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This information was generated by the HP KEYMARK database on 22 Jun 2022

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

Model: HU121MRB U30 / HN1616Y NB1

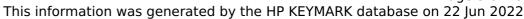
Configure model		
Model name	HU121MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

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





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_{s}	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
$COP Tj = +7^{\circ}C$	6.04	4.67
Cdh Tj = +7 °C	0.900	0.900





This information was generated by the first All water accorded on 22 jan 2022				
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		
PCK	o w	o 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		

Operating test

Domestic Hot Water (DHW)



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

Operating test

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



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	





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_{s}	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
PCK	o w	o 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)



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



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

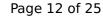
EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	12.00 kW
El input	3.33 kW	4.29 kW
СОР	4.80	2.80

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



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_{s}	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





This information was general	<u>, </u>	,
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
PCK	o w	o 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)



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



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	

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	naccod
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





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_{s}	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
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	0.50 kW	1.20 kW

5165 kWh

6788 kWh

Operating test

Domestic Hot Water (DHW)

Annual energy consumption Qhe



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

Operating test

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



Model: HU143MRB U30 / HN1616Y NB1

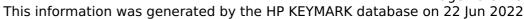
Configure model		
Model name	HU143MRB U30 / HN1616Y NB1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General 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





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_{s}	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





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
PCK	o w	o 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)



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	



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

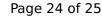
EN 14511-2			
Low temperature Medium temperature			
Heat output	16.00 kW	12.00 kW	
El input	3.33 kW	4.29 kW	
СОР	4.80	2.80	

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



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_{s}	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	





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
PCK	o 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)



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 I		