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Summary of	Buderus Logatherm WLW196i-6 AR and IR, Buderus Logatherm WLW196i.2-4 AR	Reg. No.	011-1W0128
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		
Name of testing laboratory	RISE Research Institutes of Sweden AB		
Subtype title	Buderus Logatherm WLW196i-6 AR and IR, Buderus Logatherm WLW196i.2-4 AR		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	1.75 kg		
Certification Date	18.07.2017		

Model: Buderus Logatherm WLW196i-6 ARE

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW

COP Tj = Tbiv	2.65	1.91
Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	0.90	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Model: Buderus Logatherm WLW196i-6 ARB

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW

COP Tj = Tbiv	2.65	1.91
Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	0.90	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Model: Buderus Logatherm WLW196i-6 ART

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW

COP Tj = Tbiv	2.65	1.91
Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	0.90	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	97 %
COP	2.40
Heating up time	02:44 h:min
Standby power input	58.7 W
Reference hot water temperature	55.6 °C
Mixed water at 40°C	284 l

Model: Buderus Logatherm WLW196i-6 ARTS

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW

COP Tj = Tbiv	2.65	1.91
Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	0.90	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	97 %
COP	2.40
Heating up time	02:44 h:min
Standby power input	58.7 W
Reference hot water temperature	55.6 °C
Mixed water at 40°C	284 l

Model: Buderus Logatherm WLW196i-6 IRE

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW
COP Tj = Tbiv	2.65	1.91

Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Model: Buderus Logatherm WLW196i-6 IRB

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW
COP Tj = Tbiv	2.65	1.91

Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Model: Buderus Logatherm WLW196i-6 IRT

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW
COP Tj = Tbiv	2.65	1.91

Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	97 %
COP	2.40
Heating up time	02:44 h:min
Standby power input	58.7 W
Reference hot water temperature	55.6 °C
Mixed water at 40°C	284 l

Model: Buderus Logatherm WLW196i-6 IRTS

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.96 kW	2.18 kW
El input	0.61 kW	0.80 kW
COP	4.84	2.74
Indoor water flow rate	0.65 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	203 %	145 %
Prated	5.00 kW	5.00 kW
SCOP	5.15	3.70
Tbiv	-10 °C	-10 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	4.80 kW	4.00 kW
COP Tj = -7°C	3.00	2.22
Pdh Tj = +2°C	2.90 kW	2.40 kW
COP Tj = +2°C	4.89	3.42
Pdh Tj = +7°C	1.90 kW	2.10 kW
COP Tj = +7°C	6.64	4.90
Pdh Tj = 12°C	1.30 kW	2.60 kW
COP Tj = 12°C	8.93	7.53
Pdh Tj = Tbiv	5.40 kW	4.50 kW
COP Tj = Tbiv	2.65	1.91

Pdh Tj = TOL	4.10 kW	4.30 kW
COP Tj = TOL	1.57	1.60
Cdh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	26 W	26 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2227 kWh	2740 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	97 %
COP	2.40
Heating up time	02:44 h:min
Standby power input	58.7 W
Reference hot water temperature	55.6 °C
Mixed water at 40°C	284 l

Model: Buderus Logatherm WLW196i.2-4 ARB S+

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.14 kW	1.77 kW
El input	0.43 kW	0.69 kW
COP	4.99	2.57
Indoor water flow rate	0.37 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	196 %	133 %
Prated	4.76 kW	4.49 kW
SCOP	4.99	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.93 kW
COP Tj = -7°C	3.11	2.11
Pdh Tj = +2°C	2.51 kW	2.41 kW
COP Tj = +2°C	4.96	3.36
Pdh Tj = +7°C	1.51 kW	2.06 kW
COP Tj = +7°C	6.40	4.41
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	7.53	5.76
Pdh Tj = Tbiv	4.76 kW	4.49 kW

COP Tj = Tbiv	2.68	1.82
Pdh Tj = TOL	4.76 kW	4.49 kW
COP Tj = TOL	2.68	1.82
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1971 kWh	2721 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**
η_s	168 %	118 %

Prated	4.30 kW	4.00 kW
SCOP	4.27	3.03
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh		
Pdh Tj = +7°C	1.14 kW	2.08 kW
COP Tj = +7°C	6.44	4.68
Cdh		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL	3.44 kW	3.39 kW
COP Tj = TOL	2.11	1.56
WTOL	60 °C	60 °C

Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.64 kW	0.00 kW
Annual energy consumption Qhe	2480 kWh	3250 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh		

Warmer 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**
η_s	242 %	165 %
Prated	5.50 kW	5.40 kW

SCOP	6.13	4.19
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.48 kW	5.40 kW
COP Tj = +2°C	3.03	2.10
Pdh Tj = +7°C	3.81 kW	3.56 kW
COP Tj = +7°C	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL	5.48 kW	5.40 kW
COP Tj = TOL	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1723 kWh

Model: Buderus Logatherm WLW196i.2-4 ARE S+

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.14 kW	1.77 kW
El input	0.43 kW	0.69 kW
COP	4.99	2.57
Indoor water flow rate	0.37 m³/h	0.24 m³/h

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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	47 dB(A)	47 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	196 %	133 %
Prated	4.76 kW	4.49 kW
SCOP	4.99	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.93 kW
COP Tj = -7°C	3.11	2.11
Pdh Tj = +2°C	2.51 kW	2.41 kW
COP Tj = +2°C	4.96	3.36
Pdh Tj = +7°C	1.51 kW	2.06 kW
COP Tj = +7°C	6.40	4.41
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	7.53	5.76
Pdh Tj = Tbiv	4.76 kW	4.49 kW

COP Tj = Tbiv	2.68	1.82
Pdh Tj = TOL	4.76 kW	4.49 kW
COP Tj = TOL	2.68	1.82
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1971 kWh	2721 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**
η_s	168 %	118 %

Prated	4.30 kW	4.00 kW
SCOP	4.27	3.03
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh		
Pdh Tj = +7°C	1.14 kW	2.08 kW
COP Tj = +7°C	6.44	4.68
Cdh		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL	3.44 kW	3.39 kW
COP Tj = TOL	2.11	1.56
WTOL	60 °C	60 °C

Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.64 kW	0.00 kW
Annual energy consumption Qhe	2480 kWh	3250 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh		

Warmer 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**
η_s	242 %	165 %
Prated	5.50 kW	5.40 kW

SCOP	6.13	4.19
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.48 kW	5.40 kW
COP Tj = +2°C	3.03	2.10
Pdh Tj = +7°C	3.81 kW	3.56 kW
COP Tj = +7°C	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL	5.48 kW	5.40 kW
COP Tj = TOL	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1723 kWh

Model: Buderus Logatherm WLW196i.2-4 ART S+

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.14 kW	1.77 kW
El input	0.43 kW	0.69 kW
COP	4.99	2.57
Indoor water flow rate	0.37 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	196 %	133 %
Prated	4.76 kW	4.49 kW
SCOP	4.99	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.93 kW
COP Tj = -7°C	3.11	2.11
Pdh Tj = +2°C	2.51 kW	2.41 kW
COP Tj = +2°C	4.96	3.36
Pdh Tj = +7°C	1.51 kW	2.06 kW
COP Tj = +7°C	6.40	4.41
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	7.53	5.76
Pdh Tj = Tbiv	4.76 kW	4.49 kW

COP Tj = Tbiv	2.68	1.82
Pdh Tj = TOL	4.76 kW	4.49 kW
COP Tj = TOL	2.68	1.82
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1971 kWh	2721 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**
η_s	168 %	118 %

Prated	4.30 kW	4.00 kW
SCOP	4.27	3.03
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh		
Pdh Tj = +7°C	1.14 kW	2.08 kW
COP Tj = +7°C	6.44	4.68
Cdh		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL	3.44 kW	3.39 kW
COP Tj = TOL	2.11	1.56
WTOL	60 °C	60 °C

Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.64 kW	0.00 kW
Annual energy consumption Qhe	2480 kWh	3250 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh		

Warmer 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**
η_s	242 %	165 %
Prated	5.50 kW	5.40 kW

SCOP	6.13	4.19
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.48 kW	5.40 kW
COP Tj = +2°C	3.03	2.10
Pdh Tj = +7°C	3.81 kW	3.56 kW
COP Tj = +7°C	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL	5.48 kW	5.40 kW
COP Tj = TOL	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1723 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	100 %
COP	2.36
Heating up time	03:33 h:min
Standby power input	52.0 W
Reference hot water temperature	53.5 °C
Mixed water at 40°C	271 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	84 %
COP	1.96
Heating up time	04:10 h:min
Standby power input	66.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	279 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	119 %
COP	2.80
Heating up time	02:49 h:min
Standby power input	47.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	261 l

Model: Buderus Logatherm WLW196i.2-4 ARTS S+

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	2.14 kW	1.77 kW
El input	0.43 kW	0.69 kW
COP	4.99	2.57
Indoor water flow rate	0.37 m³/h	0.24 m³/h

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

Average Climate

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

EN 14825		
	Low temperature	**Medium temperature**
η_s	196 %	133 %
Prated	4.76 kW	4.49 kW
SCOP	4.99	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.27 kW	3.93 kW
COP Tj = -7°C	3.11	2.11
Pdh Tj = +2°C	2.51 kW	2.41 kW
COP Tj = +2°C	4.96	3.36
Pdh Tj = +7°C	1.51 kW	2.06 kW
COP Tj = +7°C	6.40	4.41
Pdh Tj = 12°C	1.27 kW	2.45 kW
COP Tj = 12°C	7.53	5.76
Pdh Tj = Tbiv	4.76 kW	4.49 kW

COP Tj = Tbiv	2.68	1.82
Pdh Tj = TOL	4.76 kW	4.49 kW
COP Tj = TOL	2.68	1.82
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1971 kWh	2721 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**
η_s	168 %	118 %

Prated	4.30 kW	4.00 kW
SCOP	4.27	3.03
Tbiv	-17 °C	-17 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	2.50 kW	2.29 kW
COP Tj = -7°C	3.64	2.52
Cdh		
Pdh Tj = +2°C	1.49 kW	1.80 kW
COP Tj = +2°C	5.22	3.82
Cdh		
Pdh Tj = +7°C	1.14 kW	2.08 kW
COP Tj = +7°C	6.44	4.68
Cdh		
Pdh Tj = 12°C	1.24 kW	2.48 kW
COP Tj = 12°C	7.03	6.02
Cdh		
Pdh Tj = Tbiv	3.75 kW	3.53 kW
COP Tj = Tbiv	2.29	1.64
Pdh Tj = TOL	3.44 kW	3.39 kW
COP Tj = TOL	2.11	1.56
WTOL	60 °C	60 °C

Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0.64 kW	0.00 kW
Annual energy consumption Qhe	2480 kWh	3250 kWh
Pdh Tj = -15°C (if TOL<-20°C)		
COP Tj = -15°C (if TOL<-20°C)		
Cdh		

Warmer 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**
η_s	242 %	165 %
Prated	5.50 kW	5.40 kW

SCOP	6.13	4.19
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.48 kW	5.40 kW
COP Tj = +2°C	3.03	2.10
Pdh Tj = +7°C	3.81 kW	3.56 kW
COP Tj = +7°C	5.16	3.57
Pdh Tj = 12°C	1.71 kW	2.44 kW
COP Tj = 12°C	8.06	5.53
Pdh Tj = Tbiv	5.48 kW	5.40 kW
COP Tj = Tbiv	3.03	2.10
Pdh Tj = TOL	5.48 kW	5.40 kW
COP Tj = TOL	3.03	2.10
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electric	Electric
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	1199 kWh	1723 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	98 %
COP	2.31
Heating up time	03:11 h:min
Standby power input	54.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	261 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	80 %
COP	1.88
Heating up time	04:05 h:min
Standby power input	67.0 W
Reference hot water temperature	51.7 °C
Mixed water at 40°C	259 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	110 %
COP	2.58
Heating up time	02:44 h:min
Standby power input	49.0 W
Reference hot water temperature	51.7 °C
Mixed water at 40°C	247 l