Login

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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.80 kW	11.43 kW
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

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	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
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 Qhe	6039 kWh	7456 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.25	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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	4562 kWh	5389 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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.80 kW	11.43 kW
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

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	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
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	6039 kWh	7456 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.25	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4562 kWh	5389 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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.80 kW	11.43 kW
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

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	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
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 Qhe	6039 kWh	7456 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.25	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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	4562 kWh	5389 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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

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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.80 kW	11.43 kW
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

Colder Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	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
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 Qhe	6039 kWh	7456 kWh
Pdh Tj = -15°C (if TOL<-20°C)	8.25	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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	4562 kWh	5389 kWh

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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

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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.87 kW	11.43 kW
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

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	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
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 Qhe	5895 kWh	7769 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.80	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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

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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.87 kW	11.43 kW
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

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	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
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	5895 kWh	7769 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.80	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4558 kWh	5389 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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.87 kW	11.43 kW
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

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	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
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 Qhe	5895 kWh	7769 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.80	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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

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

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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.87 kW	11.43 kW
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

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	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
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 Qhe	5895 kWh	7769 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.80	1.92
COP Tj = -15°C (if TOL<-20°C)	2.61	1.92

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
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

Domestic Hot Water (DHW)

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	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

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

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

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
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.80 kW	11.43 kW
COP Tj = +2°C	2.98	2.14
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

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 %
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
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.49 kW	8.88 kW

Annual energy consumption Qhe	6307 kWh	7636 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.80	7.29
COP Tj = -15°C (if TOL<-20°C)	2.54	1.90

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
COP Tj = Tbiv	2.54	1.82
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	2.54	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 Qhe	4776 kWh	5484 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

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

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 %
Prated	10.87 kW	11.43 kW
SCOP	5.89	4.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	10.87 kW	11.43 kW
COP Tj = +2°C	2.98	2.14
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

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 %
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
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	9.05 kW	9.15 kW

Annual energy consumption Qhe	6132 kWh	7938 kWh
Pdh Tj = -15°C (if TOL<-20°C)	7.80	7.29
COP Tj = -15°C (if TOL<-20°C)	2.54	1.90

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
COP Tj = Tbiv	2.54	1.82
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	2.54	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 Qhe	4766 kWh	5534 kWh