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Summary of	Buderus Logatherm WLW196i-8 AR and IR, Buderus Logatherm WLW196i.2-6 AR	Reg. No.	011-1W0129
Certificate Holder			
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-8 AR and IR, Buderus Logatherm WLW196i.2-6 AR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.35 kg		
Certification Date	18.07.2017		
Testing basis	HP KEYMARK certification scheme rules rev. 8		

Model: Buderus Logatherm WLW196i-8 ARE

Configure model

Model name	Buderus Logatherm WLW196i-8 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

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	48 dB(A)	48 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW

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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22

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Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW

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Annual energy consumption Q_{he}	3346 kWh	4594 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	4.93	2.06
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.87	2.06

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.75 kW	5.71 kW
$COP T_j = -7^{\circ}\text{C}$	3.16	2.32
$P_{dh} T_j = +2^{\circ}\text{C}$	4.09 kW	3.35 kW
$COP T_j = +2^{\circ}\text{C}$	4.92	3.67

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Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

Model: Buderus Logatherm WLW196i-8 ARB

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

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	48 dB(A)	48 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22

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

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COP Tj = 12°C	7.40	5.84
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW

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

Annual energy consumption Q_{he}	3346 kWh	4594 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	4.93	2.06
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.87	2.06

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.75 kW	5.71 kW
$COP T_j = -7^{\circ}\text{C}$	3.16	2.32
$P_{dh} T_j = +2^{\circ}\text{C}$	4.09 kW	3.35 kW
$COP T_j = +2^{\circ}\text{C}$	4.92	3.67

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

Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

Model: Buderus Logatherm WLW196i-8 ART190

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

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	48 dB(A)	48 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22

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

Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW

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

Annual energy consumption Q_{he}	3346 kWh	4594 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	4.93	2.06
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.87	2.06

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.75 kW	5.71 kW
$COP T_j = -7^{\circ}\text{C}$	3.16	2.32
$P_{dh} T_j = +2^{\circ}\text{C}$	4.09 kW	3.35 kW
$COP T_j = +2^{\circ}\text{C}$	4.92	3.67

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Pdh Tj = +7°C	2.51 kW	2.76 kW
COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.2 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	270 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	98 %
COP	2.31
Heating up time	02:37 h:min
Standby power input	52.5 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

Model: Buderus Logatherm WLW196i-8 ARTS185

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

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	48 dB(A)	48 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
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Pdh Tj = 12°C	2.61 kW	3.33 kW
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Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW

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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
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	Low temperature	Medium temperature
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Average Climate

EN 12102-1		
	Low temperature	Medium temperature
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EN 14825		
	Low temperature	Medium temperature
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Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
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TOL	-10 °C	-10 °C
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$COP T_j = +2^{\circ}\text{C}$	4.92	3.67

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COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
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Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.3 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	101 %
COP	2.37
Heating up time	02:24 h:min
Standby power input	53.7 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l

Model: Buderus Logatherm WLW196i-8 IRE

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

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	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 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	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16

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

Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW

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

Annual energy consumption Q_{he}	3555 kWh	4677 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	5.49	2.07
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.61	2.07

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	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.43 kW	5.18 kW
$COP T_j = -7^{\circ}\text{C}$	3.03	2.29
$P_{dh} T_j = +2^{\circ}\text{C}$	3.93 kW	3.10 kW
$COP T_j = +2^{\circ}\text{C}$	4.19	3.56

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

Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.59	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3365 kWh	3483 kWh

Model: Buderus Logatherm WLW196i-8 IRB

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

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	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 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	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16

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

Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW

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

Annual energy consumption Q_{he}	3555 kWh	4677 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	5.49	2.07
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.61	2.07

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	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.43 kW	5.18 kW
$COP T_j = -7^{\circ}\text{C}$	3.03	2.29
$P_{dh} T_j = +2^{\circ}\text{C}$	3.93 kW	3.10 kW
$COP T_j = +2^{\circ}\text{C}$	4.19	3.56

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

Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.59	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3365 kWh	3483 kWh

Model: Buderus Logatherm WLW196i-8 IRT190

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

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	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 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	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16

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

Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW

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

Annual energy consumption Q_{he}	3555 kWh	4677 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	5.49	2.07
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.61	2.07

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	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.43 kW	5.18 kW
$COP T_j = -7^{\circ}\text{C}$	3.03	2.29
$P_{dh} T_j = +2^{\circ}\text{C}$	3.93 kW	3.10 kW
$COP T_j = +2^{\circ}\text{C}$	4.19	3.56

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

Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.59	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3365 kWh	3483 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	270 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	98 %
COP	2.31
Heating up time	02:37 h:min
Standby power input	53.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

Model: Buderus Logatherm WLW196i-8 IRTS185

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

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	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 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	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16

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

Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW

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

Annual energy consumption Q_{he}	3555 kWh	4677 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	5.49	2.07
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.61	2.07

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	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.43 kW	5.18 kW
$COP T_j = -7^{\circ}\text{C}$	3.03	2.29
$P_{dh} T_j = +2^{\circ}\text{C}$	3.93 kW	3.10 kW
$COP T_j = +2^{\circ}\text{C}$	4.19	3.56

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

Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.59	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3365 kWh	3483 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	101 %
COP	2.37
Heating up time	02:24 h:min
Standby power input	54.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l

Model: Buderus Logatherm WLW196i.2-6 ARB S+

Configure model

Model name	Buderus Logatherm WLW196i.2-6 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

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	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1591 kWh	2325 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 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15

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

Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W

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

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 Q _{he}	3291 kWh	4288 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	4.96	4.76
COP T _j = -15°C (if TOL<-20°C)	2.44	1.82
C _{dh} T _j = -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	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
T _{biv}	-10 °C	-10 °C

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

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W

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

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 Q _{he}	2553 kWh	3413 kWh

Model: Buderus Logatherm WLW196i.2-6 ARE S+

Configure model

Model name	Buderus Logatherm WLW196i.2-6 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

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	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1591 kWh	2325 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 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15

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

Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W

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

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Q _{he}	3291 kWh	4288 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	4.96	4.76
COP T _j = -15°C (if TOL<-20°C)	2.44	1.82
C _{dh} T _j = -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	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
T _{biv}	-10 °C	-10 °C

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

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W

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

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 Q _{he}	2553 kWh	3413 kWh

Model: Buderus Logatherm WLW196i.2-6 ART190 S+

Configure model	
Model name	Buderus Logatherm WLW196i.2-6 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	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

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	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1591 kWh	2325 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 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15

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

Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W

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

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Q _{he}	3291 kWh	4288 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	4.96	1.82
COP T _j = -15°C (if TOL<-20°C)	2.44	1.82
C _{dh} T _j = -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 temperature	Medium temperature
η_s	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
T _{biv}	-10 °C	-10 °C

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

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W

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

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 Q _{he}	2553 kWh	3413 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	122 %
COP	2.86
Heating up time	01:55 h:min
Standby power input	45.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	268 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.08
Heating up time	02:51 h:min
Standby power input	57.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	272 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	103 %
COP	2.42
Heating up time	02:26 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	269 l

Model: Buderus Logatherm WLW196i.2-6 ARTS185 S+

Configure model	
Model name	Buderus Logatherm WLW196i.2-6 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	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

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	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1591 kWh	2325 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 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15

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

Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W

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

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Q _{he}	3291 kWh	4288 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	4.96	1.82
COP T _j = -15°C (if TOL<-20°C)	2.44	1.82
C _{dh} T _j = -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 temperature	Medium temperature
η_s	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
T _{biv}	-10 °C	-10 °C

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

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W

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

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 Q _{he}	2553 kWh	3413 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.64
Heating up time	01:52 h:min
Standby power input	47.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	254 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	84 %
COP	2.00
Heating up time	02:48 h:min
Standby power input	58.0 W
Reference hot water temperature	51.8 °C
Mixed water at 40°C	252 l

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	101 %
COP	2.37
Heating up time	02:11 h:min
Standby power input	51.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	259 l

Model: Buderus Hybrid-Set WLW196i-8 A H

Configure model

Model name	Buderus Hybrid-Set WLW196i-8 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	3.65 kW	2.85 kW
El input	0.76 kW	1.16 kW
COP	4.81	2.46

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	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	238 %	157 %
Prated	9.00 kW	7.90 kW
SCOP	6.03	4.00
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.10 kW	7.44 kW
COP Tj = +2°C	3.71	1.98
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	5.90 kW	4.88 kW
COP Tj = +7°C	5.43	3.25
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.69 kW	3.22 kW
COP Tj = 12°C	7.35	5.66
Cdh Tj = +12 °C	1.000	0.960

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

Pdh Tj = Tbiv	8.10 kW	7.44 kW
COP Tj = Tbiv	3.71	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.10 kW	7.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	1.98
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 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	1995 kWh	2640 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature

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

η_s	162 %	117 %
Prated	6.10 kW	6.00 kW
SCOP	4.12	3.00
Tbiv	-17 °C	-15 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.52 kW	3.70 kW
COP Tj = -7°C	3.19	2.55
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.26 kW	2.17 kW
COP Tj = +2°C	5.00	3.33
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.44 kW	2.63 kW
COP Tj = +7°C	6.25	4.65
Cdh Tj = +7 °C	1.000	0.960
Pdh Tj = 12°C	1.97 kW	3.24 kW
COP Tj = 12°C	7.00	5.96
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	5.30 kW	5.02 kW
COP Tj = Tbiv	2.74	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.46 kW	2.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.01

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

WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.64 kW	3.38 kW
Annual energy consumption Qhe	3653 kWh	4923 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	172 %	132 %
Prated	7.60 kW	6.50 kW
SCOP	4.38	3.39
Tbiv	-10 °C	-7 °C

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

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.44 kW	5.79 kW
COP Tj = -7°C	3.02	2.17
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.77 kW	3.43 kW
COP Tj = +2°C	4.06	3.29
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.46 kW	2.62 kW
COP Tj = +7°C	5.99	4.47
Cdh Tj = +7 °C	1.000	0.960
Pdh Tj = 12°C	1.97 kW	3.23 kW
COP Tj = 12°C	7.26	5.80
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	7.25 kW	5.79 kW
COP Tj = Tbiv	2.56	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.25 kW	2.26 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.68
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W

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

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	4.24 kW
Annual energy consumption Q _{he}	3587 kWh	3966 kWh

Model: Buderus Hybrid-Set WLW196i-6 A H S+

Configure model	
Model name	Buderus Hybrid-Set WLW196i-6 A H S+
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

EN 14511-2		
	Low temperature	Medium temperature
Heat output	3.47 kW	2.89 kW
El input	0.73 kW	1.14 kW
COP	4.76	2.53

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

Warmer Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	225 %	156 %
Prated	7.30 kW	7.20 kW
SCOP	5.70	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.57 kW	7.31 kW
COP Tj = +2°C	3.57	2.15
Pdh Tj = +7°C	4.67 kW	5.00 kW
COP Tj = +7°C	5.14	3.31
Pdh Tj = 12°C	2.03 kW	3.29 kW
COP Tj = 12°C	6.97	5.44
Pdh Tj = Tbiv	6.57 kW	7.31 kW
COP Tj = Tbiv	3.57	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.57 kW	7.31 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.57	2.15
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 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	1710 kWh	2423 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	160 %	115 %
Prated	5.70 kW	5.50 kW
SCOP	4.06	2.94

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

Tbiv	-17 °C	-15 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.64 kW	3.29 kW
COP Tj = -7°C	3.19	2.23
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.11 kW	2.24 kW
COP Tj = +2°C	4.91	3.47
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.35 kW	2.71 kW
COP Tj = +7°C	5.91	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.02 kW	3.32 kW
COP Tj = 12°C	6.74	5.73
Cdh Tj = +12 °C	1.000	0.970
Pdh Tj = Tbiv	4.95 kW	4.68 kW
COP Tj = Tbiv	2.80	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.59 kW	2.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.30
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W

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

PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	1.16 kW	2.82 kW
Annual energy consumption Q _{he}	3461 kWh	4613 kWh

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	182 %	129 %
Prated	6.20 kW	5.90 kW
SCOP	4.61	3.30
T _{biv}	-10 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.46 kW	5.07 kW
COP T _j = -7°C	2.92	2.12

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

Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.29 kW	2.95 kW
COP Tj = +2°C	4.60	3.26
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	2.01 kW	2.55 kW
COP Tj = +7°C	6.01	4.24
Cdh Tj = +7 °C	1.000	0.970
Pdh Tj = 12°C	1.55 kW	3.06 kW
COP Tj = 12°C	6.99	5.54
Cdh Tj = +12 °C	0.910	0.960
Pdh Tj = Tbiv	5.76 kW	5.07 kW
COP Tj = Tbiv	2.57	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.76 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.57	1.84
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 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

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

Annual energy consumption Q _{he}	2778 kWh	3694 kWh
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Model: Buderus Logatherm WLW196i-8 ARTP120

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	3.78 kW	2.41 kW
El input	0.79 kW	0.93 kW
COP	4.78	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	48 dB(A)	48 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	235 %	166 %
Prated	9.00 kW	7.90 kW
SCOP	5.94	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.10 kW	7.44 kW
COP Tj = +2°C	2.99	2.23
Pdh Tj = +7°C	6.17 kW	4.92 kW
COP Tj = +7°C	5.36	3.74
Pdh Tj = 12°C	2.67 kW	3.31 kW
COP Tj = 12°C	7.40	5.47
Pdh Tj = Tbiv	9.10 kW	7.44 kW
COP Tj = Tbiv	2.99	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.10 kW	7.44 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.99	2.23
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2023 kWh	2491 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	157 %	118 %
Prated	6.50 kW	6.80 kW
SCOP	4.00	3.02

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

Tbiv	-17 °C	-17 °C
TOL	-17 °C	-17 °C
Pdh Tj = -7°C	3.83 kW	4.47 kW
COP Tj = -7°C	3.56	2.63
Pdh Tj = +2°C	2.36 kW	2.49 kW
COP Tj = +2°C	5.16	3.72
Pdh Tj = +7°C	1.61 kW	2.85 kW
COP Tj = +7°C	5.93	4.64
Pdh Tj = 12°C	1.69 kW	3.36 kW
COP Tj = 12°C	6.17	5.85
Pdh Tj = Tbiv	5.64 kW	5.82 kW
COP Tj = Tbiv	2.29	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.64 kW	5.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.72
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.50 kW	6.80 kW

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

Annual energy consumption Q_{he}	4001 kWh	5544 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	5.44	5.14
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.43	1.80

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	181 %	133 %
Prated	7.60 kW	6.34 kW
SCOP	4.61	3.41
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.58 kW	5.69 kW
$COP T_j = -7^{\circ}\text{C}$	3.05	2.19
$P_{dh} T_j = +2^{\circ}\text{C}$	4.09 kW	3.29 kW
$COP T_j = +2^{\circ}\text{C}$	4.64	3.40

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

Pdh Tj = +7°C	2.60 kW	2.78 kW
COP Tj = +7°C	5.67	4.32
Pdh Tj = 12°C	1.69 kW	3.32 kW
COP Tj = 12°C	6.36	5.55
Pdh Tj = Tbiv	7.55 kW	6.34 kW
COP Tj = Tbiv	2.60	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3406 kWh	3842 kWh

Model: Buderus Logatherm WLW196i.2-6 ARTP120 S+

Configure model	
Model name	Buderus Logatherm WLW196i.2-6 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	4.01 kW	2.60 kW
El input	0.84 kW	0.94 kW
COP	4.78	2.77

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	226 %	158 %
Prated	7.29 kW	7.25 kW
SCOP	5.72	4.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	2.95	2.16
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.31	3.67
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	7.44	5.10
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	2.95	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW

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

COP T_j = TOL or COP T_j = Tdesignh if TOL < Tdesignh	2.95	2.16
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1703 kWh	2407 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
η_s	160 %	119 %
Prated	5.72 kW	5.48 kW
SCOP	4.07	3.04

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

Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.52	2.61
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.09	3.73
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.15	4.52
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	6.53	5.91
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.39	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	1.74
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW

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

Annual energy consumption Q_{he}	3463 kWh	4440 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	4.96	4.76
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.39	1.80

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	186 %	135 %
Prated	6.20 kW	5.91 kW
SCOP	4.73	3.45
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	5.54 kW	5.21 kW
$COP T_j = -7^{\circ}\text{C}$	3.07	2.24
$P_{dh} T_j = +2^{\circ}\text{C}$	3.31 kW	3.27 kW
$COP T_j = +2^{\circ}\text{C}$	4.64	3.47

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

Pdh Tj = +7°C	2.05 kW	2.84 kW
COP Tj = +7°C	6.21	4.33
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.18	5.72
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.65	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.91
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	2707 kWh	3535 kWh

Model: Buderus Logatherm WLW196i-8 IRTP120

Configure model	
Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.41 kW
El input	0.65 kW	0.93 kW
COP	4.41	2.58

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	226 %	160 %
Prated	8.30 kW	7.20 kW
SCOP	5.73	4.08
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.75	2.15
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.00	3.61
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.39	5.24
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.75	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW

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

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	2.15
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1937 kWh	2360 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	160 %	120 %
Prated	6.20 kW	6.00 kW
SCOP	4.08	3.07

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

Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.29	2.65
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.10	3.78
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.02	4.44
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	6.59	5.46
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.25	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.89
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW

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

Annual energy consumption Q_{he}	3744 kWh	4819 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	5.49	4.72
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.55	2.04

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	168 %	135 %
P_{rated}	7.30 kW	6.00 kW
SCOP	4.27	3.44
T_{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	6.43 kW	5.18 kW
$COP T_j = -7^{\circ}\text{C}$	2.95	2.26
$P_{dh} T_j = +2^{\circ}\text{C}$	3.93 kW	3.10 kW
$COP T_j = +2^{\circ}\text{C}$	5.10	3.47

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

Pdh Tj = +7°C	2.54 kW	2.77 kW
COP Tj = +7°C	5.67	4.24
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	6.63	5.37
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.53	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.53	1.96
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3534 kWh	3602 kWh