

#### Page 1 of 35

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

#### **Login**

Summary of	Buderus Logatherm WLW196i-4 AR	Reg. No.	011-1W0127		
Certificate Holder	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-4 AR				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R410A				
Mass of Refrigerant	1.7 kg				
Certification Date	18.07.2017				
Testing basis	HP KEYMARK certification scheme rules rev. 8				



# Model: Buderus Logatherm WLW196i-4 ARE

Configure model		
Model name	Buderus Logatherm WLW196i-4 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	2.14 kW	1.88 kW		
El input	0.46 kW	0.72 kW		
СОР	4.68	2.60		

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
$\eta_{s}$	224 %	161 %	
Prated	5.30 kW	5.60 kW	
SCOP	5.69	4.10	
Tbiv	2 °C	2 °C	
TOL	2 °C	2 °C	
Pdh Tj = +2°C	5.28 kW	5.65 kW	
$COP Tj = +2^{\circ}C$	3.08	2.22	
Pdh Tj = $+7^{\circ}$ C	3.22 kW	3.92 kW	
$COPTj = +7^{\circ}C$	5.31	3.54	
Pdh Tj = 12°C	1.50 kW	2.49 kW	
COP Tj = 12°C	6.79	5.35	
Pdh Tj = Tbiv	5.28 kW	5.65 kW	
COP Tj = Tbiv	3.08	2.22	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.28 kW	5.65 kW	





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.08	2.22
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1245 kWh	1823 kWh

## Colder Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor 47 dB(A) 47 dB(A)			

EN 14825		
Low temperature	Medium temperature	
159 %	117 %	
3.90 kW	4.00 kW	
4.04	3.00	
	Low temperature 159 % 3.90 kW	





		NK database on 22 juli 202
Tbiv	-17 °C	-16 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.46 kW	2.32 kW
COP Tj = -7°C	3.56	2.57
Pdh Tj = $+2$ °C	1.48 kW	1.79 kW
COP Tj = +2°C	4.86	3.66
Pdh Tj = $+7^{\circ}$ C	1.13 kW	2.13 kW
COP Tj = +7°C	5.53	4.54
Pdh Tj = 12°C	1.21 kW	2.55 kW
COP Tj = 12°C	5.75	5.82
Pdh Tj = Tbiv	3.43 kW	3.37 kW
COP Tj = Tbiv	2.36	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.08 kW	3.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.61
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
РСК	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.90 kW	4.00 kW





Annual energy consumption Qhe	2378 kWh	3287 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.27	1.88
COP Tj = -15°C (if TOL $<$ -20°C)	2.55	1.88

# **Average Climate**

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	183 %	131 %
Prated	4.40 kW	4.10 kW
SCOP	4.65	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.88 kW	3.57 kW
COP Tj = -7°C	3.07	2.16
Pdh Tj = $+2^{\circ}$ C	2.51 kW	2.34 kW
COP Tj = +2°C	4.69	3.29





garana		
Pdh Tj = $+7^{\circ}$ C	1.50 kW	2.13 kW
$COP Tj = +7^{\circ}C$	5.78	4.29
Pdh Tj = 12°C	1.23 kW	2.52 kW
COP Tj = 12°C	6.13	5.53
Pdh Tj = Tbiv	4.37 kW	4.05 kW
COP Tj = Tbiv	2.76	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.37 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1955 kWh	2533 kWh

# Model: Buderus Logatherm WLW196i-4 ARB

Configure model		
Model name Buderus Logatherm WLW196i-4 ARB		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

# Heating

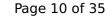
EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.14 kW	1.88 kW
El input	0.46 kW	0.72 kW
СОР	4.68	2.60

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	224 %	161 %
Prated	5.30 kW	5.60 kW
SCOP	5.69	4.10
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	5.28 kW	5.65 kW
$COPTj = +2^{\circ}C$	3.08	2.22
Pdh Tj = $+7$ °C	3.22 kW	3.92 kW
$COPTj = +7^{\circ}C$	5.31	3.54
Pdh Tj = 12°C	1.50 kW	2.49 kW
COP Tj = 12°C	6.79	5.35
Pdh Tj = Tbiv	5.28 kW	5.65 kW
COP Tj = Tbiv	3.08	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.28 kW	5.65 kW



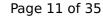


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.08	2.22
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1245 kWh	1823 kWh

#### Colder Climate

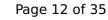
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
159 %	117 %	
3.90 kW	4.00 kW	
4.04	3.00	
	Low temperature  159 %  3.90 kW	





This information was genera	aced by the Think	Till database on 22 juli 2022
Tbiv	-17 °C	-16 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.46 kW	2.32 kW
$COP Tj = -7^{\circ}C$	3.56	2.57
Pdh Tj = $+2$ °C	1.48 kW	1.79 kW
COP Tj = +2°C	4.86	3.66
Pdh Tj = +7°C	1.13 kW	2.13 kW
COP Tj = +7°C	5.53	4.54
Pdh Tj = 12°C	1.21 kW	2.55 kW
COP Tj = 12°C	5.75	5.82
Pdh Tj = Tbiv	3.43 kW	3.37 kW
COP Tj = Tbiv	2.36	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.08 kW	3.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.61
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
РСК	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	2378 kWh	3287 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.27	1.88
COP Tj = -15°C (if TOL $<$ -20°C)	2.55	1.88

# **Average Climate**

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	29 dB(A)	29 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	183 %	131 %
Prated	4.40 kW	4.10 kW
SCOP	4.65	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.88 kW	3.57 kW
COP Tj = -7°C	3.07	2.16
Pdh Tj = $+2^{\circ}$ C	2.51 kW	2.34 kW
COP Tj = +2°C	4.69	3.29



Page 13 of 35

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Pdh Tj = $+7^{\circ}$ C	1.50 kW	2.13 kW
COP Tj = +7°C	5.78	4.29
Pdh Tj = 12°C	1.23 kW	2.52 kW
COP Tj = 12°C	6.13	5.53
Pdh Tj = Tbiv	4.37 kW	4.05 kW
COP Tj = Tbiv	2.76	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.37 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1955 kWh	2533 kWh

# Model: Buderus Logatherm WLW196i-4 ARTS185

Configure model		
Model name	Buderus Logatherm WLW196i-4 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

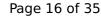
EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.14 kW	1.88 kW
El input	0.46 kW	0.72 kW
СОР	4.68	2.60

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



EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	25 dB(A)	25 dB(A)	
Sound power level outdoor	47 dB(A)	47 dB(A)	

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	224 %	161 %
Prated	5.30 kW	5.60 kW
SCOP	5.69	4.10
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.28 kW	5.65 kW
COP Tj = +2°C	3.08	2.22
Pdh Tj = $+7^{\circ}$ C	3.22 kW	3.92 kW
$COP Tj = +7^{\circ}C$	5.31	3.54
Pdh Tj = 12°C	1.50 kW	2.49 kW
COP Tj = 12°C	6.79	5.35
Pdh Tj = Tbiv	5.28 kW	5.65 kW
COP Tj = Tbiv	3.08	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.28 kW	5.65 kW



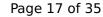


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.08	2.22
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1245 kWh	1823 kWh

#### Colder Climate

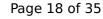
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825	
Low temperature	Medium temperature
159 %	117 %
3.90 kW	4.00 kW
4.04	3.00
	Low temperature  159 %  3.90 kW





This information was gener	ated by the HI KLIMA	NK database on 22 Juli 2022
Tbiv	-17 °C	-16 °C
TOL	-20 °C	-18 °C
Pdh Tj = $-7^{\circ}$ C	2.46 kW	2.32 kW
$COP Tj = -7^{\circ}C$	3.56	2.57
Pdh Tj = $+2$ °C	1.48 kW	1.79 kW
COP Tj = +2°C	4.86	3.66
Pdh Tj = $+7^{\circ}$ C	1.13 kW	2.13 kW
$COPTj = +7^{\circ}C$	5.53	4.54
Pdh Tj = 12°C	1.21 kW	2.55 kW
COP Tj = 12°C	5.75	5.82
Pdh Tj = Tbiv	3.43 kW	3.37 kW
COP Tj = Tbiv	2.36	1.78
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.08 kW	3.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.61
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
РСК	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.90 kW	4.00 kW





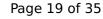
This information was genera	ted by the HP KEYMAF	RK database on 22 Jun 202	2
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Annual energy consumption Qhe	2378 kWh	3287 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.27	1.88
COP Tj = -15°C (if TOL $<$ -20°C)	2.55	1.88

# **Average Climate**

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	183 %	131 %
Prated	4.40 kW	4.10 kW
SCOP	4.65	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.88 kW	3.57 kW
COP Tj = -7°C	3.07	2.16
Pdh Tj = $+2$ °C	2.51 kW	2.34 kW
$COP Tj = +2^{\circ}C$	4.69	3.29





Pdh Tj = +7°C	1.50 kW	2.13 kW
$COP Tj = +7^{\circ}C$	5.78	4.29
Pdh Tj = 12°C	1.23 kW	2.52 kW
COP Tj = 12°C	6.13	5.53
Pdh Tj = Tbiv	4.37 kW	4.05 kW
COP Tj = Tbiv	2.76	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.37 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1955 kWh	2533 kWh

# Domestic Hot Water (DHW)



EN 16147	
Declared load profile	L
Efficiency ηDHW	119 %
СОР	2.80
Heating up time	03:00 h:min
Standby power input	47.0 W
Reference hot water temperature	54.2 °C
Mixed water at 40°C	272 I

## Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	81 %
СОР	1.90
Heating up time	04:18 h:min
Standby power input	65.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	275 I

# **Average Climate**



EN 16147	
Declared load profile	L
Efficiency ηDHW	96 %
СОР	2.25
Heating up time	03:30 h:min
Standby power input	55.0 W
Reference hot water temperature	52.1 °C
Mixed water at 40°C	272

# Model: Buderus Logatherm WLW196i-4 ART190

Configure model	
Model name	Buderus Logatherm WLW196i-4 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

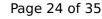
EN 14511-2		
	Low temperature	Medium temperature
Heat output	2.14 kW	1.88 kW
El input	0.46 kW	0.72 kW
СОР	4.68	2.60

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



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	224 %	161 %
Prated	5.30 kW	5.60 kW
SCOP	5.69	4.10
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	5.28 kW	5.65 kW
$COPTj = +2^{\circ}C$	3.08	2.22
Pdh Tj = $+7$ °C	3.22 kW	3.92 kW
$COPTj = +7^{\circ}C$	5.31	3.54
Pdh Tj = 12°C	1.50 kW	2.49 kW
COP Tj = 12°C	6.79	5.35
Pdh Tj = Tbiv	5.28 kW	5.65 kW
COP Tj = Tbiv	3.08	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.28 kW	5.65 kW





COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.08	2.22
WTOL	60 °C	60 °C
Poff	17 W	17 W
РТО	22 W	22 W
PSB	17 W	17 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1245 kWh	1823 kWh

## Colder Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
159 %	117 %	
3.90 kW	4.00 kW	
4.04	3.00	
	Low temperature 159 % 3.90 kW	





-16 °C  -18 °C  2.32 kW  2.57  1.79 kW  3.66  2.13 kW  4.54  2.55 kW
2.32 kW 2.57 1.79 kW 3.66 2.13 kW 4.54 2.55 kW
2.57  1.79 kW  3.66  2.13 kW  4.54  2.55 kW
1.79 kW 3.66 2.13 kW 4.54 2.55 kW
3.66 2.13 kW 4.54 2.55 kW
2.13 kW 4.54 2.55 kW
4.54 2.55 kW
2.55 kW
5.82
3.32
3.37 kW
1.78
3.11 kW
1.61
60 °C
17 W
22 W
17 W
o w
Electricity
4.00 kW





Annual energy consumption Qhe	2378 kWh	3287 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.27	1.88
COP Tj = -15°C (if TOL $<$ -20°C)	2.55	1.88

# Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	183 %	131 %
Prated	4.40 kW	4.10 kW
SCOP	4.65	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.88 kW	3.57 kW
COP Tj = -7°C	3.07	2.16
Pdh Tj = $+2$ °C	2.51 kW	2.34 kW
$COP Tj = +2^{\circ}C$	4.69	3.29





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1.50 kW	2.13 kW
5.78	4.29
1.23 kW	2.52 kW
6.13	5.53
4.37 kW	4.05 kW
2.76	1.85
4.37 kW	4.05 kW
2.76	1.85
1.00	1.00
60 °C	60 °C
17 W	17 W
22 W	22 W
17 W	17 W
0 W	0 W
Electricity	Electricity
0.00 kW	0.00 kW
1955 kWh	2533 kWh
	5.78  1.23 kW  6.13  4.37 kW  2.76  4.37 kW  2.76  1.00  60 °C  17 W  22 W  17 W  0 W  Electricity  0.00 kW

# Domestic Hot Water (DHW)



EN 16147		
Declared load profile	L	
Efficiency ηDHW	119 %	
СОР	2.80	
Heating up time	03:00 h:min	
Standby power input	47.0 W	
Reference hot water temperature	54.2 °C	
Mixed water at 40°C	272	

#### Colder Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	81 %	
СОР	1.90	
Heating up time	04:18 h:min	
Standby power input	65.0 W	
Reference hot water temperature	52.4 °C	
Mixed water at 40°C	275 I	

# **Average Climate**



EN 16147		
Declared load profile	L	
Efficiency ηDHW	96 %	
СОР	2.25	
Heating up time	03:30 h:min	
Standby power input	55.0 W	
Reference hot water temperature	52.1 °C	
Mixed water at 40°C	272	



# Model: Buderus Logatherm WLW196i-4 ARTP120

Configure model		
Model name	Buderus Logatherm WLW196i-4 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	2.14 kW	1.88 kW	
El input	0.48 kW	0.75 kW	
СОР	4.44	2.52	

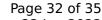
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

CEN heat pump KEYMARK

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	208 %	153 %
Prated	5.30 kW	5.60 kW
SCOP	5.28	3.90
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.28 kW	5.65 kW
$COP Tj = +2^{\circ}C$	2.98	2.19
Pdh Tj = $+7^{\circ}$ C	3.22 kW	3.92 kW
$COP Tj = +7^{\circ}C$	5.01	3.45
Pdh Tj = 12°C	1.50 kW	2.49 kW
COP Tj = 12°C	6.19	5.05
Pdh Tj = Tbiv	5.28 kW	5.65 kW
COP Tj = Tbiv	2.98	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.28 kW	5.65 kW



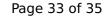


COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.98	2.19
WTOL	60 °C	60 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1341 kWh	1918 kWh

## Colder Climate

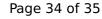
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
Low temperature	Medium temperature	
150 %	112 %	
3.90 kW	4.00 kW	
3.83	2.87	
	Low temperature 150 % 3.90 kW	





This information was genera	acca by the fit RETIN	Till database on 22 juli 2022
Tbiv	-17 °C	-16 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.46 kW	2.32 kW
$COP Tj = -7^{\circ}C$	3.43	2.52
Pdh Tj = $+2$ °C	1.48 kW	1.79 kW
COP Tj = +2°C	4.59	3.51
Pdh Tj = $+7$ °C	1.13 kW	2.13 kW
COP Tj = +7°C	5.13	4.33
Pdh Tj = 12°C	1.21 kW	2.55 kW
COP Tj = 12°C	5.24	5.51
Pdh Tj = Tbiv	3.43 kW	3.37 kW
COP Tj = Tbiv	2.31	1.76
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.08 kW	3.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.59
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
РСК	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.90 kW	4.00 kW
	1	





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

Annual energy consumption Qhe	2511 kWh	3430 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.27	3.29
COP Tj = -15°C (if TOL $<$ -20°C)	2.49	1.85

# **Average Climate**

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{S}$	172 %	125 %
Prated	4.40 kW	4.10 kW
SCOP	4.39	3.20
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.88 kW	3.57 kW
COP Tj = -7°C	2.99	2.13
Pdh Tj = $+2$ °C	2.51 kW	2.34 kW
$COP Tj = +2^{\circ}C$	4.50	3.20



Pdh Tj = $+7^{\circ}$ C	1.50 kW	2.13 kW
COP Tj = +7°C	5.32	4.08
Pdh Tj = 12°C	1.23 kW	2.52 kW
COP Tj = 12°C	5.57	5.22
Pdh Tj = Tbiv	4.37 kW	4.05 kW
COP Tj = Tbiv	2.70	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.37 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.83
WTOL	60 °C	60 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	4 W	4 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2072 kWh	2647 kWh