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Login

Summary of	Buderus Logatherm WLW196i-6 AR and IR, Buderus Logatherm WLW196i.2-4 AR	Reg. No.	011- 1W0128
Certificate Holde	er		
Name	Name Bosch Thermotechnik GmbH (Buderus)		
Address	Sophienstraße 30-32	Zip	35576
City	Wetzlar	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Buderus Logatherm WLW196i-6 AR and IR, Buderus Logatherm WLW196i.2-4 AR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	1.75 kg		
Certification Date	18.07.2017		
Testing basis	HP KEYMARK certification scheme rules rev. 8		



Model: Buderus Logatherm WLW196i-6 ARE

Configure model			
Model name	Buderus Logatherm WLW196i-6 ARE		
Application	Heating (medium temp)		
Units	Indoor + Outdoor		
Climate Zone	Colder Climate + Warmer Climate		
Reversibility	Yes		
Cooling mode application (optional)	n/a		

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	2.29 kW	2.40 kW	
El input	0.43 kW	0.88 kW	
СОР	5.27	2.75	

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 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	261 %	175 %	
Prated	6.27 kW	5.60 kW	
SCOP	6.59	4.45	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	6.27 kW	5.60 kW	
$COPTj = +2^{\circ}C$	3.05	2.19	
Pdh Tj = $+7^{\circ}$ C	4.09 kW	3.77 kW	
$COPTj = +7^{\circ}C$	5.70	3.86	
Pdh Tj = 12°C	1.79 kW	2.54 kW	
COP Tj = 12°C	8.77	5.94	
Pdh Tj = Tbiv	6.27 kW	5.60 kW	
COP Tj = Tbiv	3.05	2.19	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	6.27 kW	5.60 kW	





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.05	2.19
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1270 kWh	1683 kWh

Colder Climate

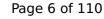
EN 12102-1				
Low temperature Medium temperature				
Sound power level indoor	29 dB(A)	29 dB(A)		
Sound power level outdoor	47 dB(A)	47 dB(A)		

EN 14825		
Low temperature	Medium temperature	
178 %	130 %	
5.11 kW	4.82 kW	
4.53	3.32	
	Low temperature 178 % 5.11 kW	





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Tbiv	-17 °C	-17 °C
TOL	-20 °C	-19 °C
Pdh Tj = -7°C	3.20 kW	3.01 kW
COP Tj = -7°C	3.61	2.72
Pdh Tj = +2°C	1.80 kW	1.91 kW
COP Tj = +2°C	5.73	4.24
Pdh Tj = $+7^{\circ}$ C	1.19 kW	2.15 kW
COP Tj = +7°C	7.41	5.03
Pdh Tj = 12°C	1.31 kW	2.61 kW
COP Tj = 12°C	8.16	6.52
Pdh Tj = Tbiv	4.45 kW	4.20 kW
COP Tj = Tbiv	2.43	1.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.07 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.11 kW	4.82 kW
		I





Annual energy consumption Qhe	2781 kWh	3575 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.68	1.97

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	202 %	143 %
Prated	5.43 kW	4.56 kW
SCOP	5.13	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	4.91 kW	4.26 kW
COP Tj = -7°C	3.08	2.24
Pdh Tj = $+2$ °C	2.92 kW	2.57 kW
COP Tj = +2°C	5.00	3.66



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1 kW
8
6 kW
4
6 kW
9
6 kW
9
0
°C
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W
I
ctricity
0 kW
30 kWh



Model: Buderus Logatherm WLW196i-6 ARB

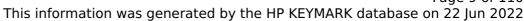
Configure model		
Model name	Buderus Logatherm WLW196i-6 ARB	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

	General Data	
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.29 kW	2.40 kW
El input	0.43 kW	0.88 kW
СОР	5.27	2.75

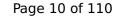
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	261 %	175 %
Prated	6.27 kW	5.60 kW
SCOP	6.59	4.45
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.27 kW	5.60 kW
$COPTj = +2^{\circ}C$	3.05	2.19
Pdh Tj = +7°C	4.09 kW	3.77 kW
$COPTj = +7^{\circ}C$	5.70	3.86
Pdh Tj = 12°C	1.79 kW	2.54 kW
COP Tj = 12°C	8.77	5.94
Pdh Tj = Tbiv	6.27 kW	5.60 kW
COP Tj = Tbiv	3.05	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.27 kW	5.60 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.05	2.19
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1270 kWh	1683 kWh

Colder Climate

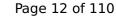
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
178 %	130 %	
5.11 kW	4.82 kW	
4.53	3.32	
	Low temperature 178 % 5.11 kW	



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20 °C .20 kW .61 .80 kW .73 .19 kW .41 .31 kW	-17 °C -19 °C 3.01 kW 2.72 1.91 kW 4.24 2.15 kW 5.03 2.61 kW 6.52 4.20 kW
.20 kW .61 .80 kW .73 .19 kW .41 .31 kW	3.01 kW 2.72 1.91 kW 4.24 2.15 kW 5.03 2.61 kW
.61 .80 kW .73 .19 kW .41 .31 kW	2.72 1.91 kW 4.24 2.15 kW 5.03 2.61 kW
.80 kW .73 .19 kW .41 .31 kW	1.91 kW 4.24 2.15 kW 5.03 2.61 kW
.73 .19 kW .41 .31 kW	4.24 2.15 kW 5.03 2.61 kW
.19 kW .41 .31 kW	2.15 kW 5.03 2.61 kW
.41 .31 kW	5.03 2.61 kW 6.52
.31 kW	2.61 kW 6.52
.16	6.52
.45 kW	4.20 kW
.43	1.75
.07 kW	3.39 kW
.25	1.65
0 °C	60 °C
2 W	22 W
2 W	22 W
2 W	22 W
W	4 W
	n/a
/a	
2	2 W W





Annual energy consumption Qhe	2781 kWh	3575 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.68	1.97

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
Low temperature	Medium temperature	
202 %	143 %	
5.43 kW	4.56 kW	
5.13	3.65	
-10 °C	-10 °C	
-10 °C	-10 °C	
4.91 kW	4.26 kW	
3.08	2.24	
2.92 kW	2.57 kW	
5.00	3.66	
	Low temperature 202 % 5.43 kW 5.13 -10 °C -10 °C 4.91 kW 3.08 2.92 kW	



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Pdh Tj = $+7^{\circ}$ C	1.84 kW	2.11 kW
COP Tj = +7°C	6.99	4.68
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.38	6.14
Pdh Tj = Tbiv	5.43 kW	4.56 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.43 kW	4.56 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2190 kWh	2580 kWh



Model: Buderus Logatherm WLW196i-6 ART190

Configure model		
Model name Buderus Logatherm WLW196i-6 ART190		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

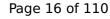
EN 14511-2			
	Low temperature	Medium temperature	
Heat output	2.29 kW	2.40 kW	
El input	0.43 kW	0.88 kW	
СОР	5.27	2.75	

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 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	25 dB(A)	25 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	261 %	175 %
Prated	6.27 kW	5.60 kW
SCOP	6.59	4.45
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.27 kW	5.60 kW
COP Tj = +2°C	3.05	2.19
Pdh Tj = +7°C	4.09 kW	3.77 kW
$COP Tj = +7^{\circ}C$	5.70	3.86
Pdh Tj = 12°C	1.79 kW	2.54 kW
COP Tj = 12°C	8.77	5.94
Pdh Tj = Tbiv	6.27 kW	5.60 kW
COP Tj = Tbiv	3.05	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	6.27 kW	5.60 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.05	2.19
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1270 kWh	1683 kWh

Colder Climate

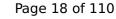
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	178 %	130 %
Prated	5.11 kW	4.82 kW
SCOP	4.53	3.32



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This information was generated by the HP KEYMARK database on 22 Jun 2022			
Tbiv	-17 °C	-17 °C	
TOL	-20 °C	-19 °C	
Pdh Tj = -7 °C	3.20 kW	3.01 kW	
COP Tj = -7°C	3.61	2.72	
Pdh Tj = +2°C	1.80 kW	1.91 kW	
COP Tj = +2°C	5.73	4.24	
Pdh Tj = $+7^{\circ}$ C	1.19 kW	2.15 kW	
$COPTj = +7^{\circ}C$	7.41	5.03	
Pdh Tj = 12°C	1.31 kW	2.61 kW	
COP Tj = 12°C	8.16	6.52	
Pdh Tj = Tbiv	4.45 kW	4.20 kW	
COP Tj = Tbiv	2.43	1.75	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.07 kW	3.39 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65	
WTOL	60 °C	60 °C	
Poff	22 W	22 W	
РТО	22 W	22 W	
PSB	22 W	22 W	
PCK	4 W	4 W	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	5.11 kW	4.82 kW	
	•		





Annual energy consumption Qhe	2781 kWh	3575 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.68	1.97

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	202 %	143 %
Prated	5.43 kW	4.56 kW
SCOP	5.13	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	4.91 kW	4.26 kW
COP Tj = -7°C	3.08	2.24
Pdh Tj = $+2$ °C	2.92 kW	2.57 kW
COP Tj = +2°C	5.00	3.66



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This information was generated by the HP KEYMARK database on 22 Jun 2022

Pdh Tj = +7°C	1.84 kW	2.11 kW
$COP Tj = +7^{\circ}C$	6.99	4.68
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.38	6.14
Pdh Tj = Tbiv	5.43 kW	4.56 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.43 kW	4.56 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2190 kWh	2580 kWh

Domestic Hot Water (DHW)

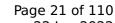


EN 16147	
Declared load profile	L
Efficiency ηDHW	119 %
СОР	2.79
Heating up time	02:31 h:min
Standby power input	45.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	271

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	97 %	
СОР	2.26	
Heating up time	04:04 h:min	
Standby power input	64.0 W	
Reference hot water temperature	53.1 °C	
Mixed water at 40°C	271	

Average Climate





EN 16147	
Declared load profile	L
Efficiency ηDHW	106 %
СОР	2.48
Heating up time	03:14 h:min
Standby power input	51.0 W
Reference hot water temperature	54.3 °C
Mixed water at 40°C	273 I

Model: Buderus Logatherm WLW196i-6 ARTS185

Configure model		
Model name	Buderus Logatherm WLW196i-6 ARTS185	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	2.29 kW	2.40 kW	
El input	0.43 kW	0.88 kW	
СОР	5.27	2.75	

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 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	261 %	175 %
Prated	6.27 kW	5.60 kW
SCOP	6.59	4.45
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	6.27 kW	5.60 kW
$COPTj = +2^{\circ}C$	3.05	2.19
Pdh Tj = $+7$ °C	4.09 kW	3.77 kW
$COPTj = +7^{\circ}C$	5.70	3.86
Pdh Tj = 12°C	1.79 kW	2.54 kW
COP Tj = 12°C	8.77	5.94
Pdh Tj = Tbiv	6.27 kW	5.60 kW
COP Tj = Tbiv	3.05	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.27 kW	5.60 kW



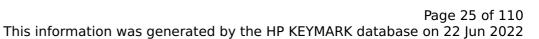


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.05	2.19
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1270 kWh	1683 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	25 dB(A)	25 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
Low temperature	Medium temperature	
178 %	130 %	
5.11 kW	4.82 kW	
4.53	3.32	
	Low temperature 178 % 5.11 kW	





THE RETAIN WAR dutubuse on 22 July 202
-17 °C
-19 °C
3.01 kW
2.72
1.91 kW
4.24
2.15 kW
5.03
2.61 kW
6.52
4.20 kW
1.75
3.39 kW
1.65
60 °C
22 W
22 W
22 W
4 W
Electricity
4.82 kW



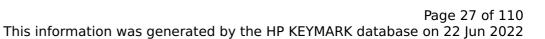


Annual energy consumption Qhe	2781 kWh	3575 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.68	1.97

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	202 %	143 %
Prated	5.43 kW	4.56 kW
SCOP	5.13	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.91 kW	4.26 kW
COP Tj = -7°C	3.08	2.24
Pdh Tj = $+2$ °C	2.92 kW	2.57 kW
$COP Tj = +2^{\circ}C$	5.00	3.66





Pdh Tj = +7°C	1.84 kW	2.11 kW
$COP Tj = +7^{\circ}C$	6.99	4.68
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.38	6.14
Pdh Tj = Tbiv	5.43 kW	4.56 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.43 kW	4.56 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2190 kWh	2580 kWh

Domestic Hot Water (DHW)

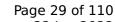


EN 16147		
Declared load profile	L	
Efficiency ηDHW	109 %	
СОР	2.58	
Heating up time	02:34 h:min	
Standby power input	47.0 W	
Reference hot water temperature	52.8 °C	
Mixed water at 40°C	257 I	

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	95 %	
СОР	2.21	
Heating up time	04:09 h:min	
Standby power input	73.0 W	
Reference hot water temperature	51.2 °C	
Mixed water at 40°C	259 I	

Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.43	
Heating up time	03:18 h:min	
Standby power input	53.0 W	
Reference hot water temperature	53.2 °C	
Mixed water at 40°C	263 I	



Model: Buderus Logatherm WLW196i-6 IRE

Configure model		
Model name Buderus Logatherm WLW196i-6 IRE		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

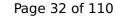
EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.29 kW	2.34 kW
El input	0.46 kW	0.87 kW
СОР	4.96	2.67

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	255 %	163 %
Prated	5.77 kW	5.08 kW
SCOP	6.45	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.77 kW	5.08 kW
$COP Tj = +2^{\circ}C$	2.91	2.09
Pdh Tj = $+7^{\circ}$ C	3.39 kW	3.55 kW
$COP Tj = +7^{\circ}C$	5.70	3.62
Pdh Tj = 12°C	1.79 kW	2.42 kW
COP Tj = 12°C	8.45	5.56
Pdh Tj = Tbiv	5.77 kW	5.08 kW
COP Tj = Tbiv	2.91	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.77 kW	5.08 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.09
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1195 kWh	1631 kWh

Colder Climate

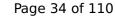
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
Low temperature	Medium temperature	
168 %	128 %	
5.27 kW	4.82 kW	
4.27	3.28	
	Low temperature 168 % 5.27 kW	



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This information was generated by the HP KEYMARK database on 22 Jun 202			
Tbiv	-16 °C	-15 °C	
TOL	-20 °C	-18 °C	
Pdh Tj = -7°C	3.20 kW	2.91 kW	
$COPTj = -7^{\circ}C$	3.17	2.72	
Pdh Tj = $+2$ °C	1.80 kW	1.91 kW	
COP Tj = +2°C	5.73	4.24	
Pdh Tj = $+7^{\circ}$ C	1.14 kW	2.15 kW	
$COPTj = +7^{\circ}C$	7.41	5.03	
Pdh Tj = 12°C	1.31 kW	2.61 kW	
COP Tj = 12°C	8.16	6.52	
Pdh Tj = Tbiv	4.45 kW	3.89 kW	
COP Tj = Tbiv	2.43	1.97	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.09 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.07	1.64	
WTOL	60 °C	60 °C	
Poff	22 W	22 W	
РТО	22 W	22 W	
PSB	22 W	22 W	
PCK	4 W	4 W	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	5.27 kW	4.82 kW	
	•	•	





Annual energy consumption Qhe	3040 kWh	3621 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.97

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	184 %	140 %
Prated	5.18 kW	4.20 kW
SCOP	4.68	3.57
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.67 kW	3.86 kW
COP Tj = -7°C	2.95	2.24
Pdh Tj = $+2$ °C	2.81 kW	2.38 kW
COP Tj = +2°C	4.26	3.66



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Pdh Tj = $+7^{\circ}$ C	1.84 kW	2.11 kW
COP Tj = +7°C	6.99	4.43
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.06	5.56
Pdh Tj = Tbiv	5.18 kW	4.20 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.18 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2289 kWh	2431 kWh



Model: Buderus Logatherm WLW196i-6 IRB

Configure model		
Model name	Buderus Logatherm WLW196i-6 IRB	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

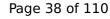
EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.29 kW	2.34 kW
El input	0.46 kW	0.87 kW
СОР	4.96	2.67

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 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	255 %	163 %
Prated	5.77 kW	5.08 kW
SCOP	6.45	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.77 kW	5.08 kW
$COP Tj = +2^{\circ}C$	2.91	2.09
Pdh Tj = $+7^{\circ}$ C	3.39 kW	3.55 kW
$COP Tj = +7^{\circ}C$	5.70	3.62
Pdh Tj = 12°C	1.79 kW	2.42 kW
COP Tj = 12°C	8.45	5.56
Pdh Tj = Tbiv	5.77 kW	5.08 kW
COP Tj = Tbiv	2.91	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.77 kW	5.08 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.09
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1195 kWh	1631 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	168 %	128 %
Prated	5.27 kW	4.82 kW
SCOP	4.27	3.28
SCOF	4.27	3.20



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This information was generated by the HP KEYMARK database on 22 Jun 2022

-16 °C -20 °C	-15 °C -18 °C
	-18 °C
3.20 kW	2.91 kW
3.17	2.72
1.80 kW	1.91 kW
5.73	4.24
1.14 kW	2.15 kW
7.41	5.03
1.31 kW	2.61 kW
8.16	6.52
4.45 kW	3.89 kW
2.43	1.97
3.50 kW	3.09 kW
2.07	1.64
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
4 W	4 W
n/a	n/a
0.00 kW	0.00 kW
	1.80 kW 5.73 1.14 kW 7.41 1.31 kW 8.16 4.45 kW 2.43 3.50 kW 2.07 60 °C 22 W 22 W 22 W 4 W n/a





Annual energy consumption Qhe	3040 kWh	3621 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.97

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	184 %	140 %
Prated	5.18 kW	4.20 kW
SCOP	4.68	3.57
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7° C	4.67 kW	3.86 kW
COP Tj = -7°C	2.95	2.24
Pdh Tj = $+2$ °C	2.81 kW	2.38 kW
COP Tj = +2°C	4.26	3.66



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	•	<u> </u>
Pdh Tj = +7°C	1.84 kW	2.11 kW
COP Tj = +7°C	6.99	4.43
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.06	5.56
Pdh Tj = Tbiv	5.18 kW	4.20 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.18 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2289 kWh	2431 kWh

Model: Buderus Logatherm WLW196i-6 IRT190

Configure model		
Model name	Buderus Logatherm WLW196i-6 IRT190	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	2.29 kW	2.34 kW	
El input	0.46 kW	0.87 kW	
СОР	4.96	2.67	

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

Warmer Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	48 dB(A)	48 dB(A)	
Sound power level outdoor	36 dB(A)	36 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	255 %	163 %	
Prated	5.77 kW	5.08 kW	
SCOP	6.45	4.16	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	5.77 kW	5.08 kW	
$COP Tj = +2^{\circ}C$	2.91	2.09	
Pdh Tj = $+7^{\circ}$ C	3.39 kW	3.55 kW	
$COP Tj = +7^{\circ}C$	5.70	3.62	
Pdh Tj = 12°C	1.79 kW	2.42 kW	
COP Tj = 12°C	8.45	5.56	
Pdh Tj = Tbiv	5.77 kW	5.08 kW	
COP Tj = Tbiv	2.91	2.09	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.77 kW	5.08 kW	





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.09
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1195 kWh	1631 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	48 dB(A)	48 dB(A)	
Sound power level outdoor	36 dB(A)	36 dB(A)	

EN 14825		
Low temperature	Medium temperature	
168 %	128 %	
5.27 kW	4.82 kW	
4.27	3.28	
	Low temperature 168 % 5.27 kW	



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This information was generated by the HP KEYMARK database on 22 Jun 2022

This information was gener	ated by the HP KETMA	RK database on 22 Jun 2022
Tbiv	-16 °C	-15 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.20 kW	2.91 kW
COP Tj = -7°C	3.17	2.72
Pdh Tj = +2°C	1.80 kW	1.91 kW
$COP Tj = +2^{\circ}C$	5.73	4.24
Pdh Tj = $+7^{\circ}$ C	1.14 kW	2.15 kW
$COP Tj = +7^{\circ}C$	7.41	5.03
Pdh Tj = 12°C	1.31 kW	2.61 kW
COP Tj = 12°C	8.16	6.52
Pdh Tj = Tbiv	4.45 kW	3.89 kW
COP Tj = Tbiv	2.43	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.09 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.07	1.64
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.27 kW	4.82 kW
		1



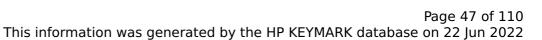


Annual energy consumption Qhe	3040 kWh	3621 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.97

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	48 dB(A)	48 dB(A)	
Sound power level outdoor	36 dB(A)	36 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	184 %	140 %
Prated	5.18 kW	4.20 kW
SCOP	4.68	3.57
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.67 kW	3.86 kW
COP Tj = -7°C	2.95	2.24
Pdh Tj = $+2$ °C	2.81 kW	2.38 kW
$COP Tj = +2^{\circ}C$	4.26	3.66



Pdh Tj = $+7^{\circ}$ C	1.84 kW	2.11 kW
$COP Tj = +7^{\circ}C$	6.99	4.43
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.06	5.56
Pdh Tj = Tbiv	5.18 kW	4.20 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.18 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2289 kWh	2431 kWh

Domestic Hot Water (DHW)

CEN heat pump KEYMARK

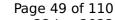
Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	119 %
СОР	2.80
Heating up time	02:31 h:min
Standby power input	45.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	271 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	97 %
СОР	2.26
Heating up time	04:04 h:min
Standby power input	64.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	271

Average Climate





EN 16147	
Declared load profile	L
Efficiency ηDHW	106 %
СОР	2.48
Heating up time	03:14 h:min
Standby power input	51.0 W
Reference hot water temperature	54.3 °C
Mixed water at 40°C	273 I

Model: Buderus Logatherm WLW196i-6 IRTS185

Configure model		
Model name Buderus Logatherm WLW196i-6 IRTS185		
Application Heating + DHW + low temp		
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.29 kW	2.34 kW
El input	0.46 kW	0.87 kW
СОР	4.96	2.67

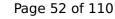
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	255 %	163 %
Prated	5.77 kW	5.08 kW
SCOP	6.45	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.77 kW	5.08 kW
$COPTj = +2^{\circ}C$	2.91	2.09
Pdh Tj = $+7$ °C	3.39 kW	3.55 kW
$COP Tj = +7^{\circ}C$	5.70	3.62
Pdh Tj = 12°C	1.79 kW	2.42 kW
COP Tj = 12°C	8.45	5.56
Pdh Tj = Tbiv	5.77 kW	5.08 kW
COP Tj = Tbiv	2.91	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.77 kW	5.08 kW



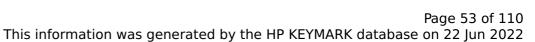


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.09
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1195 kWh	1631 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	168 %	128 %
Prated	5.27 kW	4.82 kW
SCOP	4.27	3.28





-16 °C -20 °C 3.20 kW 3.17 1.80 kW 5.73 1.14 kW	-15 °C -18 °C 2.91 kW 2.72 1.91 kW 4.24 2.15 kW
3.20 kW 3.17 1.80 kW 5.73 1.14 kW	2.91 kW 2.72 1.91 kW 4.24
3.17 1.80 kW 5.73 1.14 kW	2.72 1.91 kW 4.24
1.80 kW 5.73 1.14 kW	1.91 kW 4.24
5.73 1.14 kW	4.24
1.14 kW	
	2.15 kW
	1
7.41	5.03
1.31 kW	2.61 kW
8.16	6.52
4.45 kW	3.89 kW
2.43	1.97
3.50 kW	3.09 kW
2.07	1.64
60 °C	60 °C
22 W	22 W
22 W	22 W
22 W	22 W
4 W	4 W
Electricity	Electricity
5.27 kW	4.82 kW
	1.31 kW 8.16 4.45 kW 2.43 3.50 kW 2.07 60 °C 22 W 22 W 22 W 4 W Electricity





Annual energy consumption Qhe	3040 kWh	3621 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	1.97
COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.97

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	184 %	140 %
Prated	5.18 kW	4.20 kW
SCOP	4.68	3.57
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.67 kW	3.86 kW
COP Tj = -7°C	2.95	2.24
Pdh Tj = $+2$ °C	2.81 kW	2.38 kW
$COP Tj = +2^{\circ}C$	4.26	3.66



Pdh Tj = +7°C	1.84 kW	2.11 kW
$COP Tj = +7^{\circ}C$	6.99	4.43
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	8.06	5.56
Pdh Tj = Tbiv	5.18 kW	4.20 kW
COP Tj = Tbiv	2.64	1.89
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.18 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2289 kWh	2431 kWh

Domestic Hot Water (DHW)

Warmer Climate

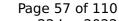


EN 16147	
Declared load profile	L
Efficiency ηDHW	109 %
СОР	2.58
Heating up time	02:34 h:min
Standby power input	47.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	257 l

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	95 %	
СОР	2.21	
Heating up time	04:09 h:min	
Standby power input	73.0 W	
Reference hot water temperature	51.8 °C	
Mixed water at 40°C	259 I	

Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	103 %	
СОР	2.43	
Heating up time	03:18 h:min	
Standby power input	53.0 W	
Reference hot water temperature	53.2 °C	
Mixed water at 40°C	263 I	

Model: Buderus Logatherm WLW196i.2-4 ARB S+

Configure model		
Model name Buderus Logatherm WLW196i.2-4 ARB S+		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.82 kW	1.78 kW
El input	0.56 kW	0.69 kW
СОР	5.01	2.57

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

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	240 %	163 %
Prated	5.50 kW	5.40 kW
SCOP	6.07	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	5.48 kW	5.40 kW
$COPTj = +2^{\circ}C$	3.03	2.10
Pdh Tj = $+7$ °C	3.81 kW	3.56 kW
$COPTj = +7^{\circ}C$	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.48 kW	5.40 kW





		-
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1211 kWh	1736 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
Low temperature	Medium temperature	
168 %	118 %	
4.30 kW	4.00 kW	
4.27	3.03	
	Low temperature 168 % 4.30 kW	



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This information was generated by the HP KEYMARK database on 22 Jun 2022

	· · · · · /	
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh Tj = -7 °C		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.14 kW	2.08 kW
$COPTj = +7^{\circ}C$	6.44	4.68
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.44 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.56
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W





PSB	17 W	17 W
PCK	o w	o w
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2482 kWh	3252 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL $<$ -20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	196 %	133 %
Prated	4.76 kW	4.49 kW
SCOP	4.98	3.40
Tbiv	-10 °C	-10 °C



CEN heat pump

Page 63 of 110 This information was generated by the HP KEYMARK database on 22 Jun 2022

Inis information was gener	ated by the HP KETMA	RK database on 22 Juli 2022
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.93 kW
COP Tj = -7°C	3.11	2.11
Pdh Tj = +2°C	2.51 kW	2.41 kW
COP Tj = +2°C	4.96	3.36
Pdh Tj = +7°C	1.51 kW	2.06 kW
$COPTj = +7^{\circ}C$	6.40	4.41
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	7.53	5.76
Pdh Tj = Tbiv	4.76 kW	4.49 kW
COP Tj = Tbiv	2.68	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.76 kW	4.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1975 kWh	2724 kWh



Model: Buderus Logatherm WLW196i.2-4 ARE S+

Configure model		
Model name	Buderus Logatherm WLW196i.2-4 ARE S+	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	2.82 kW	1.78 kW	
El input	0.56 kW	0.69 kW	
СОР	5.01	2.57	

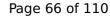
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	240 %	163 %
Prated	5.50 kW	5.40 kW
SCOP	6.07	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	5.48 kW	5.40 kW
$COPTj = +2^{\circ}C$	3.03	2.10
Pdh Tj = $+7$ °C	3.81 kW	3.56 kW
$COPTj = +7^{\circ}C$	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.48 kW	5.40 kW





		-
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1211 kWh	1736 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

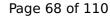
EN 14825		
	Low temperature	Medium temperature
η_{s}	168 %	118 %
Prated	4.30 kW	4.00 kW
SCOP	4.27	3.03



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This information was generated by the HP KEYMARK database on 22 Jun 2022

	· · · · · , · · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh Tj = -7 °C		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.14 kW	2.08 kW
$COP Tj = +7^{\circ}C$	6.44	4.68
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.44 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.56
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
		•



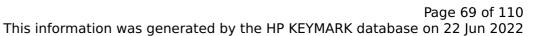


PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.30 kW	4.00 kW
Annual energy consumption Qhe	2482 kWh	3252 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.75	3.53
COP Tj = -15°C (if TOL $<$ -20°C)	2.29	1.64
Cdh Tj = -15 °C		

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
emperature Medium temperature		
133 %		
N 4.49 kW		
3.40		
-10 °C		





This information was generated by the HP KEYMARK database on 22 jun 202			
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	4.27 kW	3.93 kW	
COP Tj = -7°C	3.11	2.11	
Pdh Tj = +2°C	2.51 kW	2.41 kW	
COP Tj = +2°C	4.96	3.36	
Pdh Tj = +7°C	1.51 kW	2.06 kW	
$COP Tj = +7^{\circ}C$	6.40	4.41	
Pdh Tj = 12°C	1.27 kW	2.45 kW	
COP Tj = 12°C	7.53	5.76	
Pdh Tj = Tbiv	4.76 kW	4.49 kW	
COP Tj = Tbiv	2.68	1.82	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.76 kW	4.49 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82	
WTOL	60 °C	60 °C	
Poff	17 W	17 W	
PTO	22 W	22 W	
PSB	17 W	17 W	
PCK	o w	0 W	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	0.00 kW	0.00 kW	
Annual energy consumption Qhe	1975 kWh	2724 kWh	
	·	·	



Model: Buderus Logatherm WLW196i.2-4 ART190 S+

Configure model		
Model name Buderus Logatherm WLW196i.2-4 ART190 S+		
Application Heating + DHW + low temp		
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility Yes		
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.82 kW	1.78 kW
El input	0.56 kW	0.69 kW
СОР	5.01	2.57

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

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	240 %	163 %
Prated	5.50 kW	5.40 kW
SCOP	6.07	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.48 kW	5.40 kW
$COP Tj = +2^{\circ}C$	3.03	2.10
Pdh Tj = $+7^{\circ}$ C	3.81 kW	3.56 kW
$COP Tj = +7^{\circ}C$	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.48 kW	5.40 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1211 kWh	1736 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	168 %	118 %
Prated	4.30 kW	4.00 kW
SCOP	4.27	3.03
	·	



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Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh Tj = -7 °C		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.14 kW	2.08 kW
COP Tj = +7°C	6.44	4.68
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.44 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.56
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
	-	•





PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.30 kW	4.00 kW
Annual energy consumption Qhe	2482 kWh	3252 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.75	1.64
COP Tj = -15°C (if TOL $<$ -20°C)	2.29	1.64
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low te	emperature Medium temperatur
η_{S}	196 %	133 %
Prated	4.76 kW	V 4.49 kW
SCOP	4.98	3.40
Tbiv	-10 °C	-10 °C



This information was gener	ated by the HP KETMA	iRK database on 22 Jun 202
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.93 kW
$COP Tj = -7^{\circ}C$	3.11	2.11
Pdh Tj = +2°C	2.51 kW	2.41 kW
COP Tj = +2°C	4.96	3.36
Pdh Tj = $+7^{\circ}$ C	1.51 kW	2.06 kW
$COPTj = +7^{\circ}C$	6.40	4.41
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	7.53	5.76
Pdh Tj = Tbiv	4.76 kW	4.49 kW
COP Tj = Tbiv	2.68	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	4.76 kW	4.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1975 kWh	2724 kWh

CEN heat pump KEYMARK



Domestic Hot Water (DHW)

Warmer Climate

EN 16147		
Declared lead weefile		
Declared load profile	L	
Efficiency ηDHW	119 %	
СОР	2.80	
Heating up time	02:49 h:min	
Standby power input	47.0 W	
Reference hot water temperature	53.1 °C	
Mixed water at 40°C	261	

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	84 %	
СОР	1.96	
Heating up time	04:11 h:min	
Standby power input	66.0 W	
Reference hot water temperature	53.0 °C	
Mixed water at 40°C	279	



Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	100 %	
СОР	2.36	
Heating up time	03:34 h:min	
Standby power input	52.0 W	
Reference hot water temperature	53.5 °C	
Mixed water at 40°C	271	



Model: Buderus Logatherm WLW196i.2-4 ARTS185 S+

Configure model		
Model name Buderus Logatherm WLW196i.2-4 ARTS185 S+		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility Yes		
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.82 kW	1.78 kW
El input	0.56 kW	0.69 kW
СОР	5.01	2.57

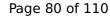
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	240 %	163 %
Prated	5.50 kW	5.40 kW
SCOP	6.07	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.48 kW	5.40 kW
$COPTj = +2^{\circ}C$	3.03	2.10
Pdh Tj = $+7$ °C	3.81 kW	3.56 kW
$COPTj = +7^{\circ}C$	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.48 kW	5.40 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1211 kWh	1736 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	25 dB(A)	25 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
Low temperature	Medium temperature	
168 %	118 %	
4.30 kW	4.00 kW	
4.27	3.03	
	Low temperature 168 % 4.30 kW	



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	· · · · · , · · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh Tj = -7 °C		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.14 kW	2.08 kW
$COP Tj = +7^{\circ}C$	6.44	4.68
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.44 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.56
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
		•





PSB	17 W	17 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.30 kW	4.00 kW
Annual energy consumption Qhe	2482 kWh	3252 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.75	1.64
COP Tj = -15°C (if TOL $<$ -20°C)	2.29	1.64
Cdh Tj = -15 °C		

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	25 dB(A)	25 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
emperature Medium temperature		
133 %		
N 4.49 kW		
3.40		
-10 °C		



This information was generated by the HP KEYMARK database on 22 jun 202.				
TOL	-10 °C	-10 °C		
Pdh Tj = -7°C	4.27 kW	3.93 kW		
COP Tj = -7°C	3.11	2.11		
Pdh Tj = +2°C	2.51 kW	2.41 kW		
COP Tj = +2°C	4.96	3.36		
Pdh Tj = +7°C	1.51 kW	2.06 kW		
$COP Tj = +7^{\circ}C$	6.40	4.41		
Pdh Tj = 12°C	1.27 kW	2.45 kW		
COP Tj = 12°C	7.53	5.76		
Pdh Tj = Tbiv	4.76 kW	4.49 kW		
COP Tj = Tbiv	2.68	1.82		
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.76 kW	4.49 kW		
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	1.82		
WTOL	60 °C	60 °C		
Poff	17 W	17 W		
РТО	22 W	22 W		
PSB	17 W	17 W		
PCK	0 W	0 W		
Supplementary Heater: Type of energy input	Electricity	Electricity		
Supplementary Heater: PSUP	0.00 kW	0.00 kW		
Annual energy consumption Qhe	1975 kWh	2724 kWh		

CEN heat pump KEYMARK



Domestic Hot Water (DHW)

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	110 %	
СОР	2.58	
Heating up time	02:45 h:min	
Standby power input	49.0 W	
Reference hot water temperature	51.7 °C	
Mixed water at 40°C	247	

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	80 %	
СОР	1.88	
Heating up time	04:05 h:min	
Standby power input	67.0 W	
Reference hot water temperature	51.7 °C	
Mixed water at 40°C	259 I	



Average Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	98 %	
СОР	2.31	
Heating up time	03:12 h:min	
Standby power input	54.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	261	

Model: Buderus Hybrid-Set WLW196i-6 A H

Configure model		
Model name	Buderus Hybrid-Set WLW196i-6 A H	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	No	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Heating

COP

EN 14511-2				
Low temperature Medium temperature				
Heat output	9.03 kW	7.41 kW		
El input	2.4 kW	2.82 kW		

2.62

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

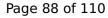
Warmer Climate

3.76



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	210 %	164 %
Prated	6.54 kW	6.10 kW
SCOP	5.31	4.16
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.54 kW	6.1 kW
COP Tj = +2°C	3.04	2.33
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = $+7^{\circ}$ C	4.02 kW	4.07 kW
$COP Tj = +7^{\circ}C$	5.03	3.47
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	1.77 kW	2.49 kW
COP Tj = 12°C	6.36	5.71
Cdh Tj = +12 °C	1.000	0.950





Pdh Tj = Tbiv	6.54 kW	6.1 kW
COP Tj = Tbiv	3.04	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.54 kW	6.1 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.33
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	6 W	6 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1645 kWh	1957 kWh

Colder Climate

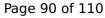
EN 12102-1 Low temperature Medium temperature Sound power level indoor 24 dB(A) 24 dB(A) Sound power level outdoor 47 dB(A) 47 dB(A)

EN 14825		
	Low temperature	Medium temperature
	*	•





This information was gener	ated by the HP KEYMA	RK database on 22 Jun 202
η_{S}	152 %	122 %
Prated	5.35 kW	5.29 kW
SCOP	3.87	3.13
Tbiv	-17 °C	-15 °C
TOL	-20 °C	-19 °C
Pdh Tj = -7° C	3.19 kW	3.21 kW
COP Tj = -7° C	3.32	2.52
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = $+2$ °C	1.18 kW	1.78 kW
$COP Tj = +2^{\circ}C$	4.59	3.71
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = $+7^{\circ}$ C	1.18 kW	2.13 kW
$COPTj = +7^{\circ}C$	5.00	5.01
Cdh Tj = $+7$ °C	1.000	0.950
Pdh Tj = 12°C	1.36 kW	2.58 kW
COP Tj = 12°C	6.19	6.89
Cdh Tj = +12 °C	0.900	0.940
Pdh Tj = Tbiv	4.39 kW	4.32 kW
COP Tj = Tbiv	2.31	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.07 kW	1.77 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.54





WTOL	62 °C	62 °C
Poff	7 W	7 W
РТО	6 W	6 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	1.28 kW	3.52 kW
Annual energy consumption Qhe	3405 kWh	4162 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL $<$ -20°C)		
Cdh Tj = -15 °C		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	169 %	133 %
		1



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		-
Prated	5.39 kW	6.25 kW
SCOP	4.31	3.4
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.55 kW	5.53 kW
$COP Tj = -7^{\circ}C$	2.96	2.02
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.63 kW	3.53 kW
COP Tj = +2°C	4.34	3.31
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = $+7^{\circ}$ C	1.75 kW	2.13 kW
$COP Tj = +7^{\circ}C$	5.24	4.55
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	1.36 kW	2.54 kW
COP Tj = 12°C	6.25	6.41
Cdh Tj = +12 °C	0.900	0.940
Pdh Tj = Tbiv	5.39 kW	5.53 kW
COP Tj = Tbiv	2.56	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.39 kW	4.61 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.93
WTOL	62 °C	62 °C
		,



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Poff	7 W	7 W
РТО	6 W	6 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0 kW	1.6 kW
Annual energy consumption Qhe	2586 kWh	3800 kWh

Model: Buderus Logatherm WLW196i-6 IRTP120

Configure model		
Model name Buderus Logatherm WLW196i-6 IRTP120		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.29 kW	2.34 kW
El input	0.49 kW	0.90 kW
СОР	4.69	2.59

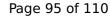
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	237 %	156 %
Prated	5.77 kW	5.08 kW
SCOP	6.00	3.98
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.77 kW	5.08 kW
COP Tj = +2°C	2.83	2.06
Pdh Tj = $+7$ °C	3.39 kW	3.55 kW
$COP Tj = +7^{\circ}C$	5.39	3.53
Pdh Tj = 12°C	1.79 kW	2.42 kW
COP Tj = 12°C	7.60	5.29
Pdh Tj = Tbiv	5.77 kW	5.08 kW
COP Tj = Tbiv	2.83	2.06
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.77 kW	5.08 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.06
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1285 kWh	1704 kWh

Colder Climate

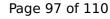
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	158 %	122 %
Prated	5.27 kW	4.82 kW
SCOP	4.03	3.14
	-	





This information was generated by the HP KEYMARK database on 22 Jun 2			
Tbiv	-16 °C	-16 °C	
TOL	-20 °C	-17 °C	
Pdh Tj = -7°C	3.20 kW	2.91 kW	
COP Tj = -7°C	3.07	2.66	
Pdh Tj = +2°C	1.80 kW	1.91 kW	
COP Tj = +2°C	5.33	4.05	
Pdh Tj = +7°C	1.14 kW	2.15 kW	
COP Tj = +7°C	6.53	4.79	
Pdh Tj = 12°C	1.31 kW	2.61 kW	
COP Tj = 12°C	7.20	6.16	
Pdh Tj = Tbiv	4.45 kW	3.93 kW	
COP Tj = Tbiv	2.38	1.73	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.50 kW	3.09 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.03	1.62	
WTOL	60 °C	60 °C	
Poff	22 W	22 W	
РТО	22 W	22 W	
PSB	22 W	22 W	
PCK	0 W	o w	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	5.27 kW	4.82 kW	





Annual energy consumption Qhe	3222 kWh	3787 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	3.89
COP Tj = -15°C (if TOL $<$ -20°C)	2.38	1.94

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	173 %	134 %
Prated	5.17 kW	4.20 kW
SCOP	4.41	3.44
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.67 kW	3.86 kW
COP Tj = -7°C	2.87	2.21
Pdh Tj = $+2$ °C	2.81 kW	2.38 kW
$COP Tj = +2^{\circ}C$	5.33	3.56



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Pdh Tj = +7°C	1.84 kW	2.11 kW
COP Tj = +7°C	6.40	4.26
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	7.13	5.35
Pdh Tj = Tbiv	5.18 kW	4.20 kW
COP Tj = Tbiv	2.58	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.18 kW	4.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.88
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2421 kWh	2525 kWh

Model: Buderus Logatherm WLW196i-6 ARTP120

Configure model		
Model name	Buderus Logatherm WLW196i-6 ARTP120	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.28 kW	2.40 kW
El input	0.46 kW	0.90 kW
СОР	4.96	2.68

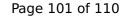
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Warmer Climate



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	49 dB(A)	49 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	241 %	167 %
Prated	6.27 kW	5.60 kW
SCOP	6.11	4.25
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	6.27 kW	5.60 kW
$COP Tj = +2^{\circ}C$	2.95	2.16
Pdh Tj = $+7^{\circ}$ C	4.09 kW	3.77 kW
$COP Tj = +7^{\circ}C$	5.41	3.76
Pdh Tj = 12°C	1.79 kW	2.54 kW
COP Tj = 12°C	7.85	5.64
Pdh Tj = Tbiv	6.27 kW	5.60 kW
COP Tj = Tbiv	2.95	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.27 kW	5.60 kW



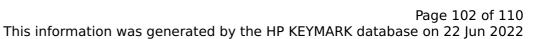


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.95	2.16
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1371 kWh	1762 kWh

Colder Climate

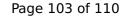
EN 12102-1			
Low temperature Medium temperature			
Sound power level indoor	49 dB(A)	49 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
Low temperature	Medium temperature	
167 %	125 %	
5.11 kW	4.82 kW	
4.26	3.20	
	Low temperature 167 % 5.11 kW	





inis inistination was gener	racea by the in Reinin	in the database on 22 jan 202
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-19 °C
Pdh Tj = -7°C	3.20 kW	3.01 kW
$COP Tj = -7^{\circ}C$	3.49	2.66
Pdh Tj = $+2$ °C	1.80 kW	1.91 kW
COP Tj = +2°C	5.32	4.05
Pdh Tj = $+7^{\circ}$ C	1.19 kW	2.15 kW
$COP Tj = +7^{\circ}C$	6.54	4.78
Pdh Tj = 12°C	1.31 kW	2.61 kW
COP Tj = 12°C	7.19	6.16
Pdh Tj = Tbiv	4.45 kW	4.20 kW
COP Tj = Tbiv	2.38	1.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.07 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.20	1.62
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.11 kW	4.82 kW
	1	





Annual energy consumption Qhe	2956 kWh	3715 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.15	3.89
COP Tj = -15°C (if TOL<-20°C)	2.62	1.94

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	189 %	137 %
Prated	5.43 kW	4.56 kW
SCOP	4.81	3.50
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.90 kW	4.26 kW
COP Tj = -7°C	2.99	2.21
Pdh Tj = $+2$ °C	2.92 kW	2.57 kW
COP Tj = +2°C	4.74	3.55



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Pdh Tj = $+7^{\circ}$ C	1.84 kW	2.11 kW
$COP Tj = +7^{\circ}C$	6.41	4.47
Pdh Tj = 12°C	1.33 kW	2.56 kW
COP Tj = 12°C	7.37	5.82
Pdh Tj = Tbiv	5.43 kW	4.56 kW
COP Tj = Tbiv	2.58	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.43 kW	4.56 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.87
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2335 kWh	2689 kWh



Model: Buderus Logatherm WLW196i.2-4 ARTP120 S+

Configure model		
Model name Buderus Logatherm WLW196i.2-4 ARTP120 S+		
Application Heating (medium temp)		
Units Indoor + Outdoor		
Climate Zone Colder Climate + Warmer Climate		
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply 3x400V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	2.82 kW	1.78 kW	
El input	0.59 kW	0.71 kW	
СОР	4.76	2.49	

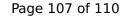
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	223 %	158 %
Prated	5.50 kW	5.40 kW
SCOP	5.65	4.01
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	5.48 kW	5.40 kW
$COPTj = +2^{\circ}C$	2.93	2.07
Pdh Tj = $+7$ °C	3.81 kW	3.56 kW
$COPTj = +7^{\circ}C$	4.91	3.48
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	7.26	5.26
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	2.93	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.48 kW	5.40 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.93	2.07
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1301 kWh	1797 kWh

Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	49 dB(A)	49 dB(A)	
Sound power level outdoor	50 dB(A)	50 dB(A)	

EN 14825		
Low temperature	Medium temperature	
157 %	113 %	
4.30 kW	4.00 kW	
4.00	2.90	
	157 % 4.30 kW	



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Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.50	2.46
Pdh Tj = $+2$ °C	1.49 kW	1.80 kW
$COP Tj = +2^{\circ}C$	4.84	3.65
Pdh Tj = $+7^{\circ}$ C	1.14 kW	2.08 kW
$COP Tj = +7^{\circ}C$	5.73	4.46
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	6.26	5.71
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.24	1.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.44 kW	3.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.07	1.54
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity





Annual energy consumption Qhe	2650 kWh	3405 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.75	3.53
COP Tj = -15°C (if TOL $<$ -20°C)	2.24	1.62

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	183 %	127 %
Prated	4.76 kW	4.49 kW
SCOP	4.66	3.26
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.94 kW
COP Tj = -7°C	3.02	2.08
Pdh Tj = $+2$ °C	2.51 kW	2.41 kW
COP Tj = +2°C	4.70	3.26



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Pdh Tj = $+7^{\circ}$ C	1.51 kW	2.06 kW
$COP Tj = +7^{\circ}C$	5.85	4.21
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	6.67	5.47
Pdh Tj = Tbiv	4.76 kW	4.49 kW
COP Tj = Tbiv	2.62	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.76 kW	4.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.80
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2112 kWh	2843 kWh