

Subtype Buderus Logatherm WLW196i-8 AR and IR, Buderus Logatherm WLW196i.2-6 AR

Certificate Holder	Bosch Thermotechnik GmbH (Buderus)
Address	Sophienstraße 30-32
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Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Buderus Logatherm WLW196i-8 AR and IR, Buderus Logatherm WLW196i.2-6 AR
Registration number	011-1W0129
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.35 kg
Certification Date	18.07.2017
Testing basis	HP KEYMARK certification scheme rules rev. 8

Model Buderus Logatherm WLW196i-8 ARE

Model name	Buderus Logatherm WLW196i-8 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW

COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87

WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL)	4.93	2.06
COP Tj = -15°C (if TOL)	2.87	2.06

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

Model Buderus Logatherm WLW196i-8 ARB

Model name	Buderus Logatherm WLW196i-8 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	1x230V 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	145 %
Prated	7.60 kW	6.50 kW
SCOP	4.93	3.70
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.75 kW	5.71 kW
COP Tj = -7°C	3.16	2.32
Pdh Tj = +2°C	4.09 kW	3.35 kW
COP Tj = +2°C	4.92	3.67
Pdh Tj = +7°C	2.51 kW	2.76 kW

COP Tj = +7°C	6.05	4.65
Pdh Tj = 12°C	1.66 kW	3.40 kW
COP Tj = 12°C	7.59	6.19
Pdh Tj = Tbiv	7.65 kW	6.50 kW
COP Tj = Tbiv	2.67	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.65 kW	6.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.67	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3188 kWh	3631 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	177 %	126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87

WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL)	4.93	2.06
COP Tj = -15°C (if TOL)	2.87	2.06

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh



Model Buderus Logatherm WLW196i-8 ART190

Model name	Buderus Logatherm WLW196i-8 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 η_{DHW}	98 %
COP	2.31
Heating up time	02:37 h:min
Standby power input	52.5 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.2 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	270 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	145 %
P _{rated}	7.60 kW	6.50 kW
SCOP	4.93	3.70
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	6.75 kW	5.71 kW
COP T _j = -7°C	3.16	2.32
P _{dh} T _j = +2°C	4.09 kW	3.35 kW
COP T _j = +2°C	4.92	3.67
P _{dh} T _j = +7°C	2.51 kW	2.76 kW
COP T _j = +7°C	6.05	4.65
P _{dh} T _j = 12°C	1.66 kW	3.40 kW
COP T _j = 12°C	7.59	6.19
P _{dh} T _j = T _{biv}	7.65 kW	6.50 kW
COP T _j = T _{biv}	2.67	2.03
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.65 kW	6.50 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.67	2.03
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	3188 kWh	3631 kWh
EN 12102-1 Colder Climate		
Sound power level indoor	Low temperature 25 dB(A)	Medium temperature 25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)
EN 14825 Colder Climate		
ηs	Low temperature 177 %	Medium temperature 126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL)	4.93	2.06
COP Tj = -15°C (if TOL)	2.87	2.06
EN 12102-1 Warmer Climate		
Sound power level indoor	Low temperature 25 dB(A)	Medium temperature 25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)
EN 14825 Warmer Climate		

	Low temperature	Medium temperature
ηs	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh



Model Buderus Logatherm WLW196i-8 ARTS185

Model name	Buderus Logatherm WLW196i-8 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 η_{DHW}	101 %
COP	2.37
Heating up time	02:24 h:min
Standby power input	53.7 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.3 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 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	3.77 kW	2.41 kW
El input	0.75 kW	0.91 kW
COP	5.02	2.66

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	194 %	145 %
P _{rated}	7.60 kW	6.50 kW
SCOP	4.93	3.70
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	6.75 kW	5.71 kW
COP T _j = -7°C	3.16	2.32
P _{dh} T _j = +2°C	4.09 kW	3.35 kW
COP T _j = +2°C	4.92	3.67
P _{dh} T _j = +7°C	2.51 kW	2.76 kW
COP T _j = +7°C	6.05	4.65
P _{dh} T _j = 12°C	1.66 kW	3.40 kW
COP T _j = 12°C	7.59	6.19
P _{dh} T _j = T _{biv}	7.65 kW	6.50 kW
COP T _j = T _{biv}	2.67	2.03
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.65 kW	6.50 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.67	2.03
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	3188 kWh	3631 kWh
EN 12102-1 Colder Climate		
Sound power level indoor	Low temperature 25 dB(A)	Medium temperature 25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)
EN 14825 Colder Climate		
ηs	Low temperature 177 %	Medium temperature 126 %
Prated	6.10 kW	6.00 kW
SCOP	4.49	3.22
Tbiv	-20 °C	-18 °C
TOL	-20 °C	-18 °C
Pdh Tj = -7°C	3.44 kW	3.61 kW
COP Tj = -7°C	3.87	2.77
Pdh Tj = +2°C	2.27 kW	2.43 kW
COP Tj = +2°C	5.43	3.89
Pdh Tj = +7°C	1.59 kW	2.79 kW
COP Tj = +7°C	5.75	4.70
Pdh Tj = 12°C	1.69 kW	3.23 kW
COP Tj = 12°C	7.40	5.84
Pdh Tj = Tbiv	5.84 kW	5.38 kW
COP Tj = Tbiv	2.36	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.84 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.36	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.10 kW	6.00 kW
Annual energy consumption Qhe	3346 kWh	4594 kWh
Pdh Tj = -15°C (if TOL)	4.93	2.06
COP Tj = -15°C (if TOL)	2.87	2.06
EN 12102-1 Warmer Climate		
Sound power level indoor	Low temperature 25 dB(A)	Medium temperature 25 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)
EN 14825 Warmer Climate		

	Low temperature	Medium temperature
η_s	247 %	178 %
Prated	9.00 kW	7.90 kW
SCOP	6.25	4.53
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.02 kW	7.93 kW
COP Tj = +2°C	2.96	2.28
Pdh Tj = +7°C	6.08 kW	4.95 kW
COP Tj = +7°C	5.37	3.95
Pdh Tj = 12°C	2.61 kW	3.33 kW
COP Tj = 12°C	8.27	5.89
Pdh Tj = Tbiv	9.02 kW	7.93 kW
COP Tj = Tbiv	2.96	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.02 kW	7.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.28
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1924 kWh	2332 kWh

Model Buderus Logatherm WLW196i-8 IRE

Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	3.03	2.29
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	4.19	3.56
Pdh Tj = +7°C	2.54 kW	2.77 kW

COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.59	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3365 kWh	3483 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92

WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Qhe	3555 kWh	4677 kWh
Pdh Tj = -15°C (if TOL)	5.49	2.07
COP Tj = -15°C (if TOL)	2.61	2.07

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh



Model Buderus Logatherm WLW196i-8 IRB

Model name	Buderus Logatherm WLW196i-8 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	1x230V 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	139 %
Prated	7.30 kW	6.00 kW
SCOP	4.48	3.56
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	3.03	2.29
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	4.19	3.56
Pdh Tj = +7°C	2.54 kW	2.77 kW

COP Tj = +7°C	5.98	4.40
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	7.30	5.61
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.59	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.59	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3365 kWh	3483 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	169 %	123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92

WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3555 kWh	4677 kWh
Pdh Tj = -15°C (if TOL)	5.49	2.07
COP Tj = -15°C (if TOL)	2.61	2.07

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh



Model Buderus Logatherm WLW196i-8 IRT190

Model name	Buderus Logatherm WLW196i-8 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 η_{DHW}	98 %
COP	2.31
Heating up time	02:37 h:min
Standby power input	53.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	77 %
COP	1.82
Heating up time	03:08 h:min
Standby power input	69.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	285 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	118 %
COP	2.77
Heating up time	02:01 h:min
Standby power input	47.0 W
Reference hot water temperature	54.7 °C
Mixed water at 40°C	270 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	139 %
P _{rated}	7.30 kW	6.00 kW
SCOP	4.48	3.56
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	6.43 kW	5.18 kW
COP T _j = -7°C	3.03	2.29
P _{dh} T _j = +2°C	3.93 kW	3.10 kW
COP T _j = +2°C	4.19	3.56
P _{dh} T _j = +7°C	2.54 kW	2.77 kW
COP T _j = +7°C	5.98	4.40
P _{dh} T _j = 12°C	1.68 kW	3.30 kW
COP T _j = 12°C	7.30	5.61
P _{dh} T _j = T _{biv}	7.29 kW	5.99 kW
COP T _j = T _{biv}	2.59	1.98
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.29 kW	5.99 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.59	1.98
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	3365 kWh	3483 kWh
EN 12102-1 Colder Climate		
Sound power level indoor	Low temperature 48 dB(A)	Medium temperature 48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)
EN 14825 Colder Climate		
ηs	Low temperature 169 %	Medium temperature 123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Qhe	3555 kWh	4677 kWh
Pdh Tj = -15°C (if TOL)	5.49	2.07
COP Tj = -15°C (if TOL)	2.61	2.07
EN 12102-1 Warmer Climate		
Sound power level indoor	Low temperature 48 dB(A)	Medium temperature 48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)
EN 14825 Warmer Climate		

	Low temperature	Medium temperature
ηs	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh



Model Buderus Logatherm WLW196i-8 IRTS185

Model name	Buderus Logatherm WLW196i-8 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 η_{DHW}	101 %
COP	2.37
Heating up time	02:24 h:min
Standby power input	54.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	263 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	87 %
COP	2.01
Heating up time	02:56 h:min
Standby power input	77.0 W
Reference hot water temperature	54.5 °C
Mixed water at 40°C	279 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	111 %
COP	2.61
Heating up time	02:00 h:min
Standby power input	48.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	261 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	2.85 kW	2.34 kW
El input	0.62 kW	0.91 kW
COP	4.63	2.58

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	139 %
P _{rated}	7.30 kW	6.00 kW
SCOP	4.48	3.56
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _d h T _j = -7°C	6.43 kW	5.18 kW
COP T _j = -7°C	3.03	2.29
P _d h T _j = +2°C	3.93 kW	3.10 kW
COP T _j = +2°C	4.19	3.56
P _d h T _j = +7°C	2.54 kW	2.77 kW
COP T _j = +7°C	5.98	4.40
P _d h T _j = 12°C	1.68 kW	3.30 kW
COP T _j = 12°C	7.30	5.61
P _d h T _j = T _{biv}	7.29 kW	5.99 kW
COP T _j = T _{biv}	2.59	1.98
P _d h T _j = TOL or P _d h T _j = T _{designh} if TOL < T _{designh}	7.29 kW	5.99 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.59	1.98
Cd _h T _j = TOL or P _d h T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	60 °C	60 °C
P _{off}	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW



Annual energy consumption Qhe	3365 kWh	3483 kWh
EN 12102-1 Colder Climate		
Sound power level indoor	Low temperature 48 dB(A)	Medium temperature 48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)
EN 14825 Colder Climate		
ηs	Low temperature 169 %	Medium temperature 123 %
Prated	6.20 kW	6.00 kW
SCOP	4.30	3.16
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.40	2.71
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.42	3.89
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.63	4.62
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	7.23	5.74
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.30	1.97
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.17	1.92
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Qhe	3555 kWh	4677 kWh
Pdh Tj = -15°C (if TOL)	5.49	2.07
COP Tj = -15°C (if TOL)	2.61	2.07
EN 12102-1 Warmer Climate		
Sound power level indoor	Low temperature 48 dB(A)	Medium temperature 48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)
EN 14825 Warmer Climate		



	Low temperature	Medium temperature
η_s	239 %	167 %
Prated	8.30 kW	7.20 kW
SCOP	6.04	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.82	2.18
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.23	3.70
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.97	5.51
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.82	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.18
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1837 kWh	2270 kWh

Model Buderus Logatherm WLW196i.2-6 ARB S+

Model name	Buderus Logatherm WLW196i.2-6 ARB S+
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	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56

Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	2553 kWh	3413 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19

Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	3291 kWh	4288 kWh
Pdh Tj = -15°C (if TOL	4.96	4.76
COP Tj = -15°C (if TOL	2.44	1.82
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1591 kWh	2325 kWh

Model Buderus Logatherm WLW196i.2-6 ARE S+

Model name	Buderus Logatherm WLW196i.2-6 ARE S+
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	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	198 %	140 %
Prated	6.20 kW	5.91 kW
SCOP	5.02	3.58
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7 °C	3.16	2.27
Cdh Tj = -7 °C		
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.86	3.56

Cdh Tj = +2 °C		
Pdh Tj = +7°C	2.04 kW	2.84 kW
COP Tj = +7°C	6.72	4.49
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.96	5.98
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.72	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.72	1.93
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	2553 kWh	3413 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19

Cdh Tj = +12 °C

Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Qhe	3291 kWh	4288 kWh
Pdh Tj = -15°C (if TOL)	4.96	4.76
COP Tj = -15°C (if TOL)	2.44	1.82
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	29 dB(A)	29 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	242 %	164 %
Prated	7.29 kW	7.25 kW
SCOP	6.12	4.17
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	3.06	2.19
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.56	3.76
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	8.01	5.28
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	3.06	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.06	2.19
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1591 kWh	2325 kWh



Model Buderus Logatherm WLW196i.2-6 ART190 S+

Model name	Buderus Logatherm WLW196i.2-6 ART190 S+
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 η_{DHW}	103 %
COP	2.42
Heating up time	02:26 h:min
Standby power input	49.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	269 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.08
Heating up time	02:51 h:min
Standby power input	57.0 W
Reference hot water temperature	53.2 °C
Mixed water at 40°C	272 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	122 %
COP	2.86
Heating up time	01:55 h:min
Standby power input	45.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	268 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	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	198 %	140 %
P _{rated}	6.20 kW	5.91 kW
SCOP	5.02	3.58
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.54 kW	5.21 kW
COP T _j = -7°C	3.16	2.27
C _{dh} T _j = -7 °C		
P _{dh} T _j = +2°C	3.31 kW	3.27 kW
COP T _j = +2°C	4.86	3.56
C _{dh} T _j = +2 °C		
P _{dh} T _j = +7°C	2.04 kW	2.84 kW
COP T _j = +7°C	6.72	4.49
C _{dh} T _j = +7 °C		
P _{dh} T _j = 12°C	1.72 kW	3.34 kW
COP T _j = 12°C	7.96	5.98
C _{dh} T _j = +12 °C		
P _{dh} T _j = T _{biv}	6.20 kW	5.91 kW
COP T _j = T _{biv}	2.72	1.93
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.20 kW	5.91 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.72	1.93
WTOL	60 °C	60 °C
P _{off}	17 W	17 W
PTO	50 W	50 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	2553 kWh	3413 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Qhe	3291 kWh	4288 kWh
Pdh Tj = -15°C (if TOL	4.96	1.82
COP Tj = -15°C (if TOL	2.44	1.82
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate



	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_S	242 %	164 %
P _{rated}	7.29 kW	7.25 kW
SCOP	6.12	4.17
T _{biv}	2 °C	2 °C
T _{OL}	2 °C	2 °C
P _{dh T_j} = +2°C	7.29 kW	7.25 kW
COP T _j = +2°C	3.06	2.19
P _{dh T_j} = +7°C	4.69 kW	4.78 kW
COP T _j = +7°C	5.56	3.76
P _{dh T_j} = 12°C	3.64 kW	3.26 kW
COP T _j = 12°C	8.01	5.28
P _{dh T_j} = T _{biv}	7.29 kW	7.25 kW
COP T _j = T _{biv}	3.06	2.19
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	7.29 kW	7.25 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	3.06	2.19
WT _{OL}	60 °C	60 °C
P _{off}	17 W	17 W
PTO	50 W	50 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 Q _{he}	1591 kWh	2325 kWh



Model Buderus Logatherm WLW196i.2-6 ARTS185 S+

Model name	Buderus Logatherm WLW196i.2-6 ARTS185 S+
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 η_{DHW}	101 %
COP	2.37
Heating up time	02:11 h:min
Standby power input	51.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	259 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	84 %
COP	2.00
Heating up time	02:48 h:min
Standby power input	58.0 W
Reference hot water temperature	51.8 °C
Mixed water at 40°C	252 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.64
Heating up time	01:52 h:min
Standby power input	47.0 W
Reference hot water temperature	51.6 °C
Mixed water at 40°C	254 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	4.01 kW	2.60 kW
El input	0.80 kW	0.91 kW
COP	5.01	2.84

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	198 %	140 %
P _{rated}	6.20 kW	5.91 kW
SCOP	5.02	3.58
T _{biv}	-10 °C	-10 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	5.54 kW	5.21 kW
COP T _j = -7°C	3.16	2.27
C _{dh} T _j = -7 °C		
P _{dh} T _j = +2°C	3.31 kW	3.27 kW
COP T _j = +2°C	4.86	3.56
C _{dh} T _j = +2 °C		
P _{dh} T _j = +7°C	2.04 kW	2.84 kW
COP T _j = +7°C	6.72	4.49
C _{dh} T _j = +7 °C		
P _{dh} T _j = 12°C	1.72 kW	3.34 kW
COP T _j = 12°C	7.96	5.98
C _{dh} T _j = +12 °C		
P _{dh} T _j = T _{biv}	6.20 kW	5.91 kW
COP T _j = T _{biv}	2.72	1.93
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.20 kW	5.91 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.72	1.93
WTOL	60 °C	60 °C
P _{off}	17 W	17 W
PTO	50 W	50 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	2553 kWh	3413 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	168 %	123 %
Prated	5.72 kW	5.48 kW
SCOP	4.28	3.15
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.63	2.66
Cdh Tj = -7 °C		
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.41	3.86
Cdh Tj = +2 °C		
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.76	4.70
Cdh Tj = +7 °C		
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	7.17	6.19
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.44	1.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.39	1.76
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Qhe	3291 kWh	4288 kWh
Pdh Tj = -15°C (if TOL	4.96	1.82
COP Tj = -15°C (if TOL	2.44	1.82
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate



	Low temperature	Medium temperature
Sound power level indoor	25 dB(A)	25 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_S	242 %	164 %
P _{rated}	7.29 kW	7.25 kW
SCOP	6.12	4.17
T _{biv}	2 °C	2 °C
T _{OL}	2 °C	2 °C
P _{dh T_j} = +2°C	7.29 kW	7.25 kW
COP T _j = +2°C	3.06	2.19
P _{dh T_j} = +7°C	4.69 kW	4.78 kW
COP T _j = +7°C	5.56	3.76
P _{dh T_j} = 12°C	3.64 kW	3.26 kW
COP T _j = 12°C	8.01	5.28
P _{dh T_j} = T _{biv}	7.29 kW	7.25 kW
COP T _j = T _{biv}	3.06	2.19
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	7.29 kW	7.25 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	3.06	2.19
WT _{OL}	60 °C	60 °C
P _{off}	17 W	17 W
PTO	50 W	50 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 Q _{he}	1591 kWh	2325 kWh

Model Buderus Hybrid-Set WLW196i-8 A H

Model name	Buderus Hybrid-Set WLW196i-8 A H
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 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	3.65 kW	2.85 kW
El input	0.76 kW	1.16 kW
COP	4.81	2.46

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	172 %	132 %
P _{rated}	7.60 kW	6.50 kW
SCOP	4.38	3.39
T _{biv}	-10 °C	-7 °C
T _{OL}	-10 °C	-10 °C
P _{dh} T _j = -7°C	6.44 kW	5.79 kW
COP T _j = -7°C	3.02	2.17
C _{dh} T _j = -7 °C	1.000	1.000
P _{dh} T _j = +2°C	3.77 kW	3.43 kW
COP T _j = +2°C	4.06	3.29
C _{dh} T _j = +2 °C	1.000	1.000

Pdh Tj = +7°C	2.46 kW	2.62 kW
COP Tj = +7°C	5.99	4.47
Cdh Tj = +7 °C	1.000	0.960
Pdh Tj = 12°C	1.97 kW	3.23 kW
COP Tj = 12°C	7.26	5.80
Cdh Tj = +12 °C	0.920	0.960
Pdh Tj = Tbiv	7.25 kW	5.79 kW
COP Tj = Tbiv	2.56	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.25 kW	2.26 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.56	1.68
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	4.24 kW
Annual energy consumption Qhe	3587 kWh	3966 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	162 %	117 %
Prated	6.10 kW	6.00 kW
SCOP	4.12	3.00
Tbiv	-17 °C	-15 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.52 kW	3.70 kW
COP Tj = -7°C	3.19	2.55
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.26 kW	2.17 kW
COP Tj = +2°C	5.00	3.33
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.44 kW	2.63 kW
COP Tj = +7°C	6.25	4.65
Cdh Tj = +7 °C	1.000	0.960
Pdh Tj = 12°C	1.97 kW	3.24 kW
COP Tj = 12°C	7.00	5.96
Cdh Tj = +12 °C	0.920	0.960

Pdh Tj = Tbiv	5.30 kW	5.02 kW
COP Tj = Tbiv	2.74	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.46 kW	2.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.01
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.64 kW	3.38 kW
Annual energy consumption Qhe	3653 kWh	4923 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	238 %	157 %
Prated	9.00 kW	7.90 kW
SCOP	6.03	4.00
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.10 kW	7.44 kW
COP Tj = +2°C	3.71	1.98
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	5.90 kW	4.88 kW
COP Tj = +7°C	5.43	3.25
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.69 kW	3.22 kW
COP Tj = 12°C	7.35	5.66
Cdh Tj = +12 °C	1.000	0.960
Pdh Tj = Tbiv	8.10 kW	7.44 kW
COP Tj = Tbiv	3.71	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.10 kW	7.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.71	1.98
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	5 W	5 W
PSB	17 W	17 W



PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1995 kWh	2640 kWh



Model Buderus Hybrid-Set WLW196i-6 A H S+

Model name	Buderus Hybrid-Set WLW196i-6 A H S+
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Heat Source	Outdoor Air
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 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	3.47 kW	2.89 kW
El input	0.73 kW	1.14 kW
COP	4.76	2.53

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	182 %	129 %
Prated	6.20 kW	5.90 kW
SCOP	4.61	3.30
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.46 kW	5.07 kW
COP Tj = -7°C	2.92	2.12
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	3.29 kW	2.95 kW
COP Tj = +2°C	4.60	3.26
Cdh Tj = +2 °C	1.000	1.000

Pdh Tj = +7°C	2.01 kW	2.55 kW
COP Tj = +7°C	6.01	4.24
Cdh Tj = +7 °C	1.000	0.970
Pdh Tj = 12°C	1.55 kW	3.06 kW
COP Tj = 12°C	6.99	5.54
Cdh Tj = +12 °C	0.910	0.960
Pdh Tj = Tbiv	5.76 kW	5.07 kW
COP Tj = Tbiv	2.57	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.76 kW	5.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.57	1.84
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2778 kWh	3694 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	160 %	115 %
Prated	5.70 kW	5.50 kW
SCOP	4.06	2.94
Tbiv	-17 °C	-15 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.64 kW	3.29 kW
COP Tj = -7°C	3.19	2.23
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	2.11 kW	2.24 kW
COP Tj = +2°C	4.91	3.47
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	1.35 kW	2.71 kW
COP Tj = +7°C	5.91	4.60
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	2.02 kW	3.32 kW
COP Tj = 12°C	6.74	5.73
Cdh Tj = +12 °C	1.000	0.970

Pdh Tj = Tbiv	4.95 kW	4.68 kW
COP Tj = Tbiv	2.80	2.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.59 kW	2.68 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.63	2.30
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas
Supplementary Heater: PSUP	1.16 kW	2.82 kW
Annual energy consumption Qhe	3461 kWh	4613 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	24 dB(A)	24 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	225 %	156 %
Prated	7.30 kW	7.20 kW
SCOP	5.70	3.97
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.57 kW	7.31 kW
COP Tj = +2°C	3.57	2.15
Pdh Tj = +7°C	4.67 kW	5.00 kW
COP Tj = +7°C	5.14	3.31
Pdh Tj = 12°C	2.03 kW	3.29 kW
COP Tj = 12°C	6.97	5.44
Pdh Tj = Tbiv	6.57 kW	7.31 kW
COP Tj = Tbiv	3.57	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.57 kW	7.31 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.57	2.15
WTOL	62 °C	62 °C
Poff	7 W	7 W
PTO	4 W	4 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Gas	Gas



Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1710 kWh	2423 kWh

Model Buderus Logatherm WLW196i-8 ARTP120

Model name	Buderus Logatherm WLW196i-8 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	3.78 kW	2.41 kW
El input	0.79 kW	0.93 kW
COP	4.78	2.60

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	181 %	133 %
Prated	7.60 kW	6.34 kW
SCOP	4.61	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.58 kW	5.69 kW
COP Tj = -7°C	3.05	2.19
Pdh Tj = +2°C	4.09 kW	3.29 kW
COP Tj = +2°C	4.64	3.40
Pdh Tj = +7°C	2.60 kW	2.78 kW

COP Tj = +7°C	5.67	4.32
Pdh Tj = 12°C	1.69 kW	3.32 kW
COP Tj = 12°C	6.36	5.55
Pdh Tj = Tbiv	7.55 kW	6.34 kW
COP Tj = Tbiv	2.60	1.87
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.55 kW	6.34 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.87
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3406 kWh	3842 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	157 %	118 %
Prated	6.50 kW	6.80 kW
SCOP	4.00	3.02
Tbiv	-17 °C	-17 °C
TOL	-17 °C	-17 °C
Pdh Tj = -7°C	3.83 kW	4.47 kW
COP Tj = -7°C	3.56	2.63
Pdh Tj = +2°C	2.36 kW	2.49 kW
COP Tj = +2°C	5.16	3.72
Pdh Tj = +7°C	1.61 kW	2.85 kW
COP Tj = +7°C	5.93	4.64
Pdh Tj = 12°C	1.69 kW	3.36 kW
COP Tj = 12°C	6.17	5.85
Pdh Tj = Tbiv	5.64 kW	5.82 kW
COP Tj = Tbiv	2.29	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.64 kW	5.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.29	1.72
WTOL	60 °C	60 °C
Poff	17 W	17 W

PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.50 kW	6.80 kW
Annual energy consumption Qhe	4001 kWh	5544 kWh
Pdh Tj = -15°C (if TOL)	5.44	5.14
COP Tj = -15°C (if TOL)	2.43	1.80

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	48 dB(A)	48 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	235 %	166 %
Prated	9.00 kW	7.90 kW
SCOP	5.94	4.24
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.10 kW	7.44 kW
COP Tj = +2°C	2.99	2.23
Pdh Tj = +7°C	6.17 kW	4.92 kW
COP Tj = +7°C	5.36	3.74
Pdh Tj = 12°C	2.67 kW	3.31 kW
COP Tj = 12°C	7.40	5.47
Pdh Tj = Tbiv	9.10 kW	7.44 kW
COP Tj = Tbiv	2.99	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.10 kW	7.44 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.99	2.23
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	25 W	25 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2023 kWh	2491 kWh

Model Buderus Logatherm WLW196i.2-6 ARTP120 S+

Model name	Buderus Logatherm WLW196i.2-6 ARTP120 S+
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	4.01 kW	2.60 kW
El input	0.84 kW	0.94 kW
COP	4.78	2.77

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	135 %
Prated	6.20 kW	5.91 kW
SCOP	4.73	3.45
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.54 kW	5.21 kW
COP Tj = -7°C	3.07	2.24
Pdh Tj = +2°C	3.31 kW	3.27 kW
COP Tj = +2°C	4.64	3.47
Pdh Tj = +7°C	2.05 kW	2.84 kW

COP Tj = +7°C	6.21	4.33
Pdh Tj = 12°C	1.72 kW	3.34 kW
COP Tj = 12°C	7.18	5.72
Pdh Tj = Tbiv	6.20 kW	5.91 kW
COP Tj = Tbiv	2.65	1.91
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.20 kW	5.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.91
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	2707 kWh	3535 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	160 %	119 %
Prated	5.72 kW	5.48 kW
SCOP	4.07	3.04
Tbiv	-17 °C	-17 °C
TOL	-18 °C	-18 °C
Pdh Tj = -7°C	3.26 kW	3.47 kW
COP Tj = -7°C	3.52	2.61
Pdh Tj = +2°C	2.28 kW	2.42 kW
COP Tj = +2°C	5.09	3.73
Pdh Tj = +7°C	1.53 kW	2.83 kW
COP Tj = +7°C	6.15	4.52
Pdh Tj = 12°C	1.68 kW	3.31 kW
COP Tj = 12°C	6.53	5.91
Pdh Tj = Tbiv	4.96 kW	4.76 kW
COP Tj = Tbiv	2.39	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.84 kW	4.62 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.33	1.74
WTOL	60 °C	60 °C
Poff	17 W	17 W

PTO	50 W	50 W
PSB	17 W	17 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	5.72 kW	5.48 kW
Annual energy consumption Qhe	3463 kWh	4440 kWh
Pdh Tj = -15°C (if TOL)	4.96	4.76
COP Tj = -15°C (if TOL)	2.39	1.80

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	50 dB(A)	50 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	226 %	158 %
Prated	7.29 kW	7.25 kW
SCOP	5.72	4.02
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.29 kW	7.25 kW
COP Tj = +2°C	2.95	2.16
Pdh Tj = +7°C	4.69 kW	4.78 kW
COP Tj = +7°C	5.31	3.67
Pdh Tj = 12°C	3.64 kW	3.26 kW
COP Tj = 12°C	7.44	5.10
Pdh Tj = Tbiv	7.29 kW	7.25 kW
COP Tj = Tbiv	2.95	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	7.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.95	2.16
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	50 W	50 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	1703 kWh	2407 kWh

Model Buderus Logatherm WLW196i-8 IRTP120

Model name	Buderus Logatherm WLW196i-8 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	2.85 kW	2.41 kW
El input	0.65 kW	0.93 kW
COP	4.41	2.58

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	168 %	135 %
Prated	7.30 kW	6.00 kW
SCOP	4.27	3.44
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.43 kW	5.18 kW
COP Tj = -7°C	2.95	2.26
Pdh Tj = +2°C	3.93 kW	3.10 kW
COP Tj = +2°C	5.10	3.47
Pdh Tj = +7°C	2.54 kW	2.77 kW

COP Tj = +7°C	5.67	4.24
Pdh Tj = 12°C	1.68 kW	3.30 kW
COP Tj = 12°C	6.63	5.37
Pdh Tj = Tbiv	7.29 kW	5.99 kW
COP Tj = Tbiv	2.53	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.29 kW	5.99 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.53	1.96
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3534 kWh	3602 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	160 %	120 %
Prated	6.20 kW	6.00 kW
SCOP	4.08	3.07
Tbiv	-19 °C	-16 °C
TOL	-20 °C	-17 °C
Pdh Tj = -7°C	3.50 kW	3.49 kW
COP Tj = -7°C	3.29	2.65
Pdh Tj = +2°C	2.28 kW	2.39 kW
COP Tj = +2°C	5.10	3.78
Pdh Tj = +7°C	1.52 kW	2.77 kW
COP Tj = +7°C	6.02	4.44
Pdh Tj = 12°C	1.67 kW	3.25 kW
COP Tj = 12°C	6.59	5.46
Pdh Tj = Tbiv	5.68 kW	5.04 kW
COP Tj = Tbiv	2.25	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.02 kW	4.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.89
WTOL	60 °C	60 °C
Poff	17 W	17 W

PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.20 kW	6.00 kW
Annual energy consumption Qhe	3744 kWh	4819 kWh
Pdh Tj = -15°C (if TOL)	5.49	4.72
COP Tj = -15°C (if TOL)	2.55	2.04

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	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
Sound power level outdoor	36 dB(A)	36 dB(A)

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	Low temperature	Medium temperature
η_s	226 %	160 %
Prated	8.30 kW	7.20 kW
SCOP	5.73	4.08
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.31 kW	7.19 kW
COP Tj = +2°C	2.75	2.15
Pdh Tj = +7°C	5.04 kW	4.66 kW
COP Tj = +7°C	5.00	3.61
Pdh Tj = 12°C	2.57 kW	3.17 kW
COP Tj = 12°C	7.39	5.24
Pdh Tj = Tbiv	8.31 kW	7.19 kW
COP Tj = Tbiv	2.75	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.31 kW	7.19 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.75	2.15
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	17 W	17 W
PSB	17 W	17 W
PCK	7 W	7 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1937 kWh	2360 kWh