Login

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	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

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
COP	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_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

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
PTO	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
Annual energy consumption Qhe	5165 kWh	6788 kWh

Domestic Hot Water (DHW)

Operating test

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 %
COP	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 l

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
COP	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_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
PTO	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	0.00 kW	1.10 kW
Annual energy consumption Qhe	5425 kWh	6991 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	120 %
COP	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 l

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
COP	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_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
PTO	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	0.00 kW	0.90 kW
Annual energy consumption Qhe	5586 kWh	7187 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	120 %
COP	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 l

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
COP	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_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

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
PTO	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
Annual energy consumption Qhe	5165 kWh	6788 kWh

Domestic Hot Water (DHW)

Operating test

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 %
COP	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 l

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
COP	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_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
PTO	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	0.00 kW	1.10 kW
Annual energy consumption Qhe	5425 kWh	6991 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	120 %
COP	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 l

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
COP	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_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
PTO	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	0.00 kW	0.90 kW
Annual energy consumption Qhe	5586 kWh	7187 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	120 %
COP	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 l