Subtype Buderus Logatherm WLW196i-11 AR and IR

Certificate Holder	Bosch Thermotechnik GmbH (Buderus)
Address	Sophienstraße 30-32
ZIP	35576
City	Wetzlar
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Buderus Logatherm WLW196i-11 AR and IR
Registration number	011-1W0130
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	
Model name	Buderus Logatherm WLW196i-11 ARE
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	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 12102-1 | Average Climate		
	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 | Average Climate		
	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	8.25	1.92
COP Tj = -15°C (if TOL	2.61	1.92

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 ARB

Model name	Buderus Logatherm WLW196i-11 ARB
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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
Cdh Tj = -7 °C		
Pdh Tj = +2°C	7.25 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Cdh Tj = +2 °C		
Pdh Tj = +7°C	5.48 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Cdh Tj = +7 °C		
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	6.14
Cdh Tj = +12 °C		
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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	9.49 kW	8.87 kW
Annual energy consumption Qhe	6039 kWh	7456 kWh
Pdh Tj = -15°C (if TOL	8.25	1.92
COP Tj = -15°C (if TOL	2.61	1.92
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 ART190	
Model name	Buderus Logatherm WLW196i-11 ART190
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water	
EN 16147 | Average Climate	
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
EN 16147 | Colder Climate	
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
EN 16147 | Warmer Climate	
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
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	8.25	1.92
COP Tj = -15°C (if TOL	2.61	1.92

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 ARTS185

Model name	Buderus Logatherm WLW196i-11 ARTS185
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 16147 | Colder Climate

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

EN 16147 | Warmer Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	8.25	1.92
COP Tj = -15°C (if TOL	2.61	1.92

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 IRE

Model name	Buderus Logatherm WLW196i-11 IRE
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	7.80	1.92
COP Tj = -15°C (if TOL	2.61	1.92

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 IRB

Model name	Buderus Logatherm WLW196i-11 IRB
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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
Cdh Tj = -7 °C		
Pdh Tj = +2°C	5.40 kW	6.86 kW
COP Tj = +2°C	4.12	3.23
Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.77 kW	5.19 kW
COP Tj = +7°C	6.35	4.86
Cdh Tj = +7 °C		
Pdh Tj = 12°C	3.07 kW	6.14 kW
COP Tj = 12°C	7.59	5.90
Cdh Tj = +12 °C		
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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
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	9.05 kW	9.15 kW
Annual energy consumption Qhe	5895 kWh	7769 kWh
Pdh Tj = -15°C (if TOL	7.80	1.92
COP Tj = -15°C (if TOL	2.61	1.92
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 IRT190	
Model name	Buderus Logatherm WLW196i-11 IRT190
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water	
EN 16147 | Average Climate	
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
EN 16147 | Colder Climate	
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
EN 16147 | Warmer Climate	
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
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	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 12102-1 | Average Climate		
	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 | Average Climate		
	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	7.80	1.92
COP Tj = -15°C (if TOL	2.61	1.92

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 IRTS185

Model name	Buderus Logatherm WLW196i-11 IRTS185
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 16147 | Average Climate

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

EN 16147 | Colder Climate

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

EN 16147 | Warmer Climate

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

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	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 12102-1 | Average Climate

	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 | Average Climate

	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	7.80	1.92
COP Tj = -15°C (if TOL	2.61	1.92

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 ARTP120	
Model name	Buderus Logatherm WLW196i-11 ARTP120
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	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 12102-1 | Average Climate		
	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 | Average Climate		
	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	7.80	7.29
COP Tj = -15°C (if TOL	2.54	1.90

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Logatherm WLW196i-11 IRTP120	
Model name	Buderus Logatherm WLW196i-11 IRTP120
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	No

Outdoor Air/Water	
EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating		
	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 12102-1 | Average Climate		
	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 | Average Climate		
	Low temperature	Medium temperature
ηs	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

EN 12102-1 | Colder Climate

	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 | Colder Climate

	Low temperature	Medium temperature
ηs	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	7.80	7.29
COP Tj = -15°C (if TOL	2.54	1.90

EN 12102-1 | Warmer Climate

	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 | Warmer Climate

	Low temperature	Medium temperature
ηs	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

Model Buderus Hybrid-Set WLW196i-11 A H

Model name	Buderus Hybrid-Set WLW196i-11 A H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	5.18 kW	7.41 kW
El input	1.06 kW	2.61 kW
COP	4.89	2.84

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	194 %	136 %
Prated	10.00 kW	9.30 kW
SCOP	4.92	3.47
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.31 kW	8.39 kW
COP Tj = -7°C	3.00	2.15
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	5.17 kW	4.65 kW
COP Tj = +2°C	4.88	3.48
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	3.70 kW	5.06 kW

COP Tj = +7°C	6.56	4.46
Cdh Tj = +7 °C	1.000	0.980
Pdh Tj = 12°C	3.22 kW	6.05 kW
COP Tj = 12°C	8.28	5.81
Cdh Tj = +12 °C	0.930	0.970
Pdh Tj = Tbiv	10.23 kW	8.39 kW
COP Tj = Tbiv	2.60	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.23 kW	6.33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	27 W	27 W
PSB	26 W	26 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	Gas
Supplementary Heater: PSUP	0.00 kW	2.97 kW
Annual energy consumption Qhe	4198 kWh	5535 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	168 %	119 %
Prated	9.50 kW	8.90 kW
SCOP	4.16	3.05
Tbiv	-17 °C	-12 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	5.79 kW	5.78 kW
COP Tj = -7°C	3.72	2.68
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.50 kW	3.83 kW
COP Tj = +2°C	4.89	3.28
Cdh Tj = +2 °C	1.000	0.980
Pdh Tj = +7°C	2.77 kW	5.23 kW
COP Tj = +7°C	7.49	4.71
Cdh Tj = +7 °C	0.930	0.980
Pdh Tj = 12°C	3.20 kW	6.11 kW
COP Tj = 12°C	8.18	6.04
Cdh Tj = +12 °C	0.930	0.970

Pdh Tj = Tbiv	8.55 kW	6.42 kW
COP Tj = Tbiv	2.25	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.86 kW	5.02 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.08	1.86
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	27 W	27 W
PSB	26 W	26 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	9.50 kW	8.90 kW
Annual energy consumption Qhe	5487 kWh	7194 kWh
Pdh Tj = -15°C (if TOL	8.31	
COP Tj = -15°C (if TOL	2.46	

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	237 %	161 %
Prated	11.80 kW	11.40 kW
SCOP	6.00	4.11
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.80 kW	11.43 kW
COP Tj = +2°C	2.97	2.08
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	7.71 kW	7.96 kW
COP Tj = +7°C	5.04	3.53
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	3.21 kW	5.96 kW
COP Tj = 12°C	8.31	5.57
Cdh Tj = +12 °C	1.000	0.970
Pdh Tj = Tbiv	11.80 kW	11.43 kW
COP Tj = Tbiv	2.97	2.08
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	2.97	2.08
WTOL	60 °C	60 °C
Poff	11 W	11 W

PTO	27 W	27 W
PSB	26 W	26 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	2628 kWh	3705 kWh