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<u>Login</u>			
Summary of	R32 Hydrosplit, IWT 12 14 16 kW 1 phase & 3 phases	Reg. No.	011-1W0466
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		
Subtype title	R32 Hydrosplit, IWT 12 14 16 kW 1 phase & 3 phases		
Heat Pump Type	e Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	2.1 kg		
Certification Date	e 14.04.2021		
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 8 (as of 2020-09)		

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# Model: HU121MRB U30 / HN1616Y NB1

Configure model		
Model name	HU121MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data	
Power supply 1x230V 50Hz	

#### Operating test

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	12.00 kW	11.00 kW
El input	2.38 kW	3.79 kW
СОР	5.04	2.90

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	43 dB(A)	43 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	181 %	137 %
Prated	12.00 kW	12.00 kW
SCOP	4.60	3.50
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.20 kW	10.20 kW
COP Tj = -7°C	3.01	2.20
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.20 kW	6.30 kW
COP Tj = +2°C	4.42	3.38
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.50 kW	4.60 kW
COP Tj = +7°C	6.04	4.67
Cdh Tj = +7 °C	0.900	0.900

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Pdh Tj = 12°C	5.00 kW	4.60 kW
COP Tj = 12°C	8.44	6.66
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.50 kW	10.20 kW
COP Tj = Tbiv	2.65	2.20
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	10.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.92
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
РСК	0 W	0 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	0.50 kW	1.20 kW
Annual energy consumption Qhe	5165 kWh	6788 kWh

### Domestic Hot Water (DHW)

Operating test

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EN 16147	
Temperature operating range	passed
Safety devices checking test	passed
Condensate draining	passed

### Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	2.74
Heating up time	1:25 h:min
Standby power input	69.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	222

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# Model: HU141MRB U30 / HN1616Y NB1

Configure model		
Model name	HU141MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.00 kW	11.50 kW
El input	2.86 kW	4.03 kW
СОР	4.89	2.85

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	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	180 %	136 %
Prated	12.00 kW	12.00 kW
SCOP	4.57	3.47
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.40 kW
COP Tj = -7°C	2.94	2.16
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.45	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	5.95	4.66
Cdh Tj = +7 °C	0.900	0.900

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5.00 kW	4.60 kW		
8.12	6.62		
0.900	0.900		
12.00 kW	10.40 kW		
2.60	2.16		
12.00 kW	10.90 kW		
2.60	1.86		
65 °C	65 °C		
60 W	60 W		
60 W	60 W		
60 W	60 W		
0 W	0 W		
n/a	Electricity		
0.00 kW	1.10 kW		
5425 kWh	6991 kWh		
	5.00 kW 8.12 0.900 12.00 kW 2.60 12.00 kW 2.60 65 °C 60 W 60 W 60 W 60 W 0 W		

### Domestic Hot Water (DHW)

Average Climate



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EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.74	
Heating up time	1:25 h:min	
Standby power input	69.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	222	



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# Model: HU161MRB U30 / HN1616Y NB1

Configure model		
Model name	HU161MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	12.00 kW
El input	3.33 kW	4.29 kW
СОР	4.80	2.80

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	43 dB(A)	43 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	179 %	135 %
Prated	12.00 kW	12.00 kW
SCOP	4.55	3.45
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.90 kW	10.60 kW
COP Tj = -7°C	2.88	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.70 kW	6.50 kW
COP Tj = +2°C	4.45	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.20 kW
COP Tj = +7°C	5.97	4.65
Cdh Tj = +7 °C	0.900	0.900

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5.30 kW	4.60 kW
8.11	6.58
0.900	0.900
12.30 kW	10.60 kW
2.56	2.15
12.30 kW	11.10 kW
2.56	1.85
65 °C	65 °C
60 W	60 W
60 W	60 W
60 W	60 W
0 W	0 W
n/a	Electricity
0.00 kW	0.90 kW
5586 kWh	7187 kWh
	<ul> <li>8.11</li> <li>0.900</li> <li>12.30 kW</li> <li>2.56</li> <li>12.30 kW</li> <li>2.56</li> <li>65 °C</li> <li>60 W</li> <li>60 W</li> <li>60 W</li> <li>0 W</li> <li>0 W</li> <li>0.00 kW</li> </ul>

### Domestic Hot Water (DHW)

Average Climate

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EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.74	
Heating up time	1:25 h:min	
Standby power input	69.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	222	

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# Model: HU123MRB U30 / HN1616Y NB1

Configure model		
Model name	HU123MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

#### Operating test

### Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	12.00 kW	11.00 kW	
El input	2.38 kW	3.79 kW	
СОР	5.04	2.90	

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	43 dB(A)	43 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	181 %	137 %
Prated	12.00 kW	12.00 kW
SCOP	4.60	3.50
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.20 kW	10.20 kW
COP Tj = -7°C	3.01	2.20
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.20 kW	6.30 kW
COP Tj = +2°C	4.42	3.38
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.50 kW	4.60 kW
COP Tj = +7°C	6.04	4.67
Cdh Tj = +7 °C	0.900	0.900

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Pdh Tj = 12°C	5.00 kW	4.60 kW	
COP Tj = 12°C	8.44	6.66	
Cdh Tj = +12 °C	0.900	0.900	
Pdh Tj = Tbiv	11.50 kW	10.20 kW	
COP Tj = Tbiv	2.65	2.20	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	10.80 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.92	
WTOL	65 °C	65 °C	
Poff	60 W	60 W	
РТО	60 W	60 W	
PSB	60 W	60 W	
РСК	0 W	0 W	
Supplementary Heater: Type of energy input	n/a	Electricity	
Supplementary Heater: PSUP	0.50 kW	1.20 kW	
Annual energy consumption Qhe	5165 kWh	6788 kWh	

### Domestic Hot Water (DHW)

Operating test

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EN 16147	
Temperature operating range	passed
Safety devices checking test	passed
Condensate draining	passed

### Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.74	
Heating up time	1:25 h:min	
Standby power input	69.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	222	

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# Model: HU143MRB U30 / HN1616Y NB1

Configure model		
Model name	HU143MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

Genera	al Data
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.00 kW	11.50 kW
El input	2.86 kW	4.03 kW
СОР	4.89	2.85

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	43 dB(A)	43 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	180 %	136 %
Prated	12.00 kW	12.00 kW
SCOP	4.57	3.47
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.40 kW
COP Tj = -7°C	2.94	2.16
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.45	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	5.95	4.66
Cdh Tj = +7 °C	0.900	0.900

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Pdh Tj = 12°C	5.00 kW	4.60 kW		
COP Tj = 12°C	8.12	6.62		
Cdh Tj = +12 °C	0.900	0.900		
Pdh Tj = Tbiv	12.00 kW	10.40 kW		
COP Tj = Tbiv	2.60	2.16		
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	10.90 kW		
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.86		
WTOL	65 °C	65 °C		
Poff	60 W	60 W		
РТО	60 W	60 W		
PSB	60 W	60 W		
РСК	0 W	0 W		
Supplementary Heater: Type of energy input	n/a	Electricity		
Supplementary Heater: PSUP	0.00 kW	1.10 kW		
Annual energy consumption Qhe	5425 kWh	6991 kWh		

### Domestic Hot Water (DHW)

Average Climate

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EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	2.74	
Heating up time	1:25 h:min	
Standby power input	69.0 W	
Reference hot water temperature	49.0 °C	
Mixed water at 40°C	222	

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# Model: HU163MRB U30 / HN1616Y NB1

Configure model		
Model name	HU163MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data	
Power supply 3x400V 50Hz	

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	12.00 kW
El input	3.33 kW	4.29 kW
СОР	4.80	2.80

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	43 dB(A)	43 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
η <sub>s</sub>	179 %	135 %
Prated	12.00 kW	12.00 kW
SCOP	4.55	3.45
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.90 kW	10.60 kW
COP Tj = -7°C	2.88	2.15
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.70 kW	6.50 kW
COP Tj = +2°C	4.45	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.20 kW
COP Tj = +7°C	5.97	4.65
Cdh Tj = +7 °C	0.900	0.900

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Pdh Tj = 12°C	5.30 kW	4.60 kW	
COP Tj = 12°C	8.11	6.58	
Cdh Tj = +12 °C	0.900	0.900	
Pdh Tj = Tbiv	12.30 kW	10.60 kW	
COP Tj = Tbiv	2.56	2.15	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	11.10 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.85	
WTOL	65 °C	65 °C	
Poff	60 W	60 W	
РТО	60 W	60 W	
PSB	60 W	60 W	
РСК	0 W	0 W	
Supplementary Heater: Type of energy input	n/a	Electricity	
Supplementary Heater: PSUP	0.00 kW	0.90 kW	
Annual energy consumption Qhe	5586 kWh	7187 kWh	

### Domestic Hot Water (DHW)

Average Climate

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EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	2.74
Heating up time	1:25 h:min
Standby power input	69.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	222