30°C / 35°C, outdoor temp. 7°CDB / 6°CWB
   - Interconnected pipe length is 5m and difference of elevation (outdoor ~ indoor unit) is 0m.
5. This product contains fluorinated greenhouse gases.

PRODUCT SPECIFICATION

Performance Table for Heating Operaion

Maximum Heating Capacity (Including Defrost Effect)

HU161HA U33 + HN1610H NK3

Outdoor Temperature	LWT 35°C	LWT 40°C	LWT 45°C	LWT 50°C	LWT 55°C	LWT 60°C	LWT 65°C	LWT 70°C	LWT 75°C	LWT 80°C
	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC
-25°C DB	13.50	13.29	13.07	12.86	12.64	12.43	12.21	12.00	-	-
-20°C DB	14.19	14.04	13.88	13.73	13.58	13.42	13.27	13.11	12.96	-
-15°C DB	14.89	14.79	14.70	14.60	14.51	14.41	14.32	14.22	14.10	14.00
-7°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
-4°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
-2°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
2°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
7°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
10°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
15°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
18°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
20°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
35°C DB	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00

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.

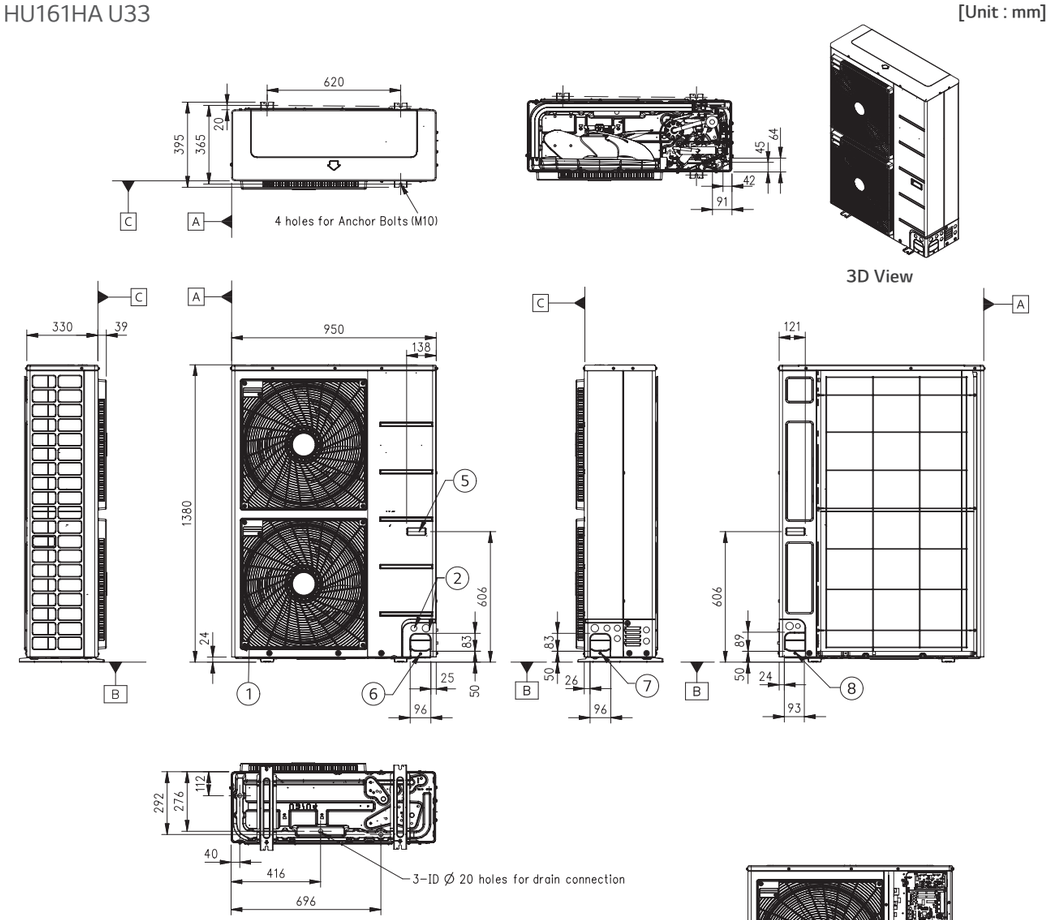
PRODUCT SPECIFICATION

Drawings

Category	Unit	Model Name
		Capacity (kW)
		16.0
1 Phase Model 220 ~ 240V, 1Ø, 50Hz	Outdoor Unit	HU161HA U33
	Indoor Unit	HN1610H NK3

HU161HA U33

[Unit : mm]

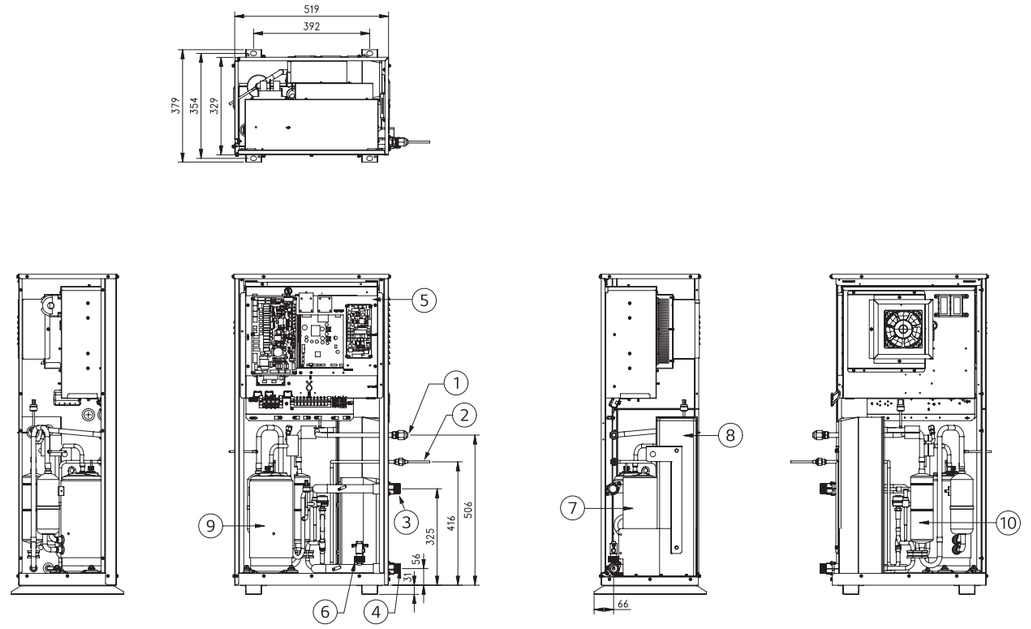


No.	Part Name	Description
1	Air Outlet	-
2	Power and Communication Cable Hole	-
3	Gas Pipe Connection	Flare joint
4	Liquid Pipe Connection	Flare joint
5	Handle	-
6	Pipe Routing Hole (front)	-
7	Pipe Routing Hole (side)	-
8	Pipe Routing Hole (back)	-

Piping Connection Port

HN1610H NK3

[Unit : mm]

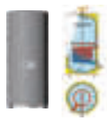


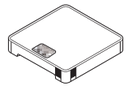
No.	Part Name	Description
1	Refrigerant Pipe	Ø9.52 (mm)
2	Refrigerant Pipe	Ø15.88 (mm)
3	Leaving Water Pipe	Male PT 25mm (1 inch)
4	Entering Water Pipe	Male PT 25mm (1 inch)
5	Control Box	PCB and terminal blocks
6	Flow Switch	Minimum operation range at 15LPM
7	Plate Heat Exchanger	Heat exchanger between refrigerant and water
8	Plate Heat Exchanger	Heat exchanger between refrigerant and refrigerant
9	Compressor	EPT525MBA
10	Accumulator	716 cc

THERMA V™
ACCESSORIES

ACCESSORIES

Accessories Provided by LG

Category	Model Name	Model Number	Figure	Applicable Product	Relevant Function	Purpose	Feature
Sensors	Room Temperature Sensor	PQRSTA0		All except for R410A IWT	Room Temperature Based Control	To detect room air temperature for room temperature based control	• Max. wire length : 15m
	2nd Circuit Thermistor	PRSTAT5K10		All except for R410A IWT and High temp.	2nd Circuit (mixing circuit)	To detect 2nd circuit temperature when using 2nd circuit function	• 5kΩ thermistor, 10m
	Domestic Hot Water Sensor	PHRSTA0		All except for IWT and High temp. models	Domestic Hot Water Heating	To detect DHW tank temperature	• Included in PHLTA kit
Valves	3 Way Valve	OSHA-3V		All except for IWT models	Domestic Hot Water Heating	To divert water flow between space heating and DHW heating	• Size : DN 20 G 1" connection, male threaded
	Thermostatic Mixing Valve	OSHA-MV		Regardless of model	Domestic Hot Water Supply	To blend hot water with cold water for ensuring constant, safe shower and bath outlet temp.	• Size : 3/4" DN20 male threaded
		OSHA-MV1					• Size : 1" DN25 male threaded
DHW Tanks	Domestic Hot Water Tank (single coil)	OSHW-200F		All except for IWT models	Domestic Hot Water Heating	To generate and store domestic hot water	• Storage volume : 200L, 300L, 500L • Type : Internal double coil • Material : Stainless steel • Capacity of booster heater : 2.4kW
		OSHW-300F					
		OSHW-500F					
	Domestic Hot Water Tank (double coil)	OSHW-300FD		All except for IWT and High temp. models			• Storage volume : 300L • Type : Internal double coil • Material : Stainless steel • Capacity of booster heater : 2.4kW
Installation Kits	Domestic Hot Water Tank Kit	PHLTA (1Ø, split)		All except for IWT and High temp. models	Domestic Hot Water Heating	To operate with DHW tank	• Parts included : DHW tank sensor (thermistor), Circuit breaker, Relay
		PHLTC (3Ø, split)					
		PHLTB (monobloc)					• Parts included : DHW tank sensor (thermistor), Circuit breaker, Relay, Multi harness
	Solar Thermal Kit	PHLLA		All except for IWT, Hydrosplit and High temp. models	Solar Thermal Heat Utilization	To operate with solar thermal system	• Length of thermistor : 12m • Size of tube connector (W x H x D) : 110 x 55 x 22

Category	Model Name	Model Number	Figure	Applicable Product	Relevant Function	Purpose	Feature
Installation Kits	Electric Back Up Heater	HA031M E1		R32 Monobloc and R32 Silent Monobloc (HA063M E1 is not applicable for R32 Silent Monobloc)	Capacity Back Up & Emergency Operation	To supplement insufficient capacity	• Heater capacity : 3kW • Number of heating coil : 1EA (3.0kW) • Size (W x H x D) : 210 x 607 x 217 • Power : 220 ~ 240V, 1Ø
		HA061M E1					• Heater capacity : 6kW • Number of heating coil : 2EA (3.0 + 3.0kW) • Size (W x H x D) : 210 x 607 x 217 • Power : 220 ~ 240V, 1Ø
		HA063M E1					• Heater capacity : 6kW • Number of heating coil : 3EA (2.0 + 2.0 + 2.0kW) • Size (W x H x D) : 210 x 607 x 217 • Power : 380 ~ 415V, 3Ø
Vessel	Buffer Tank for Space Heating	OSHB-40KT		R32 IWT	-	To provide the buffer volume of water to the heating circuit	• Volume : 40L • Size (W x H x D) : 518 x 560 x 175
	Expansion Vessel for DHW	OSHE-12KT		R32 IWT	-	To absorb the volume changes by temperature of water for the DHW circuit	• Volume : 8L • Connection : 3/4" • Max. pressure : 10 bar • Size (W x H x D) : 416 x 238 x 502
ETC	Extension Wire for Wire Remote Controller	PZCWRC1		All except for R410A IWT	-	To extend wire between wired remote controller and indoor unit	• Length : 10m
	Extension Cable for Wi-Fi Modem	PWYREW000		All except for R410A IWT	Wi-Fi Control via LG ThinQ	To extend wire between WI-Fi modem and indoor unit	• Length : 10m
	2 Remote Control Wire	PZCWRC2		All except for R410A IWT model	2 Remote Control	To connect two remote controller on the one indoor unit	• Length : 0.25m
	Drain Pan	PHDPB		R32 Split, R410A Split	Cooling Operation	To collect condensed water in indoor unit when cooling operation	-
		PHDPC		R32 Hydrosplit			
	Cover Plate	PDC-HK10		R32 Hydrosplit, R32 Split, R32 IWT, R410A Split	-	To fill the blank space of the indoor unit front panel when the remote controller is relocated indoors.	-

ACCESSORIES

Accessories Provided by LG

Category	Model Name	Model Number	Figure	Applicable Product	Relevant Function	Purpose	Feature
Remote Controller	Wired Remote Controller	PREMTW101		All except for R410A IWT model	2 Remote Control	To control AWHP using two remote controller (additional remote controller)	• New modern design 4.3 inch color LCD display • Information displayed with simple graphic, icon & text • Built-in temperature sensor • Size (W x H x D) : 120 x 120 x 16 • Extension cable (PZCWRC1, 10m) and 2 remote cable (PZCWRC2, 0.25m) are included
Central Controller	AC Ez Touch	PACEZA000		All except for R410A IWT model	Centralized Control	To control AWHP using LG central controller	• 5 inch color display • User-friendly control with iconographic interface (touch screen) • Max. 32 unit control • Total 200 schedule events (weekly / monthly / yearly / exception day) • Operation history • Remote controller lock (all, temp, mode) • PC access supported (IPv6 supported) • DI 1EA (emergency stop only) • Size (W x H x D) : 137 x 121 x 25
	AC Smart 5	PACS4B000 (Smart 4) PACS5A000 (Smart 5)					• 10.2 inch color display • User-friendly control with iconographic interface (touch screen) • (Smart 4)_Max. IDU 32, (Smart 5)_Max. IDU 64 • Total 100 schedule events (weekly / monthly / yearly / exception day) • History / operation trend • Interlock with 3rd party equipment (ACS IO, ACU IO module is needed) • Error alarm by e-mail • Remote controller lock (all, temp, mode) • Map view (visual navigation) • Web access supported with HTML5 (PC, smartphone, tablet) • DI 2EA, DO 2EA • BACnet IP/ modbus TCP protocol support • Size (W x H x D) : 253.2 x 167.7 x 28.9
	ACP 5	PACP4B000 (ACP4) PACP5A000 (ACP5)					• Web access controller • Max. 128 unit control • Total 100 schedule events (weekly / monthly / yearly / exception day) • History / operation trend • Interlock with 3rd party equipment (ACS IO, ACU IO module is needed) • Error alarm by e-mail • Remote controller lock (all, temp, mode) • Map view (visual navigation) • DI 10EA, DO 4EA • BACnet IP/ modbus TCP protocol support • Size (W x H x D) : 270 x 155 x 65
Gateway	ACP Lonworks	PLNWKB000		All except for R410A IWT model	Centralized Control	To link with AWHP and other existing building control system	• Web access controller • Max. 64 unit control • ACP function included • Lonworks protocol support • Size (W x H x D) : 270 x 155 x 65

Category	Model Name	Model Number	Figure	Applicable Product	Relevant Function	Purpose	Feature
Gateway	Modbus RTU Gateway	PMBUSB00A		All except for R410A IWT model	Centralized Control	To communicate and control through the central controller (providing modbus RTU connection between AWHP and BMS)	• Modbus RTU slave (RS485) / 9,600 bps • Size (W x H x D) : 53.6 x 89.7 x 60.7 • Max. 16 IDUs with single module / Max. 64 IDUs with 4 modules • Power : DC 12V
	PI485 Gateway	PMNFP14A1		All except for R410A IWT model		To communicate and control through the central controller (converting LG protocol to RS485 protocol)	• 1 for each outdoor unit • Power : Supplied by outdoor unit
	PI485 Gateway	PP485B00K		R410A IWT		To communicate between outdoor unit and IWT type indoor unit	• 1 for each outdoor unit • Power : Supplied by outdoor unit
Dry Contact	Simple Dry Contact	PDRYCB000		All except for R410A IWT model	-	To connect between the AWHP and external devices to control various functions	• 1 Set per 1 unit • 1 Input contact for turning on/off • Input power : 220 ~ 240V • 2 output contacts - Operation status - Error status
	Dry Contact for Thermostat	PDRYCB320					• 1 Set per 1 unit • Non voltage or 12 ~ 24V • 8 digital input contacts for thermostat - On/off, operation mode, DHW heating - Emergency mode, silent mode • 2 Output contacts - Operation status - Error status
ETC	LG Wi-Fi Modem	PWFMDD200		All except for R410A IWT model	Wi-Fi Control via LG ThinQ	To control AWHP via smartphone	• Basic control function - On/off, operation mode, set temp - DHW heating and set temp • Weekly on/off schedule • Error status check • Frequency : 2.4GHz • IEEE 802.11b/g/n supported
	Meter Interface	PENKTH000		All except for R410A IWT model	Energy Monitoring	To measure production / consumption power	• Energy meter interface to monitor Electricity and Heat energy - Max. 3 watt - Hour meter - Max. 1 heat meter - Pulse width : 40ms ~ 100ms • Modbus RTU comm. with THERMA V - 2 wire RS485 / 9600bps • Power : DC 12V • Size (W x H x D) : 54 x 90 x 61
	2 Zone Valve Controller	PZNVVB200		All except for R410A IWT model	Zone Valve Control	To control individual zone valves with room temperature sensor or room thermostat	• Individual temperature setting possible. (to be set through wired remote control in room temperature input mode) • Room temperature detection (AI : 2 ports) • 3rd Party thermostat interlock input. (DI : 2 port) • Can read one DI or AI for each zone. • Maximum number of connections : Max. 4EA (expandable up to 8-zone) • Size (W x H x D) : 53.6 x 89.7 x 60.7 • Power : DC12V for module, AC24V for valve

Note
1. PI485 Gateway (PMNFP14A1) should be installed on outdoor unit to use central controller.

ACCESSORIES

LG Wi-Fi Modem

PWFMDD200 ENCXLEU

Access LG THERMA V anytime and from anywhere with Wi-Fi equipped device. LG's exclusive Home Appliances control app (LG ThinQ) is available.
Simple operation for various functions.

- On/off
- Operation mode selection
- Current temperature
- Set temperature
- On/off reservation scheduling
- Energy monitoring
- ESS monitoring
- Silent mode reservation
- Holiday mode
- Quick DHW heating

Model Name	PWFMDD200
Size (mm)	46 x 68 x 14
Interfaceable Products	All THERMA V Line-ups except for R410A IWT
Connection Type	Indoor Unit 1 : 1
Communication Frequency	2.4GHz
Wireless Standards	IEEE 802.11b/g/n
Mobile Application	LG ThinQ (Android v4.1 (Jellybean) or higher, iPhone iOS 9.0 or higher)
Optional Extension Cable	PWYREW000 (10m extension)

Note

1. Functionality may be different according to each Indoor model.
2. User interface of application shall be revised for its design and contents improvement.
3. Application is optimized for smartphone use, so it may not be well functioning with tablet devices.
   - For the compatibility with indoor unit, please contact regional office.

Domestic Hot Water Tank

OSHW-200F AEU
OSHW-300F AEU
OSHW-500F AEU
OSHW-300FD AEU

Double Coil Single Coil

Domestic Hot Water Tank		Unit	OSHW-200F	OSHW-300F	OSHW-500F	OSHW-300FD
General Characteristics	Water Volume	ℓ	200	300	500	300
	Diameter	mm	640	640	640	640
	Height	mm	1,350	1,850	1,900	1,850
	Empty Weight	Kg	61	100	146	106
	Tank Materials	-	STS : F18	STS : F18	STS : F18	STS : F18
	Color	-	Grey	Grey	Grey	Grey
Specification of Electric Back up	Additional Electric Heater	W	2,400	2,400	2,400	2,400
	Power Supply	V, Ø, Hz	230, 1, 50 (60)	230, 1, 50 (60)	230, 1, 50 (60)	230, 1, 50 (60)
	Adjustable Thermostat	°C	0 ~ 90	0 ~ 90	0 ~ 90	0 ~ 90
Specification of Heat Exchanger	Exchanger Type	-	Single	Single	Single	Double
	Material Exchanger	-	STS : F18	STS : F18	STS : F18	STS : F18
	Maximum Water Temp.	°C	90	90	90	90
	Coil Surface	m^2	2.3	3.1	4.8	3.1 + 0.97
Water Connections	Heat Pump Inlet	inch	1 BSP female	1 BSP female	1 ¼ BSP female	¾ BSP female (upper coil)
	Heat Pump Outlet	inch	1 BSP female	1 BSP female	1 ¼ BSP female	¾ BSP female (upper coil)
	Solar Inlet	inch	-	-	-	1 BSP Female (lower coil)
	Solar Outlet	inch	-	-	-	1 BSP Female (lower coil)
	City Water Inlet	inch	¾ BSP male	¾ BSP male	1 BSP male	¾ BSP male
	Hot Water Outlet	inch	¾ BSP female	1 BSP female	1 BSP female	1 BSP female
Energy Efficiency Class (A+ to F scale)		-	B	B	B	B
Standing Heat Loss		W	61	70	83	70

Mandatory Optional Accessories	
Domestic Hot Water Tank Installation Kit	PHLTA (1Ø, split), PHLTB (monobloc), PHLTC (3Ø, split)
Optional Accessories	
Thermostatic Mixing Valve (3/4" DN20)	OSHA-MV
Thermostatic Mixing Valve (1" DN25)	OSHA-MV1
3 Way Valve	OSHA-3V

ACCESSORIES

Combined Test with DHW Tank

LG has conducted a combination test of THERMA V with DHW tanks in accordance with EN16147 and obtained an ErP label for packages in order to cope with European nZEB regulations.

- R32 Monobloc (5, 7, 9kW) + OSHW-200F
- R32 Monobloc (12, 14, 16kW) + OSHW-200F
- R32 Monobloc (5, 7, 9kW) + OSHW-300F
- R32 Split Hydro Box (5, 7, 9kW) + OSHW-200F

Model	AWHP	R32 Split (5,7,9kW)	R32 Monobloc (5,7,9kW)	R32 Monobloc (12,14,16kW)	R32 Monobloc (5,7,9kW)
	IDU	HN0916M NK4	HM051M U43 HM071M U43 HM091M U43	HM121M U33 HM141M U33 HM161M U33	HM051M U43 HM071M U43 HM091M U43
	ODU	HU051MR U44 HU071MR U44 HU091MR U44			
	Tank	OSHW-200F AEU	OSHW-200F AEU	OSHW-200F AEU	OSHW-300F AEU
Declared Load Profile		L	L	L	XL
Average Climate	Grade	A+	A+	A	A+
	Efficiency	118%	122%	109%	134%
	Annual Energy Consumption	865kWh	839kWh	940kWh	1,254kWh
Energy Label