

## Subtype R32 monobloc(2nd) 12 14 16 kW 1&amp;3 phase

Certificate Holder	LG Electronics Inc.
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Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	R32 monobloc(2nd) 12 14 16 kW 1&3 phase
Registration number	011-1W0470
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2 kg
Certification Date	05.07.2021
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 9 (as of 2021-03)

## Model HM121MR U34

Model name	HM121MR U34
Application	Heating (medium temp)
Units	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
El input	2.45 kW	3.79 kW
COP	4.90	2.90

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	184 %	136 %
Prated	11.50 kW	12.00 kW
SCOP	4.67	3.47
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.20 kW	10.20 kW
COP Tj = -7°C	3.10	2.07
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.20 kW	6.30 kW
COP Tj = +2°C	4.39	3.38
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.50 kW	4.60 kW
COP Tj = +7°C	6.40	4.64

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.20 kW	4.60 kW
COP Tj = 12°C	8.50	6.79
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.50 kW	10.20 kW
COP Tj = Tbiv	2.55	2.07
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	2.55	1.92
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 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	5086 kWh	6882 kWh

## Model HM123MR U34

Model name	HM123MR U34
Application	Heating (medium temp)
Units	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
El input	2.45 kW	3.79 kW
COP	4.90	2.90

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	184 %	136 %
Prated	11.50 kW	12.00 kW
SCOP	4.67	3.47
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.20 kW	10.20 kW
COP Tj = -7°C	3.10	2.07
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.20 kW	6.30 kW
COP Tj = +2°C	4.39	3.38
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.50 kW	4.60 kW
COP Tj = +7°C	6.40	4.64

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.20 kW	4.60 kW
COP Tj = 12°C	8.50	6.79
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.50 kW	10.20 kW
COP Tj = Tbiv	2.55	2.07
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	2.55	1.92
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 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	5086 kWh	6882 kWh

## Model HM141MR U34

Model name	HM141MR U34
Application	Heating (medium temp)
Units	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
El input	2.92 kW	4.04 kW
COP	4.80	2.85

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	182 %	135 %
Prated	12.00 kW	12.00 kW
SCOP	4.62	3.46
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.40 kW
COP Tj = -7°C	3.10	2.11
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.40	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.60 kW	4.70 kW
COP Tj = +7°C	6.10	4.66

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.40	6.62
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.00 kW	10.40 kW
COP Tj = Tbiv	2.50	2.11
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	2.50	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 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	5362 kWh	7016 kWh

## Model HM143MR U34

Model name	HM143MR U34
Application	Heating (medium temp)
Units	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
El input	2.92 kW	4.04 kW
COP	4.80	2.85

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	182 %	135 %
Prated	12.00 kW	12.00 kW
SCOP	4.62	3.46
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.40 kW
COP Tj = -7°C	3.10	2.11
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.50 kW	6.30 kW
COP Tj = +2°C	4.40	3.35
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.60 kW	4.70 kW
COP Tj = +7°C	6.10	4.66



Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.40	6.62
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.00 kW	10.40 kW
COP Tj = Tbiv	2.50	2.11
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	2.50	1.86
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 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	5362 kWh	7016 kWh

## Model HM163MR U34

Model name	HM163MR U34
Application	Heating (medium temp)
Units	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
El input	3.40 kW	4.29 kW
COP	4.70	2.80

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	178 %	135 %
Prated	12.00 kW	12.00 kW
SCOP	4.53	3.45
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.90 kW	10.70 kW
COP Tj = -7°C	3.09	2.13
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.60 kW	6.50 kW
COP Tj = +2°C	4.33	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.20 kW
COP Tj = +7°C	5.90	4.65

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.15	6.58
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.30 kW	10.60 kW
COP Tj = Tbiv	2.50	2.13
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	2.50	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 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	5604 kWh	7213 kWh

## Model HM161MR U34

Model name	HM161MR U34
Application	Heating (medium temp)
Units	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
El input	3.40 kW	4.29 kW
COP	4.70	2.80

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	178 %	135 %
Prated	12.00 kW	12.00 kW
SCOP	4.53	3.45
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.90 kW	10.70 kW
COP Tj = -7°C	3.09	2.13
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.60 kW	6.50 kW
COP Tj = +2°C	4.33	3.34
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.00 kW	5.20 kW
COP Tj = +7°C	5.90	4.65

Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.30 kW	4.60 kW
COP Tj = 12°C	8.15	6.58
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.30 kW	10.60 kW
COP Tj = Tbiv	2.50	2.13
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	2.50	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	30 W	30 W
PSB	10 W	10 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	5604 kWh	7213 kWh