Summary of	THERMA V_R32 Split 5 7 9 kW	Reg. No.	011-1W0315
Certificate Holder			
Name	LG Electronics Inc.		
Address	84, Wanam-ro, seongsan-gu	Zip	51554
City	Changwon-si	Country	South Korea
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	TÜV Rheinland Energy GmbH		
Subtype title	THERMA V_R32 Split 5 7 9 kW		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	1.5 kg		
Certification Date	05.03.2019		
Testing basis	HP KEYMARK certification scheme rules rev. 7		

Model: HU091MR U44, HN0916M NK4

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	9.00 kW	5.50 kW
El input	1.94 kW	2.04 kW
COP	4.65	2.70
Indoor water flow rate	1.55 m³/h	0.59 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	183 %	126 %
Prated	6.00 kW	6.00 kW
SCOP	4.65	3.23
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	5.30 kW	5.30 kW
COP Tj = -7°C	2.75	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	3.20 kW	3.20 kW
COP Tj = +2°C	4.50	3.10
Cdh	0.90	0.90
Pdh Tj = +7°C	2.30 kW	3.00 kW
COP Tj = +7°C	6.50	4.50
Cdh	0.90	0.90

Pdh Tj = 12°C	2.80 kW	3.60 kW
COP Tj = 12°C	9.00	6.80
Cdh	0.90	0.90
Pdh Tj = Tbiv	6.00 kW	5.30 kW
COP Tj = Tbiv	2.45	2.05
Pdh Tj = TOL	6.00 kW	5.10 kW
COP Tj = TOL	2.45	1.65
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	2666 kWh	3837 kWh

Model: HU071MR U44, HN0916M NK4

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	7.00 kW	5.50 kW
El input	1.43 kW	2.04 kW
COP	4.90	2.70
Indoor water flow rate	1.21 m³/h	0.59 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	126 %
Prated	6.00 kW	6.00 kW
SCOP	4.65	3.23
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	5.10 kW	5.30 kW
COP Tj = -7°C	2.80	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	3.10 kW	3.20 kW
COP Tj = +2°C	4.50	3.10
Cdh	0.90	0.90
Pdh Tj = +7°C	2.40 kW	3.00 kW
COP Tj = +7°C	6.50	4.50
Cdh	0.90	0.90

Pdh Tj = 12°C	2.80 kW	3.60 kW
COP Tj = 12°C	9.00	6.80
Cdh	0.90	0.90
Pdh Tj = Tbiv	5.80 kW	5.30 kW
COP Tj = Tbiv	2.50	2.05
Pdh Tj = TOL	5.80 kW	5.10 kW
COP Tj = TOL	2.50	1.65
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.20 kW	0.90 kW
Annual energy consumption Qhe	2575 kWh	3837 kWh

Model: HU051MR U44, HN0916M NK4

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.50 kW	5.50 kW
El input	1.12 kW	2.04 kW
COP	4.90	2.70
Indoor water flow rate	0.95 m³/h	0.59 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	126 %
Prated	6.00 kW	6.00 kW
SCOP	4.65	3.23
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.90 kW	5.30 kW
COP Tj = -7°C	2.80	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	3.00 kW	3.20 kW
COP Tj = +2°C	4.50	3.10
Cdh	0.90	0.90
Pdh Tj = +7°C	2.20 kW	3.00 kW
COP Tj = +7°C	6.40	4.50
Cdh	0.90	0.90

Pdh Tj = 12°C	2.60 kW	3.60 kW
COP Tj = 12°C	9.20	6.80
Cdh	0.90	0.90
Pdh Tj = Tbiv	5.50 kW	5.30 kW
COP Tj = Tbiv	2.50	2.05
Pdh Tj = TOL	5.50 kW	5.10 kW
COP Tj = TOL	2.50	1.65
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.50 kW	0.90 kW
Annual energy consumption Qhe	2444 kWh	3837 kWh

Model: HU091MR U44 , HN091MR NK5

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	9.00 kW	5.50 kW
El input	1.94 kW	2.04 kW
COP	4.65	2.70
Indoor water flow rate	1.55 m³/h	0.59 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	126 %
Prated	6.00 kW	6.00 kW
SCOP	4.65	3.23
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	5.30 kW	5.30 kW
COP Tj = -7°C	2.75	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	3.20 kW	3.20 kW
COP Tj = +2°C	4.50	3.10
Cdh	0.90	0.90
Pdh Tj = +7°C	2.30 kW	3.00 kW
COP Tj = +7°C	6.50	4.50
Cdh	0.90	0.90

Pdh Tj = 12°C	2.80 kW	3.60 kW
COP Tj = 12°C	9.00	6.80
Cdh	0.90	0.90
Pdh Tj = Tbiv	6.00 kW	5.30 kW
COP Tj = Tbiv	2.45	2.05
Pdh Tj = TOL	6.00 kW	5.10 kW
COP Tj = TOL	2.45	1.65
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	2666 kWh	3837 kWh

Model: HU071MR U44, HN091MR NK5

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	7.00 kW	5.50 kW
El input	1.43 kW	2.04 kW
COP	4.90	2.70
Indoor water flow rate	1.21 m³/h	0.59 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	126 %
Prated	6.00 kW	6.00 kW
SCOP	4.65	3.23
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	5.10 kW	5.30 kW
COP Tj = -7°C	2.80	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	3.10 kW	3.20 kW
COP Tj = +2°C	4.50	3.10
Cdh	0.90	0.90
Pdh Tj = +7°C	2.40 kW	3.00 kW
COP Tj = +7°C	6.50	4.50
Cdh	0.90	0.90

Pdh Tj = 12°C	2.80 kW	3.60 kW
COP Tj = 12°C	9.00	6.80
Cdh	0.90	0.90
Pdh Tj = Tbiv	5.80 kW	5.30 kW
COP Tj = Tbiv	2.50	2.05
Pdh Tj = TOL	5.80 kW	5.10 kW
COP Tj = TOL	2.50	1.65
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.20 kW	0.90 kW
Annual energy consumption Qhe	2575 kWh	3837 kWh

Model: HU051MR U44, HN091MR NK5

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.50 kW	5.50 kW
El input	1.12 kW	2.04 kW
COP	4.90	2.70
Indoor water flow rate	0.95 m³/h	0.59 m³/h

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	126 %
Prated	6.00 kW	6.00 kW
SCOP	4.65	3.23
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.90 kW	5.30 kW
COP Tj = -7°C	2.80	2.05
Cdh	0.90	0.90
Pdh Tj = +2°C	3.00 kW	3.20 kW
COP Tj = +2°C	4.50	3.10
Cdh	0.90	0.90
Pdh Tj = +7°C	2.20 kW	3.00 kW
COP Tj = +7°C	6.40	4.50
Cdh	0.90	0.90

Pdh Tj = 12°C	2.60 kW	3.60 kW
COP Tj = 12°C	9.20	6.80
Cdh	0.90	0.90
Pdh Tj = Tbiv	5.50 kW	5.30 kW
COP Tj = Tbiv	2.50	2.05
Pdh Tj = TOL	5.50 kW	5.10 kW
COP Tj = TOL	2.50	1.65
WTOL	65 °C	65 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.50 kW	0.90 kW
Annual energy consumption Qhe	2444 kWh	3837 kWh