

CERTIFICATE

Certificate holder

Bosch Thermotechnik GmbH

Sophienstr. 30-32 35576 Wetzlar

GERMANY

Production facility

Aveiro, Tranas

Product

Air/Water Heat pumps

Type, Model

Buderus Logatherm WLW196i-14 AR and IR

Testing basis

DIN EN 14511-1; DIN EN 14511-2; DIN EN 14511-3; DIN EN 14511-4:2019-07

DIN EN 14825:2019-07 DIN EN 12102-1:2018-02 DIN EN 16147:2017-08

European KEYMARK Scheme for Heat Pumps Rev. 8 (2020-09)

Mark of conformity



Registration No.

011-1W0131

Valid until

2027-07-31

Right of use

This certificate entitles the holder to use the mark of conformity shown above in conjunction with the specified registration number.

See annex for further information.



2021-05-17

Dipl.-Wi.-Ing. (FH) Sören Scholz Head of Certification Body







ANNEX

Page 1 of 1

Certificate

011-1W0131 dated 2021-05-17

Technical Data

See Heat Pump KEYMARK database for detailed information

Testing laboratory/ **Inspection body**

RISE Research Institutes of Sweden AB PO Box 857 501 15 Boras **SWEDEN**

Test report(s)

3P06665-02 dated 2014-06-30





	Buderus Logatherm WLW196i-14 AR and IR	Reg. No.	011-1W0131		
Certificate Holder	Certificate Holder				
	Bosch Thermotechnik GmbH (Buderus)				
	Sophienstraße 30-32		35576		
	Wetzlar		Germany		
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH				
Subtype title	Buderus Logatherm WLW196i-14 AR and IR				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R410A				
Mass of Refrigerant	4 kg				
Certification Date	18.07.2017				
Testing basis	HP KEYMARK certification scheme rules rev. 8				

Model: Buderus Logatherm WLW196i-14 ARE

Configure model		
Model name	Buderus Logatherm WLW196i-14 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

CEN heat pump

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	5.63 kW	4.48 kW	
El input	1.16 kW	1.63 kW	
СОР	4.87	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	41 dB(A)	41 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	242 %	170 %	
Prated	14.30 kW	12.50 kW	
SCOP	6.13	4.34	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = $+2$ °C	14.59 kW	12.49 kW	
$COPTj = +2^{\circ}C$	2.85	2.18	
Pdh Tj = $+7^{\circ}$ C	8.92 kW	8.08 kW	
$COPTj = +7^{\circ}C$	5.37	3.81	
Pdh Tj = 12°C	4.16 kW	5.99 kW	
COP Tj = 12°C	8.00	5.61	
Pdh Tj = Tbiv	14.59 kW	12.49 kW	
COP Tj = Tbiv	2.85	2.18	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.59 kW	12.49 kW	





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.18
WTOL	60 °C	60 °C
Poff	24 W	24 W
PTO	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3115 kWh	3852 kWh

Colder Climate

EN 12102-1				
Low temperature Medium temperature				
Sound power level indoor	41 dB(A)	41 dB(A)		
Sound power level outdoor 53 dB(A) 53 dB(A)				

EN 14825		
	Low temperature	Medium temperature
η_{s}	161 %	123 %
Prated	10.00 kW	9.10 kW
SCOP	4.11	3.15





	ted by the HE KLIMAN	ik database on 25 Teb 2025
Tbiv	-19 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	6.20 kW	5.60 kW
$COP Tj = -7^{\circ}C$	3.71	2.68
Pdh Tj = +2°C	4.91 kW	4.40 kW
COP Tj = +2°C	4.64	3.86
Pdh Tj = $+7^{\circ}$ C	5.34 kW	5.07 kW
$COPTj = +7^{\circ}C$	6.14	4.76
Pdh Tj = 12°C	6.28 kW	6.00 kW
COP Tj = 12°C	7.41	6.23
Pdh Tj = Tbiv	9.25 kW	7.90 kW
COP Tj = Tbiv	2.21	1.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	7.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.65
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.10 kW





Annual energy consumption Qhe	6000 kWh	7117 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.92	1.96
COP Tj = -15°C (if TOL $<$ -20°C)	2.66	1.96

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	191 %	141 %
Prated	12.00 kW	10.00 kW
SCOP	4.84	3.61
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.36 kW	9.51 kW
COP Tj = -7°C	2.87	2.25
Pdh Tj = +2°C	6.84 kW	5.60 kW
COP Tj = +2°C	4.84	3.64



This information was generated by the HF KETMAKK database on 25 feb 2025			
Pdh Tj = +7°C	4.21 kW	5.07 kW	
COP Tj = +7°C	6.41	4.49	
Pdh Tj = 12°C	3.03 kW	6.01 kW	
COP Tj = 12°C	7.31	5.79	
Pdh Tj = Tbiv	12.26 kW	10.11 kW	
COP Tj = Tbiv	2.43	1.90	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.26 kW	10.11 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	1.90	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00	
WTOL	60 °C	60 °C	
Poff	24 W	24 W	
PTO	41 W	41 W	
PSB	24 W	24 W	
PCK	11 W	11 W	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	0.00 kW	0.00 kW	
Annual energy consumption Qhe	5117 kWh	5721 kWh	



Model: Buderus Logatherm WLW196i-14 ARB

Configure model		
Model name Buderus Logatherm WLW196i-14 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	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.63 kW	4.48 kW
El input	1.16 kW	1.63 kW
СОР	4.87	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	



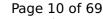
Sound power level outdoor

This information was generated by the HP KEYMARK database on 25 Feb 2023 EN 12102-1 Low temperature Medium temperature Sound power level indoor 41 dB(A) 41 dB(A)

53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	242 %	170 %
Prated	14.30 kW	12.50 kW
SCOP	6.13	4.34
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.59 kW	12.49 kW
COP Tj = +2°C	2.85	2.18
Pdh Tj = +7°C	8.92 kW	8.08 kW
$COP Tj = +7^{\circ}C$	5.37	3.81
Pdh Tj = 12°C	4.16 kW	5.99 kW
COP Tj = 12°C	8.00	5.61
Pdh Tj = Tbiv	14.59 kW	12.49 kW
COP Tj = Tbiv	2.85	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.59 kW	12.49 kW

53 dB(A)



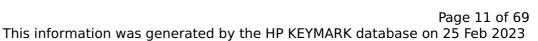


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.18
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3115 kWh	3852 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
Low temperature	Medium temperature	
161 %	123 %	
10.00 kW	9.10 kW	
4.11	3.15	
	Low temperature 161 % 10.00 kW	



Tbiv	-19 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	6.20 kW	5.60 kW
COP Tj = -7°C	3.71	2.68
Pdh Tj = +2°C	4.91 kW	4.40 kW
COP Tj = +2°C	4.64	3.86
Pdh Tj = +7°C	5.34 kW	5.07 kW
COP Tj = +7°C	6.14	4.76
Pdh Tj = 12°C	6.28 kW	6.00 kW
COP Tj = 12°C	7.41	6.23
Pdh Tj = Tbiv	9.25 kW	7.90 kW
COP Tj = Tbiv	2.21	1.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	7.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.65
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
РСК	11 W	11 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
		1





Annual energy consumption Qhe	6000 kWh	7117 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.92	1.96
COP Tj = -15°C (if TOL $<$ -20°C)	2.66	1.96

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	53 dB(A)	53 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	191 %	141 %
Prated	12.00 kW	10.00 kW
SCOP	4.84	3.61
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.36 kW	9.51 kW
COP Tj = -7°C	2.87	2.25
Pdh Tj = $+2$ °C	6.84 kW	5.60 kW
$COP Tj = +2^{\circ}C$	4.84	3.64



Pdh Tj = $+7$ °C	4.21 kW	5.07 kW
$COPTj = +7^{\circ}C$	6.41	4.49
Pdh Tj = 12°C	3.03 kW	6.01 kW
COP Tj = 12°C	7.31	5.79
Pdh Tj = Tbiv	12.26 kW	10.11 kW
COP Tj = Tbiv	2.43	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.26 kW	10.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
РСК	11 W	11 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5117 kWh	5721 kWh

Model: Buderus Logatherm WLW196i-14 ART190

Configure model		
Model name	Buderus Logatherm WLW196i-14 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

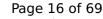
EN 14511-2			
Low temperature Medium temperature			
Heat output	5.63 kW	4.48 kW	
El input	1.16 kW	1.63 kW	
СОР	4.87	2.75	

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	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	242 %	170 %
Prated	14.30 kW	12.50 kW
SCOP	6.13	4.34
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	14.59 kW	12.49 kW
$COPTj = +2^{\circ}C$	2.85	2.18
Pdh Tj = $+7$ °C	8.92 kW	8.08 kW
$COPTj = +7^{\circ}C$	5.37	3.81
Pdh Tj = 12°C	4.16 kW	5.99 kW
COP Tj = 12°C	8.00	5.61
Pdh Tj = Tbiv	14.59 kW	12.49 kW
COP Tj = Tbiv	2.85	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.59 kW	12.49 kW



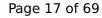


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.18
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3115 kWh	3852 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825	
Low temperature	Medium temperature
161 %	123 %
10.00 kW	9.10 kW
4.11	3.15
	Low temperature 161 % 10.00 kW





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Tbiv	-19 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	6.20 kW	5.60 kW
$COP Tj = -7^{\circ}C$	3.71	2.68
Pdh Tj = $+2$ °C	4.91 kW	4.40 kW
COP Tj = +2°C	4.64	3.86
Pdh Tj = +7°C	5.34 kW	5.07 kW
COP Tj = +7°C	6.14	4.76
Pdh Tj = 12°C	6.28 kW	6.00 kW
COP Tj = 12°C	7.41	6.23
Pdh Tj = Tbiv	9.25 kW	7.90 kW
COP Tj = Tbiv	2.21	1.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	7.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.65
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
РСК	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.10 kW





Annual energy consumption Qhe	6000 kWh	7117 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.92	1.96
COP Tj = -15°C (if TOL $<$ -20°C)	2.66	1.96

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	191 %	141 %
Prated	12.00 kW	10.00 kW
SCOP	4.84	3.61
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.36 kW	9.51 kW
COP Tj = -7°C	2.87	2.25
Pdh Tj = $+2$ °C	6.84 kW	5.60 kW
$COP Tj = +2^{\circ}C$	4.84	3.64





This information was generated by the HP KEYMARK database on 25 Fe	b 2023

Pdh Tj = $+7$ °C	4.21 kW	5.07 kW
$COP Tj = +7^{\circ}C$	6.41	4.49
Pdh Tj = 12°C	3.03 kW	6.01 kW
COP Tj = 12°C	7.31	5.79
Pdh Tj = Tbiv	12.26 kW	10.11 kW
COP Tj = Tbiv	2.43	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.26 kW	10.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5117 kWh	5721 kWh

Domestic Hot Water (DHW)

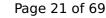


EN 16147	
Declared load profile	L
Efficiency ηDHW	107 %
СОР	2.49
Heating up time	01:57 h:min
Standby power input	58.5 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	266 I

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	78 %
СОР	1.82
Heating up time	02:48 h:min
Standby power input	80.7 W
Reference hot water temperature	53.5 °C
Mixed water at 40°C	272

Average Climate





EN 16147	
Declared load profile	L
Efficiency ηDHW	91 %
СОР	2.12
Heating up time	02:24 h:min
Standby power input	64.3 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	269 I



Model: Buderus Logatherm WLW196i-14 ARTS185

Configure model		
Model name Buderus Logatherm WLW196i-14 ARTS185		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Colder Climate + Warmer Climate		
Reversibility Yes		
Cooling mode application (optional)	n/a	

General Data		
Power supply	3x400V 50Hz	

Heating

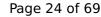
EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.63 kW	4.48 kW
El input	1.16 kW	1.63 kW
СОР	4.87	2.75

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	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	242 %	170 %
Prated	14.30 kW	12.50 kW
SCOP	6.13	4.34
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	14.59 kW	12.49 kW
$COPTj = +2^{\circ}C$	2.85	2.18
Pdh Tj = $+7$ °C	8.92 kW	8.08 kW
$COPTj = +7^{\circ}C$	5.37	3.81
Pdh Tj = 12°C	4.16 kW	5.99 kW
COP Tj = 12°C	8.00	5.61
Pdh Tj = Tbiv	14.59 kW	12.49 kW
COP Tj = Tbiv	2.85	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.59 kW	12.49 kW



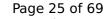


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	2.18
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3115 kWh	3852 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	161 %	123 %
Prated	10.00 kW	9.10 kW
SCOP	4.11	3.15





		K database on 25 Teb 2023
Tbiv	-19 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	6.20 kW	5.60 kW
$COP Tj = -7^{\circ}C$	3.71	2.68
Pdh Tj = +2°C	4.91 kW	4.40 kW
COP Tj = +2°C	4.64	3.86
Pdh Tj = $+7$ °C	5.34 kW	5.07 kW
$COP Tj = +7^{\circ}C$	6.14	4.76
Pdh Tj = 12°C	6.28 kW	6.00 kW
COP Tj = 12°C	7.41	6.23
Pdh Tj = Tbiv	9.25 kW	7.90 kW
COP Tj = Tbiv	2.21	1.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	7.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.65
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.10 kW
	•	



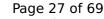


Annual energy consumption Qhe	6000 kWh	7117 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.92	1.96
COP Tj = -15°C (if TOL $<$ -20°C)	2.66	1.96

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	191 %	141 %
Prated	12.00 kW	10.00 kW
SCOP	4.84	3.61
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.36 kW	9.51 kW
COP Tj = -7°C	2.87	2.25
Pdh Tj = +2°C	6.84 kW	5.60 kW
COP Tj = +2°C	4.84	3.64





The machine general		
Pdh Tj = +7°C	4.21 kW	5.07 kW
COP Tj = +7°C	6.41	4.49
Pdh Tj = 12°C	3.03 kW	6.01 kW
COP Tj = 12°C	7.31	5.79
Pdh Tj = Tbiv	12.26 kW	10.11 kW
COP Tj = Tbiv	2.43	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.26 kW	10.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5117 kWh	5721 kWh
Annual energy consumption Qhe	5117 kWh	5721 kWh

Domestic Hot Water (DHW)

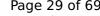


EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.30	
Heating up time	01:59 h:min	
Standby power input	61.0 W	
Reference hot water temperature	51.4 °C	
Mixed water at 40°C	252 I	

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	77 %	
СОР	1.78	
Heating up time	02:51 h:min	
Standby power input	92.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	260	

Average Climate





 $$\operatorname{\textit{Page}}\xspace$ 29 of 69 This information was generated by the HP KEYMARK database on 25 Feb 2023

EN 16147		
Declared load profile	L	
Efficiency ηDHW	89 %	
СОР	2.08	
Heating up time	02:27 h:min	
Standby power input	67.0 W	
Reference hot water temperature	51.8 °C	
Mixed water at 40°C	259 I	



Model: Buderus Logatherm WLW196i-14 IRE

Configure model		
Model name	Buderus Logatherm WLW196i-14 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

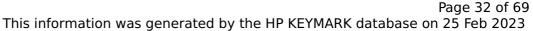
EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.08 kW	4.10 kW
El input	1.04 kW	1.63 kW
СОР	4.90	2.51

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	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	242 %	166 %
Prated	13.44 kW	12.41 kW
SCOP	6.12	4.23
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	13.44 kW	12.41 kW
$COPTj = +2^{\circ}C$	2.86	2.21
Pdh Tj = $+7$ °C	8.54 kW	8.58 kW
$COPTj = +7^{\circ}C$	5.31	3.64
Pdh Tj = 12°C	4.07 kW	5.86 kW
COP Tj = 12°C	7.94	5.48
Pdh Tj = Tbiv	13.44 kW	12.41 kW
COP Tj = Tbiv	2.86	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.44 kW	12.41 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh 2.86 2.21 60 °C 60 °C WTOL Poff 22 W 22 W PTO 23 W 23 W **PSB** 22 W 22 W **PCK** 0 W 0 W Supplementary Heater: Type of energy input Electricity Electricity

0.00 kW

2931 kWh

0.00 kW

3916 kWh

Colder Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

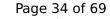
EN 14825		
Low temperature	Medium temperature	
170 %	123 %	
10.00 kW	9.40 kW	
4.33	3.16	
	Low temperature 170 % 10.00 kW	



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This information was generated by the HP KEYMARK database on 25 Feb 2023

This information was genera	ted by the HI KETMAN	in database on 25 reb 2023
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	6.09 kW	5.63 kW
$COP Tj = -7^{\circ}C$	3.68	2.71
Pdh Tj = $+2$ °C	3.66 kW	4.40 kW
COP Tj = +2°C	5.48	3.89
Pdh Tj = $+7^{\circ}$ C	2.70 kW	5.06 kW
$COP Tj = +7^{\circ}C$	6.48	4.75
Pdh Tj = 12°C	6.23 kW	5.98 kW
COP Tj = 12°C	7.42	5.99
Pdh Tj = Tbiv	8.29 kW	8.23 kW
COP Tj = Tbiv	2.52	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.64 kW	8.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.80
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.40 kW



2.01



This information was generated by the HP KEYMARK database on 25 Feb 2023		
Annual energy consumption Qhe	5697 kWh	7343 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.01	2.01

2.72

Average Climate

COP Tj = -15°C (if TOL<-20°C)

EN 12102-1				
	Low temperature	Medium temperature		
Sound power level indoor	51 dB(A)	51 dB(A)		
Sound power level outdoor	37 dB(A)	37 dB(A)		

EN 14825			
	Low temperature	Medium temperature	
η_{s}	194 %	140 %	
Prated	12.13 kW	10.00 kW	
SCOP	4.92	3.56	
Tbiv	-10 °C	-10 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	10.89 kW	8.44 kW	
COP Tj = -7°C	2.98	2.25	
Pdh Tj = +2°C	6.78 kW	5.45 kW	
COP Tj = +2°C	4.91	3.56	



	<u> </u>	
Pdh Tj = +7°C	4.05 kW	4.98 kW
$COP Tj = +7^{\circ}C$	6.33	4.44
Pdh Tj = 12°C	3.00 kW	5.93 kW
COP Tj = 12°C	7.60	5.76
Pdh Tj = Tbiv	12.13 kW	10.00 kW
COP Tj = Tbiv	2.56	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.13 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.88
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	23 W	23 W
PSB	22 W	22 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	5090 kWh	5794 kWh



Model: Buderus Logatherm WLW196i-14 IRB

Configure model		
Model name Buderus Logatherm WLW196i-14 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	3x400V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.08 kW	4.10 kW
El input	1.04 kW	1.63 kW
СОР	4.90	2.51

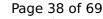
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	242 %	166 %
Prated	13.44 kW	12.41 kW
SCOP	6.12	4.23
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	13.44 kW	12.41 kW
$COPTj = +2^{\circ}C$	2.86	2.21
Pdh Tj = $+7$ °C	8.54 kW	8.58 kW
$COPTj = +7^{\circ}C$	5.31	3.64
Pdh Tj = 12°C	4.07 kW	5.86 kW
COP Tj = 12°C	7.94	5.48
Pdh Tj = Tbiv	13.44 kW	12.41 kW
COP Tj = Tbiv	2.86	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.44 kW	12.41 kW



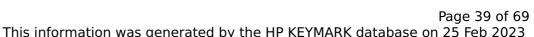


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.21
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2931 kWh	3916 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
Low temperature	Medium temperature	
170 %	123 %	
10.00 kW	9.40 kW	
4.33	3.16	
	Low temperature 170 % 10.00 kW	



This information was generated by the HP KEYMARK database on 25 Feb 2023			
Tbiv	-17 °C	-17 °C	
TOL	-18 °C	-17 °C	
Pdh Tj = -7°C	6.09 kW	5.63 kW	
COP Tj = -7°C	3.68	2.71	
Pdh Tj = +2°C	3.66 kW	4.40 kW	
COP Tj = +2°C	5.48	3.89	
Pdh Tj = +7°C	2.70 kW	5.06 kW	
$COP Tj = +7^{\circ}C$	6.48	4.75	
Pdh Tj = 12°C	6.23 kW	5.98 kW	
COP Tj = 12°C	7.42	5.99	
Pdh Tj = Tbiv	8.29 kW	8.23 kW	
COP Tj = Tbiv	2.52	1.80	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.64 kW	8.23 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.80	
WTOL	60 °C	60 °C	
Poff	22 W	22 W	
РТО	23 W	23 W	
PSB	22 W	22 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	

CEN heat pump





Annual energy consumption Qhe	5697 kWh	7343 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.01	2.01
COP Tj = -15°C (if TOL $<$ -20°C)	2.72	2.01

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825			
	Low temperature	Medium temperature	
η_{S}	194 %	140 %	
Prated	12.13 kW	10.00 kW	
SCOP	4.92	3.56	
Tbiv	-10 °C	-10 °C	
TOL	-10 °C	-10 °C	
Pdh Tj = -7°C	10.89 kW	8.44 kW	
COP Tj = -7°C	2.98	2.25	
Pdh Tj = $+2$ °C	6.78 kW	5.45 kW	
$COP Tj = +2^{\circ}C$	4.91	3.56	



Pdh Tj = $+7$ °C	4.05 kW	4.98 kW
$COP Tj = +7^{\circ}C$	6.33	4.44
Pdh Tj = 12°C	3.00 kW	5.93 kW
COP Tj = 12°C	7.60	5.76
Pdh Tj = Tbiv	12.13 kW	10.00 kW
COP Tj = Tbiv	2.56	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.13 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.88
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	23 W	23 W
PSB	22 W	22 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	5090 kWh	5794 kWh

Model: Buderus Logatherm WLW196i-14 IRT190

Configure model	
Model name	Buderus Logatherm WLW196i-14 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	5.08 kW	4.10 kW
El input	1.04 kW	1.63 kW
СОР	4.90	2.51

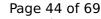
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825				
Low temperature Medium tempera				
η_{s}	242 %	166 %		
Prated	13.44 kW	12.41 kW		
SCOP	6.12	4.23		
Tbiv	2 °C	2 °C		
TOL	2 °C	2 °C		
Pdh Tj = +2°C	13.44 kW	12.41 kW		
$COPTj = +2^{\circ}C$	2.86	2.21		
Pdh Tj = +7°C	8.54 kW	8.58 kW		
$COP Tj = +7^{\circ}C$	5.31	3.64		
Pdh Tj = 12°C	4.07 kW	5.86 kW		
COP Tj = 12°C	7.94	5.48		
Pdh Tj = Tbiv	13.44 kW	12.41 kW		
COP Tj = Tbiv	2.86	2.21		
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.44 kW	12.41 kW		



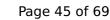


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.21
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2931 kWh	3916 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
emperature Medium to	emperature	
123 %		
kW 9.40 kW		
3.16		
	3.16	





This information was general	ed by the HERLIMAN	IN database on 25 Teb 2025
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	6.09 kW	5.63 kW
$COP Tj = -7^{\circ}C$	3.68	2.71
Pdh Tj = $+2$ °C	3.66 kW	4.40 kW
$COPTj = +2^{\circ}C$	5.48	3.89
Pdh Tj = $+7^{\circ}$ C	2.70 kW	5.06 kW
$COPTj = +7^{\circ}C$	6.48	4.75
Pdh Tj = 12°C	6.23 kW	5.98 kW
COP Tj = 12°C	7.42	5.99
Pdh Tj = Tbiv	8.29 kW	8.23 kW
COP Tj = Tbiv	2.52	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.64 kW	8.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.80
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	0 W	o w
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.40 kW
	'	



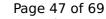


Annual energy consumption Qhe	5697 kWh	7343 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.01	2.01
COP Tj = -15°C (if TOL $<$ -20°C)	2.72	2.01

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	194 %	140 %
Prated	12.13 kW	10.00 kW
SCOP	4.92	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.89 kW	8.44 kW
COP Tj = -7°C	2.98	2.25
Pdh Tj = +2°C	6.78 kW	5.45 kW
COP Tj = +2°C	4.91	3.56





· · · · · · · · · · · · · · · · · · ·	in database on 25 reb 2025
4.05 kW	4.98 kW
6.33	4.44
3.00 kW	5.93 kW
7.60	5.76
12.13 kW	10.00 kW
2.56	1.88
12.13 kW	10.00 kW
2.56	1.88
1.00	1.00
60 °C	60 °C
22 W	22 W
23 W	23 W
22 W	22 W
0 W	0 W
Electricity	Electricity
0.00 kW	0.00 kW
5090 kWh	5794 kWh
	4.05 kW 6.33 3.00 kW 7.60 12.13 kW 2.56 12.13 kW 2.56 1.00 60 °C 22 W 23 W 22 W 0 W Electricity 0.00 kW

Domestic Hot Water (DHW)

Warmer Climate



EN 16147		
Declared load profile	L	
Efficiency ηDHW	107 %	
СОР	2.49	
Heating up time	01:57 h:min	
Standby power input	59.0 W	
Reference hot water temperature	52.8 °C	
Mixed water at 40°C	266 I	
Times nate at 10 0	200.	

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	78 %	
СОР	1.82	
Heating up time	02:48 h:min	
Standby power input	81.0 W	
Reference hot water temperature	53.5 °C	
Mixed water at 40°C	272	

Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	91 %	
СОР	2.12	
Heating up time	02:24 h:min	
Standby power input	54.0 W	
Reference hot water temperature	52.9 °C	
Mixed water at 40°C	269 I	



Model: Buderus Logatherm WLW196i-14 IRTS185

Configure model		
Model name	Buderus Logatherm WLW196i-14 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	5.08 kW	4.10 kW
El input	1.04 kW	1.63 kW
СОР	4.90	2.51

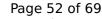
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Warmer Climate



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	242 %	166 %
Prated	13.44 kW	12.41 kW
SCOP	6.12	4.23
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	13.44 kW	12.41 kW
$COPTj = +2^{\circ}C$	2.86	2.21
Pdh Tj = $+7$ °C	8.54 kW	8.58 kW
$COPTj = +7^{\circ}C$	5.31	3.64
Pdh Tj = 12°C	4.07 kW	5.86 kW
COP Tj = 12°C	7.94	5.48
Pdh Tj = Tbiv	13.44 kW	12.41 kW
COP Tj = Tbiv	2.86	2.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.44 kW	12.41 kW



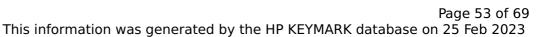


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.21
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	23 W	23 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2931 kWh	3916 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
Low temperature	Medium temperature	
170 %	123 %	
10.00 kW	9.40 kW	
4.33	3.16	
	Low temperature 170 % 10.00 kW	





This information was genera	ted by the HI KETMAN	in database on 25 reb 2023
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	6.09 kW	5.63 kW
$COP Tj = -7^{\circ}C$	3.68	2.71
Pdh Tj = $+2$ °C	3.66 kW	4.40 kW
COP Tj = +2°C	5.48	3.89
Pdh Tj = $+7^{\circ}$ C	2.70 kW	5.06 kW
COP Tj = +7°C	6.48	4.75
Pdh Tj = 12°C	6.23 kW	5.98 kW
COP Tj = 12°C	7.42	5.99
Pdh Tj = Tbiv	8.29 kW	8.23 kW
COP Tj = Tbiv	2.52	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.64 kW	8.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.41	1.80
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.40 kW



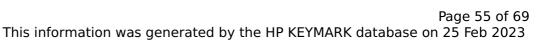


Annual energy consumption Qhe	5697 kWh	7343 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.01	2.01
COP Tj = -15°C (if TOL $<$ -20°C)	2.72	2.01

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	194 %	140 %
Prated	12.13 kW	10.00 kW
SCOP	4.92	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.89 kW	8.44 kW
COP Tj = -7°C	2.98	2.25
Pdh Tj = $+2$ °C	6.78 kW	5.45 kW
$COP Tj = +2^{\circ}C$	4.91	3.56





4.05 kW	4.98 kW
6.33	4.44
3.00 kW	5.93 kW
7.60	5.76
12.13 kW	10.00 kW
2.56	1.88
12.13 kW	10.00 kW
2.56	1.88
1.00	1.00
60 °C	60 °C
22 W	22 W
23 W	23 W
22 W	22 W
o w	0 W
Electricity	Electricity
0.00 kW	0.00 kW
5090 kWh	5794 kWh
	6.33 3.00 kW 7.60 12.13 kW 2.56 12.13 kW 2.56 1.00 60 °C 22 W 23 W 22 W 0 W Electricity 0.00 kW

Domestic Hot Water (DHW)

Warmer Climate

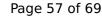


EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.30
Heating up time	01:59 h:min
Standby power input	61.0 W
Reference hot water temperature	51.4 °C
Mixed water at 40°C	252 I

Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	77 %	
СОР	1.78	
Heating up time	02:51 h:min	
Standby power input	92.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	260	

Average Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	89 %	
СОР	2.08	
Heating up time	02:27 h:min	
Standby power input	67.0 W	
Reference hot water temperature	51.8 °C	
Mixed water at 40°C	259 I	



Model: Buderus Logatherm WLW196i-14 IRTP120

Configure model		
Model name Buderus Logatherm WLW196i-14 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	5.08 kW	4.10 kW	
El input	1.09 kW	1.68 kW	
СОР	4.68	2.45	

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	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	228 %	162 %
Prated	13.44 kW	12.41 kW
SCOP	5.78	4.12
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	13.44 kW	12.41 kW
$COPTj = +2^{\circ}C$	2.82	2.17
Pdh Tj = $+7$ °C	8.54 kW	8.58 kW
$COPTj = +7^{\circ}C$	5.05	3.56
Pdh Tj = 12°C	4.07 kW	5.86 kW
COP Tj = 12°C	7.38	5.30
Pdh Tj = Tbiv	13.44 kW	12.41 kW
COP Tj = Tbiv	2.82	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.44 kW	12.41 kW



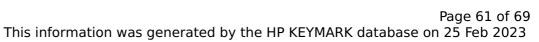


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.17
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3105 kWh	4025 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

	EN 14825		
Low temperature	Medium temperature		
163 %	120 %		
10.00 kW	9.40 kW		
4.15	3.09		
	163 % 10.00 kW		



	CEN heat pump KEYMARK
5	KEYMARK

Tbiv	-17 °C	-17 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	6.09 kW	5.63 kW
$COP Tj = -7^{\circ}C$	3.56	2.66
Pdh Tj = +2°C	3.66 kW	4.40 kW
COP Tj = +2°C	5.20	3.79
Pdh Tj = +7°C	2.70 kW	5.06 kW
$COPTj = +7^{\circ}C$	6.06	4.61
Pdh Tj = 12°C	6.23 kW	5.98 kW
COP Tj = 12°C	6.94	5.78
Pdh Tj = Tbiv	8.29 kW	8.23 kW
COP Tj = Tbiv	2.46	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	8.64 kW	8.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.35	1.78
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.40 kW





Annual energy consumption Qhe	5947 kWh	7507 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.01	7.48
COP Tj = -15°C (if TOL $<$ -20°C)	2.65	1.99

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	51 dB(A)	51 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	185 %	136 %
Prated	12.13 kW	10.00 kW
SCOP	4.70	3.48
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.89 kW	8.44 kW
COP Tj = -7°C	2.92	2.22
Pdh Tj = $+2$ °C	6.78 kW	5.45 kW
COP Tj = +2°C	4.69	3.48



Pdh Tj = $+7$ °C	4.05 kW	4.98 kW
$COP Tj = +7^{\circ}C$	5.96	4.32
Pdh Tj = 12°C	3.00 kW	5.93 kW
COP Tj = 12°C	7.04	5.57
Pdh Tj = Tbiv	12.13 kW	10.00 kW
COP Tj = Tbiv	2.52	1.86
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.13 kW	10.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.52	1.86
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	23 W	23 W
PSB	22 W	22 W
РСК	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	5335 kWh	5935 kWh



Model: Buderus Logatherm WLW196i-14 ARTP120

Configure model		
Model name	Buderus Logatherm WLW196i-14 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	5.63 kW	4.32 kW
El input	1.21 kW	1.66 kW
СОР	4.66	2.60

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	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	229 %	166 %
Prated	14.30 kW	12.50 kW
SCOP	5.79	4.22
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	14.59 kW	12.49 kW
$COP Tj = +2^{\circ}C$	2.81	2.15
Pdh Tj = $+7$ °C	8.92 kW	8.08 kW
$COPTj = +7^{\circ}C$	5.10	3.73
Pdh Tj = 12°C	4.16 kW	5.99 kW
COP Tj = 12°C	7.44	5.42
Pdh Tj = Tbiv	14.59 kW	12.49 kW
COP Tj = Tbiv	2.81	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	14.59 kW	12.49 kW



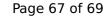


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.81	2.15
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3299 kWh	3959 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{S}	155 %	120 %
Prated	10.00 kW	9.10 kW
SCOP	3.94	3.08





		K database on 25 Teb 2023
Tbiv	-19 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	6.20 kW	5.60 kW
$COP Tj = -7^{\circ}C$	3.59	2.64
Pdh Tj = +2°C	4.91 kW	4.40 kW
COP Tj = +2°C	4.43	3.76
Pdh Tj = $+7$ °C	5.34 kW	5.07 kW
$COP Tj = +7^{\circ}C$	5.81	4.60
Pdh Tj = 12°C	6.28 kW	6.00 kW
COP Tj = 12°C	6.92	6.03
Pdh Tj = Tbiv	9.25 kW	7.90 kW
COP Tj = Tbiv	2.17	1.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	7.47 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.63
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.10 kW





Annual energy consumption Qhe	6251 kWh	7274 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.92	7.13
COP Tj = -15°C (if TOL $<$ -20°C)	2.59	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	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	183 %	138 %
Prated	12.00 kW	10.00 kW
SCOP	4.64	3.52
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.36 kW	9.51 kW
COP Tj = -7°C	2.82	2.22
Pdh Tj = $+2$ °C	6.84 kW	5.60 kW
$COP Tj = +2^{\circ}C$	4.64	3.56



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This information was generated by the HP KEYMARK database on 25 Feb 2023

Pdh Tj = $+7^{\circ}$ C	4.21 kW	5.07 kW
COP Tj = +7°C	6.02	4.36
Pdh Tj = 12°C	3.03 kW	6.01 kW
COP Tj = 12°C	6.87	5.58
Pdh Tj = Tbiv	12.26 kW	10.11 kW
COP Tj = Tbiv	2.40	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.26 kW	10.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	1.88
WTOL	60 °C	60 °C
Poff	24 W	24 W
РТО	41 W	41 W
PSB	24 W	24 W
PCK	11 W	11 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5346 kWh	5861 kWh