Summary of	split mid temperature 12 14 16 kW 1 phase and 3 phases	Reg. No.	011-1W0253
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	split mid temperature 12 14 16 kW 1 phase and 3 phases		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.3 kg		
Certification Date	31.07.2019		
Testing basis	HP KEYMARK certification scheme rules V8		

Model: HU161 U33/ HN1616 NK3

General Data	
Power supply	1x230V 50Hz

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	169 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.30	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	8.80 kW
COP Tj = -7°C	2.55	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.30 kW
COP Tj = +2°C	4.15	3.15

Cdh	0.900	0.900
Pdh Tj = +7°C	4.10 kW	3.60 kW
COP Tj = +7°C	6.10	4.79
Cdh	0.900	0.900
Pdh Tj = 12°C	4.60 kW	4.10 kW
COP Tj = 12°C	8.30	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	10.00 kW	9.90 kW
COP Tj = Tbiv	2.30	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	5 W	5 W
PTO	60 W	60 W
PSB	5 W	5 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4802 kWh	6154 kWh

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	12.50 kW
El input	3.76 kW	4.94 kW
COP	4.26	2.53

Model: HU141 U33/ HN1616 NK3

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	12.50 kW
El input	3.17 kW	4.94 kW
COP	4.41	2.53

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	175 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.10 kW	5.30 kW
COP Tj = +2°C	4.25	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	3.80 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.40 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.50 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.50 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	5 W	5 W
PTO	60 W	60 W
PSB	5 W	5 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.50 kW	0.10 kW
Annual energy consumption Qhe	4408 kWh	6154 kWh

Model: HU121 U33/ HN1616 NK3

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	12.50 kW
El input	2.64 kW	4.94 kW
COP	4.55	2.53

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	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	175 %	130 %
Prated	9.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	4.90 kW	5.30 kW
COP Tj = +2°C	4.27	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.50 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.00 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	5 W	5 W
PTO	60 W	60 W
PSB	5 W	5 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4177 kWh	6154 kWh

Model: HU163 U33 / HN1639 NK3

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	12.50 kW
El input	3.76 kW	4.94 kW
COP	4.26	2.53

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	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	169 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.30	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	8.80 kW
COP Tj = -7°C	2.55	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.30 kW
COP Tj = +2°C	4.15	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	4.10 kW	3.60 kW
COP Tj = +7°C	6.10	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.60 kW	4.10 kW
COP Tj = 12°C	8.30	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	10.00 kW	9.90 kW
COP Tj = Tbiv	2.30	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	60 W	60 W
PTO	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4804 kWh	6156 kWh

Model: HU143 U33 / HN1639 NK3

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	14.00 kW	12.50 kW
El input	3.17 kW	4.94 kW
COP	4.41	2.53

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	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.10 kW	5.30 kW
COP Tj = +2°C	4.25	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	3.80 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.40 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.50 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.50 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	60 W	60 W
PTO	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.50 kW	0.10 kW
Annual energy consumption Qhe	4410 kWh	6156 kWh

Model: HU123 U33 / HN1639 NK3

General Data	
Power supply	3x400V 50Hz

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	130 %
Prated	9.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	4.90 kW	5.30 kW
COP Tj = +2°C	4.27	3.15

Cdh	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900
Pdh Tj = 12°C	4.50 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.00 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	60 W	60 W
PTO	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4179 kWh	6156 kWh

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	12.50 kW
El input	2.64 kW	4.94 kW
COP	4.55	2.53

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

Model: HU161 U33 / HN1616M NK5

General Data	
Power supply	1x230V 50Hz

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	169 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.30	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	8.80 kW
COP Tj = -7°C	2.55	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.30 kW
COP Tj = +2°C	4.15	3.15

Cdh	0.900	0.900
Pdh Tj = +7°C	4.10 kW	3.60 kW
COP Tj = +7°C	6.10	4.79
Cdh	0.900	0.900
Pdh Tj = 12°C	4.60 kW	4.10 kW
COP Tj = 12°C	8.30	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	10.00 kW	9.90 kW
COP Tj = Tbiv	2.30	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	5 W	5 W
PTO	60 W	60 W
PSB	5 W	5 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4802 kWh	6154 kWh

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	12.50 kW
El input	3.76 kW	4.94 kW
COP	4.26	2.53

Model: HU141 U33 / HN1616M NK5

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	12.50 kW
El input	3.17 kW	4.94 kW
COP	4.41	2.53

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	175 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.10 kW	5.30 kW
COP Tj = +2°C	4.25	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	3.80 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.40 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.50 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.50 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	5 W	5 W
PTO	60 W	60 W
PSB	5 W	5 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.50 kW	0.10 kW
Annual energy consumption Qhe	4408 kWh	6154 kWh

Model: HU121 U33 / HN1616M NK5

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	12.50 kW
El input	2.64 kW	4.94 kW
COP	4.55	2.53

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	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	175 %	130 %
Prated	9.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	4.90 kW	5.30 kW
COP Tj = +2°C	4.27	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.50 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.00 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	5 W	5 W
PTO	60 W	60 W
PSB	5 W	5 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4177 kWh	6154 kWh

Model: HU163 U33 / HN1636M NK5

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	16.00 kW	12.50 kW
El input	3.76 kW	4.94 kW
COP	4.26	2.53

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	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	169 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.30	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	8.80 kW
COP Tj = -7°C	2.55	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.40 kW	5.30 kW
COP Tj = +2°C	4.15	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	4.10 kW	3.60 kW
COP Tj = +7°C	6.10	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.60 kW	4.10 kW
COP Tj = 12°C	8.30	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	10.00 kW	9.90 kW
COP Tj = Tbiv	2.30	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	60 W	60 W
PTO	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4804 kWh	6156 kWh

Model: HU143 U33 / HN1636M NK5

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	14.00 kW	12.50 kW
El input	3.17 kW	4.94 kW
COP	4.41	2.53

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	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	5.10 kW	5.30 kW
COP Tj = +2°C	4.25	3.15
Cdh	0.900	0.900
Pdh Tj = +7°C	3.80 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900

Pdh Tj = 12°C	4.40 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.50 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.50 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	60 W	60 W
PTO	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	0.50 kW	0.10 kW
Annual energy consumption Qhe	4410 kWh	6156 kWh

Model: HU123 U33 / HN1636M NK5

General Data	
Power supply	3x400V 50Hz

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	130 %
Prated	9.00 kW	10.00 kW
SCOP	4.45	3.32
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.80 kW
COP Tj = -7°C	2.67	1.93
Cdh	0.900	0.900
Pdh Tj = +2°C	4.90 kW	5.30 kW
COP Tj = +2°C	4.27	3.15

Cdh	0.900	0.900
Pdh Tj = +7°C	3.70 kW	3.60 kW
COP Tj = +7°C	6.30	4.79
Cdh	0.900	0.900
Pdh Tj = 12°C	4.50 kW	4.10 kW
COP Tj = 12°C	9.20	7.00
Cdh	0.900	0.900
Pdh Tj = Tbiv	9.00 kW	9.90 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh	0.90	0.90
WTOL	57 °C	57 °C
Poff	60 W	60 W
PTO	60 W	60 W
PSB	60 W	60 W
PCK	50 W	50 W
Supplementary Heater: Type of energy input	N/A	electric
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	4179 kWh	6156 kWh

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.00 kW	12.50 kW
El input	2.64 kW	4.94 kW
COP	4.55	2.53

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