

Page 1 of 19

#### This information was generated by the HP KEYMARK database on 18 Mar 2022

#### Login

Summary of	R32 monobloc 12 14 16 kW 1 phase & 3 phases	Reg. No.	011-1W0244
Certificate Holder			
Name	me 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 monobloc 12 14 16 kW 1 phase & 3 phases		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	2.4 kg		
Certification Date	04.04.2018		



### Model: HM163M U33

Configure model		
Model name	HM163M U33	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

### Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	12.00 kW
El input	3.64 kW	4.29 kW
СОР	4.40	2.80



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	dB(A)	dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	175 %	124 %
Prated	11.00 kW	12.00 kW
SCOP	4.45	3.18
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	9.70 kW	10.60 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.90 kW	6.50 kW
COP Tj = +2°C	4.38	3.00
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.70 kW	6.30 kW
COP Tj = +7°C	6.24	4.80
Cdh Tj = +7 °C	0.90	0.90



Page 4 of 19

#### This information was generated by the HP KEYMARK database on 18 Mar 2022

	1	
Pdh Tj = 12°C	8.10 kW	7.70 kW
COP Tj = 12°C	8.30	7.00
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.00 kW	10.60 kW
COP Tj = Tbiv	2.50	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.00 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	0.00 kW	2.00 kW
Annual energy consumption Qhe	5103 kWh	7795 kWh



### Model: HM143M U33

Configure model		
Model name	HM143M U33	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.00 kW	12.00 kW
El input	3.11 kW	4.29 kW
СОР	4.50	2.80



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	175 %	124 %
Prated	11.00 kW	12.00 kW
SCOP	4.45	3.18
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	9.30 kW	10.60 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.70 kW	6.50 kW
COP Tj = +2°C	4.38	3.00
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.50 kW	6.30 kW
COP Tj = +7°C	6.24	4.80
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	7.70 kW	7.70 kW



COP Tj = 12°C	8.30	7.00
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	10.50 kW	10.60 kW
COP Tj = Tbiv	2.50	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	2.00 kW
Annual energy consumption Qhe	4875 kWh	7795 kWh



### Model: HM123M U33

Configure model		
Model name	HM123M U33	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

#### Heating

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 14511-2		
	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.61 kW	4.29 kW
СОР	4.60	2.80



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	175 %	124 %
Prated	10.00 kW	12.00 kW
SCOP	4.45	3.18
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	8.80 kW	10.60 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.40 kW	6.50 kW
COP Tj = +2°C	4.38	3.00
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.10 kW	6.30 kW
COP Tj = +7°C	6.24	4.80
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	7.40 kW	7.70 kW



#### Page 10 of 19

#### This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	8.30	7.00
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	10.00 kW	10.60 kW
COP Tj = Tbiv	2.50	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	0.00 kW	2.00 kW
Annual energy consumption Qhe	4642 kWh	7795 kWh



### Model: HM161M U33

Configure model		
Model name	HM161M U33	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

### Heating

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 14511-2			
Low temperature Medium temperature			
Heat output	16.00 kW	12.00 kW	
El input	3.64 kW	4.29 kW	
СОР	4.40	2.80	



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

	EN 14825	
	Low temperature	Medium temperature
$\eta_{s}$	175 %	124 %
Prated	11.00 kW	12.00 kW
SCOP	4.45	3.18
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	9.70 kW	10.60 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.90 kW	6.50 kW
COP Tj = +2°C	4.38	3.00
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.70 kW	6.30 kW
COP Tj = +7°C	6.24	4.80
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	8.10 kW	7.70 kW



# $$\operatorname{Page}\ 13$$ of 19 This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	8.30	7.00
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	11.00 kW	10.60 kW
COP Tj = Tbiv	2.50	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.00 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	0.00 kW	2.00 kW
Annual energy consumption Qhe	5103 kWh	7795 kWh



### Model: HM141M U33

Configure model		
Model name	HM141M U33	
Application	Heating (medium temp)	
Units	Outdoor	
Climate Zone	n/a	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

### Heating

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 14511-2			
Low temperature Medium temperature			
Heat output	14.00 kW	12.00 kW	
El input	3.11 kW	4.29 kW	
СОР	4.50	2.80	



EN 12102-1		
	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	175 %	124 %
Prated	11.00 kW	12.00 kW
SCOP	4.45	3.18
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	9.30 kW	10.60 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.70 kW	6.50 kW
COP Tj = +2°C	4.38	3.00
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.50 kW	6.30 kW
COP Tj = +7°C	6.24	4.80
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	7.70 kW	7.70 kW



# $$\operatorname{\textit{Page}}\ 16$$ of 19 This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	8.30	7.00
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	10.50 kW	10.60 kW
COP Tj = Tbiv	2.50	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.50 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	2.00 kW
Annual energy consumption Qhe	4875 kWh	7795 kWh



### Model: HM121M U33

Configure model			
Model name	HM121M U33		
Application	Heating (medium temp)		
Units	Outdoor		
Climate Zone	n/a		
Reversibility	No		
Cooling mode application (optional)	n/a		

General Data		
Power supply	1x230V 50Hz	

#### Heating

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 14511-2		
	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.61 kW	4.29 kW
СОР	4.60	2.80



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level outdoor	63 dB(A)	63 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	175 %	124 %
Prated	10.00 kW	12.00 kW
SCOP	4.45	3.18
Tbiv	-10 °C	-7 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	8.80 kW	10.60 kW
COP Tj = -7°C	2.90	1.93
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	5.40 kW	6.50 kW
COP Tj = +2°C	4.38	3.00
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.10 kW	6.30 kW
COP Tj = +7°C	6.24	4.80
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	7.40 kW	7.70 kW



#### Page 19 of 19

#### This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = 12°C	8.30	7.00
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	10.00 kW	10.60 kW
COP Tj = Tbiv	2.50	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	65 °C	65 °C
Poff	60 W	60 W
РТО	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	n/a	Electricity
Supplementary Heater: PSUP	0.00 kW	2.00 kW
Annual energy consumption Qhe	4642 kWh	7795 kWh