

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

Certificate Holder	LG Electronics Inc.
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Country	KR
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	R32 Hydrosplit 12 14 16 kW 1 phase & 3 phases
Registration number	011-1W0382
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.1 kg
Certification Date	06.07.2020
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 8 (as of 2020-09)

**Model HU121MRB U30 / HN1600MB NK0**

Model name	HU121MRB U30 / HN1600MB NK0
Application	Heating (medium 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 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
EI 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	0 dB(A)	44 dB(A)
Sound power level outdoor	0 dB(A)	61 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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 HU123MRB U30 / HN1600MB NK0**

Model name	HU123MRB U30 / HN1600MB NK0
Application	Heating (medium 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 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
EI 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	0 dB(A)	44 dB(A)
Sound power level outdoor	0 dB(A)	61 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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 HU141MRB U30 / HN1600MB NK0**

Model name	HU141MRB U30 / HN1600MB NK0
Application	Heating (medium 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 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
EI input	2.86 kW	4.04 kW
COP	4.89	2.85

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.45	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	5.95	4.66
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.00 kW	4.60 kW
COP Tj = 12°C	8.12	6.62
Cdh Tj = +12 °C	0.90	0.90
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	6992 kWh

**Model HU143MRB U30 / HN1600MB NK0**

Model name	HU143MRB U30 / HN1600MB NK0
Application	Heating (medium 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 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
EI input	2.86 kW	4.04 kW
COP	4.89	2.85

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.45	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	5.95	4.66
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.00 kW	4.60 kW
COP Tj = 12°C	8.12	6.62
Cdh Tj = +12 °C	0.90	0.90
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	6992 kWh

**Model HU161MRB U30 / HN1600MB NK0**

Model name	HU161MRB U30 / HN1600MB NK0
Application	Heating (medium 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 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
EI 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	44 dB(A)	44 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.70 kW	6.50 kW
COP Tj = +2°C	4.45	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.00 kW	5.20 kW

COP Tj = +7°C	5.97	4.65
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.11	6.58
Cdh Tj = +12 °C	0.90	0.90
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

**Model HU163MRB U30 / HN1600MB NK0**

Model name	HU163MRB U30 / HN1600MB NK0
Application	Heating (medium 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 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
EI 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	44 dB(A)	44 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.70 kW	6.50 kW
COP Tj = +2°C	4.45	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.00 kW	5.20 kW

COP Tj = +7°C	5.97	4.65
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.11	6.58
Cdh Tj = +12 °C	0.90	0.90
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

**Model HU121MRB U30 / HN1600MC NK1**

Model name	HU121MRB U30 / HN1600MC NK1
Application	Heating (medium 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 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
EI 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	0 dB(A)	44 dB(A)
Sound power level outdoor	0 dB(A)	61 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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 HU123MRB U30 / HN1600MC NK1**

Model name	HU123MRB U30 / HN1600MC NK1
Application	Heating (medium 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 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
EI 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	0 dB(A)	44 dB(A)
Sound power level outdoor	0 dB(A)	61 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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 HU141MRB U30 / HN1600MC NK1**

Model name	HU141MRB U30 / HN1600MC NK1
Application	Heating (medium 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 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
EI input	2.86 kW	4.04 kW
COP	4.89	2.85

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.45	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	5.95	4.66
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.00 kW	4.60 kW
COP Tj = 12°C	8.12	6.62
Cdh Tj = +12 °C	0.90	0.90
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	6992 kWh

**Model HU143MRB U30 / HN1600MC NK1**

Model name	HU143MRB U30 / HN1600MC NK1
Application	Heating (medium 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 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
EI input	2.86 kW	4.04 kW
COP	4.89	2.85

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.45	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	5.95	4.66
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.00 kW	4.60 kW
COP Tj = 12°C	8.12	6.62
Cdh Tj = +12 °C	0.90	0.90
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	6992 kWh

**Model HU161MRB U30 / HN1600MC NK1**

Model name	HU161MRB U30 / HN1600MC NK1
Application	Heating (medium 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 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
EI 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	44 dB(A)	44 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.70 kW	6.50 kW
COP Tj = +2°C	4.45	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.00 kW	5.20 kW

COP Tj = +7°C	5.97	4.65
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.11	6.58
Cdh Tj = +12 °C	0.90	0.90
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

**Model HU163MRB U30 / HN1600MC NK1**

Model name	HU163MRB U30 / HN1600MC NK1
Application	Heating (medium 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 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
EI 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	44 dB(A)	44 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	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	0.90	0.90
Pdh Tj = +2°C	6.70 kW	6.50 kW
COP Tj = +2°C	4.45	3.34
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.00 kW	5.20 kW

COP Tj = +7°C	5.97	4.65
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.11	6.58
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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