

Subtype R32 Hydrosplit, IWT 12 14 16 kW 1 phase & 3 phases

Certificate Holder	LG Electronics Inc.
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	R32 Hydrosplit, IWT 12 14 16 kW 1 phase & 3 phases
Registration number	011-1W0466
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

Model name	HU121MRB U30 / HN1616Y NB1
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water**EN 16147 | Operating test**

Temperature operating range	2
Safety devices checking test	2
Condensate draining	2

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 Average Climate		
	Low temperature	Medium temperature
ηs	181 %	137 %
Prated	11.50 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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	1.20 kW
Annual energy consumption Qhe	5165 kWh	6788 kWh

Model HU141MRB U30 / HN1616Y NB1

Model name	HU141MRB U30 / HN1616Y NB1
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	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		Electricity
Supplementary Heater: PSUP	0.00 kW	1.10 kW
Annual energy consumption Qhe	5425 kWh	6991 kWh

Model HU161MRB U30 / HN1616Y NB1

Model name	HU161MRB U30 / HN1616Y NB1
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	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		Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	5586 kWh	7187 kWh

Model HU123MRB U30 / HN1616Y NB1

Model name	HU123MRB U30 / HN1616Y NB1
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Operating test**

Temperature operating range	2
Safety devices checking test	2
Condensate draining	2

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
η_s	181 %	137 %
Prated	11.50 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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	1.20 kW
Annual energy consumption Qhe	5165 kWh	6788 kWh

Model HU143MRB U30 / HN1616Y NB1

Model name	HU143MRB U30 / HN1616Y NB1
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	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		Electricity
Supplementary Heater: PSUP	0.00 kW	1.10 kW
Annual energy consumption Qhe	5425 kWh	6991 kWh

Model HU163MRB U30 / HN1616Y NB1

Model name	HU163MRB U30 / HN1616Y NB1
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	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		Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	5586 kWh	7187 kWh