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Summary of	Buderus Logatherm WLW196i-11 AR and IR	Reg. No.	011-1W0130
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-11 AR and IR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	3.3 kg		
Certification Date	18.07.2017		
Testing basis	HP KEYMARK certification scheme rules rev. 8		

Model: Buderus Logatherm WLW196i-11 ARE

Configure model	
Model name	Buderus Logatherm WLW196i-11 ARE
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.19 kW	4.62 kW
El input	1.04 kW	1.62 kW
COP	4.98	2.85

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.53 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.68 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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 Q_{he}	4562 kWh	5389 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

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η_s	152 %	114 %
Prated	9.49 kW	8.87 kW
SCOP	3.87	2.93
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	7.25 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	5.48 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	6.14
Pdh Tj = Tbiv	8.25 kW	7.71 kW
COP Tj = Tbiv	2.36	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.48 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

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PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.49 kW	8.87 kW
Annual energy consumption Q _{he}	6039 kWh	7456 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	8.25	1.92
COP T _j = -15°C (if TOL<-20°C)	2.61	1.92

Warmer 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	249 %	167 %
Prated	11.80 kW	11.43 kW
SCOP	6.30	4.24
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	11.80 kW	11.43 kW

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COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.62 kW	7.90 kW
COP Tj = +7°C	5.37	3.61
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	11.80 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2504 kWh	3603 kWh

Model: Buderus Logatherm WLW196i-11 ARB

Configure model	
Model name	Buderus Logatherm WLW196i-11 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	5.19 kW	4.62 kW
El input	1.04 kW	1.62 kW
COP	4.98	2.85

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

Average Climate

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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	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.53 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.68 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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}	4562 kWh	5389 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

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

η_s	152 %	114 %
Prated	9.49 kW	8.87 kW
SCOP	3.87	2.93
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	7.25 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	5.48 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	6.14
Pdh Tj = Tbiv	8.25 kW	7.71 kW
COP Tj = Tbiv	2.36	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.48 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

This information was generated by the HP KEYMARK database on 18 Mar 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}	6039 kWh	7456 kWh
P _{dh} T _j = -15°C (if TOL < -20°C)	8.25	1.92
COP T _j = -15°C (if TOL < -20°C)	2.61	1.92

Warmer 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	249 %	167 %
Prated	11.80 kW	11.43 kW
SCOP	6.30	4.24
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	11.80 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.62 kW	7.90 kW
COP Tj = +7°C	5.37	3.61
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	11.80 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2504 kWh	3603 kWh

Model: Buderus Logatherm WLW196i-11 ART190

Configure model	
Model name	Buderus Logatherm WLW196i-11 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	5.19 kW	4.62 kW
El input	1.04 kW	1.62 kW
COP	4.98	2.85

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	26 dB(A)	26 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.53 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.68 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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 Q_{he}	4562 kWh	5389 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

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

η_s	152 %	114 %
Prated	9.49 kW	8.87 kW
SCOP	3.87	2.93
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	7.25 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	5.48 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	6.14
Pdh Tj = Tbiv	8.25 kW	7.71 kW
COP Tj = Tbiv	2.36	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.48 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

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

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.49 kW	8.87 kW
Annual energy consumption Q _{he}	6039 kWh	7456 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	8.25	1.92
COP T _j = -15°C (if TOL<-20°C)	2.61	1.92

Warmer 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	249 %	167 %
Prated	11.80 kW	11.43 kW
SCOP	6.30	4.24
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	11.80 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.62 kW	7.90 kW
COP Tj = +7°C	5.37	3.61
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	11.80 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2504 kWh	3603 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	92 %
COP	2.15
Heating up time	02:12 h:min
Standby power input	68.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	265 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	76 %
COP	1.77
Heating up time	02:34 h:min
Standby power input	83.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	269 l

Warmer Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	111 %
COP	2.55
Heating up time	01:48 h:min
Standby power input	66.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	266 l

Model: Buderus Logatherm WLW196i-11 ARTS185

Configure model	
Model name	Buderus Logatherm WLW196i-11 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	5.19 kW	4.62 kW
El input	1.04 kW	1.62 kW
COP	4.98	2.85

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

Average Climate

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

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	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.53 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.68 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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 Q _{he}	4562 kWh	5389 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

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

η_s	152 %	114 %
Prated	9.49 kW	8.87 kW
SCOP	3.87	2.93
Tbiv	-17 °C	-17 °C
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WTOL	60 °C	60 °C
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This information was generated by the HP KEYMARK database on 18 Mar 2022

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.49 kW	8.87 kW
Annual energy consumption Q _{he}	6039 kWh	7456 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	8.25	1.92
COP T _j = -15°C (if TOL<-20°C)	2.61	1.92

Warmer 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	249 %	167 %
Prated	11.80 kW	11.43 kW
SCOP	6.30	4.24
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	11.80 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.62 kW	7.90 kW
COP Tj = +7°C	5.37	3.61
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	11.80 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2504 kWh	3603 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	91 %
COP	2.11
Heating up time	02:15 h:min
Standby power input	71.0 W
Reference hot water temperature	52.2 °C
Mixed water at 40°C	255 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	75 %
COP	1.73
Heating up time	02:37 h:min
Standby power input	94.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	257 l

Warmer Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	102 %
COP	2.35
Heating up time	01:51 h:min
Standby power input	69.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	252 l

Model: Buderus Logatherm WLW196i-11 IRE

Configure model	
Model name	Buderus Logatherm WLW196i-11 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	4.67 kW	4.39 kW
El input	0.93 kW	1.62 kW
COP	5.00	2.71

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.14 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.54 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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 Q_{he}	4558 kWh	5389 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature

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

η_s	148 %	113 %
Prated	9.05 kW	9.15 kW
SCOP	3.78	2.90
Tbiv	-17 °C	-16 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	5.40 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	2.77 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	5.90
Pdh Tj = Tbiv	7.39 kW	7.71 kW
COP Tj = Tbiv	2.11	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.18 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

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

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.05 kW	9.15 kW
Annual energy consumption Q _{he}	5895 kWh	7769 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	7.80	1.92
COP T _j = -15°C (if TOL<-20°C)	2.61	1.92

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	249 %	163 %
Prated	10.87 kW	11.43 kW
SCOP	6.29	4.15
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	10.87 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.30 kW	7.90 kW
COP Tj = +7°C	5.37	3.45
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	10.87 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.87 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2308 kWh	3681 kWh

Model: Buderus Logatherm WLW196i-11 IRB

Configure model	
Model name	Buderus Logatherm WLW196i-11 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	4.67 kW	4.39 kW
El input	0.93 kW	1.62 kW
COP	5.00	2.71

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.14 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.54 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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}	4558 kWh	5389 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature

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

η_s	148 %	113 %
Prated	9.05 kW	9.15 kW
SCOP	3.78	2.90
Tbiv	-17 °C	-16 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	5.40 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	2.77 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	5.90
Pdh Tj = Tbiv	7.39 kW	7.71 kW
COP Tj = Tbiv	2.11	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.18 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

This information was generated by the HP KEYMARK database on 18 Mar 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}	5895 kWh	7769 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	7.80	1.92
COP T _j = -15°C (if TOL<-20°C)	2.61	1.92

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	249 %	163 %
Prated	10.87 kW	11.43 kW
SCOP	6.29	4.15
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	10.87 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.30 kW	7.90 kW
COP Tj = +7°C	5.37	3.45
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	10.87 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.87 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2308 kWh	3681 kWh

Model: Buderus Logatherm WLW196i-11 IRT190

Configure model	
Model name	Buderus Logatherm WLW196i-11 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	4.67 kW	4.39 kW
El input	0.93 kW	1.62 kW
COP	5.00	2.71

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.14 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.54 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP Tj = Tbiv	2.59	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.97 kW	9.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	4558 kWh	5389 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature

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

η_s	148 %	113 %
Prated	9.05 kW	9.15 kW
SCOP	3.78	2.90
Tbiv	-17 °C	-16 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	5.40 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	2.77 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	5.90
Pdh Tj = Tbiv	7.39 kW	7.71 kW
COP Tj = Tbiv	2.11	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.18 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

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

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.05 kW	9.15 kW
Annual energy consumption Q _{he}	5895 kWh	7769 kWh
P _{dh} T _j = -15°C (if TOL<-20°C)	7.80	1.92
COP T _j = -15°C (if TOL<-20°C)	2.61	1.92

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	249 %	163 %
Prated	10.87 kW	11.43 kW
SCOP	6.29	4.15
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	10.87 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.30 kW	7.90 kW
COP Tj = +7°C	5.37	3.45
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	10.87 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.87 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2308 kWh	3681 kWh

Domestic Hot Water (DHW)

Average Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	92 %
COP	2.15
Heating up time	02:12 h:min
Standby power input	68.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	265 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	76 %
COP	1.77
Heating up time	02:34 h:min
Standby power input	83.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	269 l

Warmer Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	111 %
COP	2.55
Heating up time	01:49 h:min
Standby power input	66.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	266 l

Model: Buderus Logatherm WLW196i-11 IRTS185

Configure model

Model name	Buderus Logatherm WLW196i-11 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	4.67 kW	4.39 kW
El input	0.93 kW	1.62 kW
COP	5.00	2.71

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	178 %	140 %
Prated	9.97 kW	9.33 kW
SCOP	4.52	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.14 kW	8.41 kW
COP Tj = -7°C	2.95	2.21
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	4.04	3.58
Pdh Tj = +7°C	3.54 kW	5.12 kW
COP Tj = +7°C	6.71	4.54
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.94	5.66
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.59	1.84
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.59	1.84
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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 Q _{he}	4558 kWh	5389 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature

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

η_s	148 %	113 %
Prated	9.05 kW	9.15 kW
SCOP	3.78	2.90
Tbiv	-17 °C	-16 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.61	2.70
Pdh Tj = +2°C	5.40 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Pdh Tj = +7°C	2.77 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	5.90
Pdh Tj = Tbiv	7.39 kW	7.71 kW
COP Tj = Tbiv	2.11	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.18 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.69
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W

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

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.05 kW	9.15 kW
Annual energy consumption Q _{he}	5895 kWh	7769 kWh
P _{dh} T _j = -15°C (if TOL < -20°C)	7.80	1.92
COP T _j = -15°C (if TOL < -20°C)	2.61	1.92

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	249 %	163 %
Prated	10.87 kW	11.43 kW
SCOP	6.29	4.15
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	10.87 kW	11.43 kW

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

COP Tj = +2°C	3.04	2.17
Pdh Tj = +7°C	7.30 kW	7.90 kW
COP Tj = +7°C	5.37	3.45
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	8.25	5.56
Pdh Tj = Tbiv	10.87 kW	11.43 kW
COP Tj = Tbiv	3.04	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.87 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	2.17
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2308 kWh	3681 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	91 %
COP	2.11
Heating up time	02:15 h:min
Standby power input	71.0 W
Reference hot water temperature	52.2 °C
Mixed water at 40°C	255 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	75 %
COP	1.73
Heating up time	02:37 h:min
Standby power input	94.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	257 l

Warmer Climate

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

EN 16147	
Declared load profile	L
Efficiency η_{DHW}	102 %
COP	2.35
Heating up time	01:51 h:min
Standby power input	69.0 W
Reference hot water temperature	51.3 °C
Mixed water at 40°C	252 l

Model: Buderus Logatherm WLW196i-11 ARTP120

Configure model

Model name	Buderus Logatherm WLW196i-11 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	5.19 kW	4.62 kW
El input	1.09 kW	1.65 kW
COP	4.76	2.80

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	170 %	137 %
Prated	9.97 kW	9.26 kW
SCOP	4.31	3.49
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.53 kW	8.41 kW
COP Tj = -7°C	2.89	2.18
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	3.88	3.50
Pdh Tj = +7°C	3.68 kW	5.12 kW
COP Tj = +7°C	6.30	4.42
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.35	5.51
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.54	1.82
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.54	1.82
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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 Q_{he}	4776 kWh	5484 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	145 %	112 %

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

Prated	9.49 kW	8.88 kW
SCOP	3.71	2.87
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.49	2.65
Pdh Tj = +2°C	7.25 kW	6.86 kW
COP Tj = +2°C	3.95	3.16
Pdh Tj = +7°C	5.48 kW	5.19 kW
COP Tj = +7°C	6.00	4.71
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.04	5.92
Pdh Tj = Tbiv	8.25 kW	7.71 kW
COP Tj = Tbiv	2.30	1.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.48 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.11	1.67
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 W
PCK	0 W	0 W

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

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.49 kW	8.88 kW
Annual energy consumption Q _{he}	6307 kWh	7636 kWh
P _{dh} T _j = -15°C (if TOL < -20°C)	7.80	7.29
COP T _j = -15°C (if TOL < -20°C)	2.54	1.90

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	233 %	161 %
Prated	11.80 kW	11.43 kW
SCOP	5.90	4.10
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	11.80 kW	11.43 kW
COP T _j = +2°C	2.98	2.14

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

Pdh Tj = +7°C	7.62 kW	7.90 kW
COP Tj = +7°C	5.11	3.54
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	7.61	5.38
Pdh Tj = Tbiv	11.80 kW	11.43 kW
COP Tj = Tbiv	2.98	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.98	2.14
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	20 W	20 W
PSB	20 W	20 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	2673 kWh	3720 kWh

Model: Buderus Logatherm WLW196i-11 IRTP120

Configure model

Model name	Buderus Logatherm WLW196i-11 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
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Heating

EN 14511-2

	Low temperature	Medium temperature
Heat output	4.67 kW	4.39 kW
El input	0.98 kW	1.66 kW
COP	4.77	2.64

EN 14511-4

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	170 %	136 %
Prated	9.97 kW	9.33 kW
SCOP	4.32	3.48
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.14 kW	8.41 kW
COP Tj = -7°C	2.88	2.18
Pdh Tj = +2°C	5.48 kW	4.74 kW
COP Tj = +2°C	3.89	3.50
Pdh Tj = +7°C	3.54 kW	5.12 kW
COP Tj = +7°C	6.30	4.41
Pdh Tj = 12°C	3.11 kW	6.10 kW
COP Tj = 12°C	7.35	5.47
Pdh Tj = Tbiv	9.97 kW	9.33 kW

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

COP $T_j = T_{biv}$	2.54	1.82
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.97 kW	9.33 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.54	1.82
WTOL	60 °C	60 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q_{he}	4766 kWh	5534 kWh

Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	143 %	111 %

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

Prated	9.05 kW	9.15 kW
SCOP	3.64	2.84
Tbiv	-17 °C	-16 °C
TOL	-18 °C	-17 °C
Pdh Tj = -7°C	5.98 kW	5.62 kW
COP Tj = -7°C	3.49	2.66
Pdh Tj = +2°C	5.40 kW	6.86 kW
COP Tj = +2°C	3.97	3.17
Pdh Tj = +7°C	2.77 kW	5.19 kW
COP Tj = +7°C	5.95	4.72
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.04	5.70
Pdh Tj = Tbiv	7.39 kW	7.71 kW
COP Tj = Tbiv	2.07	1.70
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.18 kW	6.32 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.67
WTOL	60 °C	60 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	12 W	12 W

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

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.05 kW	9.15 kW
Annual energy consumption Q_{he}	6132 kWh	7938 kWh
$P_{dh} T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	7.80	7.29
$COP T_j = -15^{\circ}\text{C}$ (if $TOL < -20^{\circ}\text{C}$)	2.54	1.90

Warmer Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	37 dB(A)	37 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_s	233 %	158 %
P_{rated}	10.87 kW	11.43 kW
SCOP	5.89	4.02
T_{biv}	2 °C	2 °C
TOL	2 °C	2 °C
$P_{dh} T_j = +2^{\circ}\text{C}$	10.87 kW	11.43 kW
$COP T_j = +2^{\circ}\text{C}$	2.98	2.14

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

Pdh Tj = +7°C	7.30 kW	7.90 kW
COP Tj = +7°C	5.10	3.38
Pdh Tj = 12°C	3.13 kW	6.01 kW
COP Tj = 12°C	7.61	5.38
Pdh Tj = Tbiv	10.87 kW	11.43 kW
COP Tj = Tbiv	2.98	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.87 kW	11.43 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.98	2.14
WTOL	60 °C	60 °C
Poff	23 W	23 W
PTO	23 W	23 W
PSB	23 W	23 W
PCK	12 W	12 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2466 kWh	3799 kWh