

Subtype Buderus Logatherm WPS 8K-1

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 WPS 8K-1
Registration number	011-1W0178
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	1.95 kg
Certification Date	17.11.2017
Testing basis	HP KEYMARK certification scheme rules rev. 14
Testing laboratory	Universität Stuttgart, Prüfstelle HLK am Institut für Gebäudeenergetik, Thermotechnik und Energiespeicherung (IGTE), DE

Model Buderus Logatherm WPS 8K-1

Model name	Buderus Logatherm WPS 8K-1
Application	Heating + DHW + low temp
Units	Indoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Brine/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.13
Heating up time	1:16 h:min
Standby power input	33.9 W
Reference hot water temperature	44.6 °C
Mixed water at 40°C	181 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.13
Heating up time	76.4 h:min
Standby power input	33.9 W
Reference hot water temperature	44.6 °C
Mixed water at 40°C	181 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.13
Heating up time	76.4 h:min
Standby power input	33.9 W
Reference hot water temperature	44.6 °C
Mixed water at 40°C	181 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	7.45 kW	6.79 kW
El input	1.66 kW	2.35 kW
COP	4.49	2.89

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	184 %	137 %
Prated	7 kW	8 kW
SCOP	4.81	3.64
Tbiv	-10 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.46 kW	6.91 kW
COP Tj = -7°C	4.54	3.09
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	7.53 kW	7.14 kW
COP Tj = +2°C	4.81	3.62
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	7.59 kW	7.27 kW
COP Tj = +7°C	5.07	4.02
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	7.65 kW	7.38 kW
COP Tj = 12°C	5.36	4.47
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	7.45 kW	6.94 kW
COP Tj = Tbiv	4.49	3.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.45 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.49	2.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	62 °C	62 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity

Supplementary Heater: PSUP	0 kW	1.21 kW
Annual energy consumption Q _{he}	3007 kWh	4547 kWh

EN 12102-1 | Colder Climate

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

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	189 %	141 %
Prated	7.00 kW	8.00 kW
SCOP	4.93	3.73
T _{biv}	-22 °C	-16 °C
TOL	-22 °C	-22 °C
P _{dh} T _j = -7 °C	7.54 kW	7.1 kW
COP T _j = -7 °C	4.85	3.51
C _{dh} T _j = -7 °C	1.00	1.00
P _{dh} T _j = +2 °C	7.59 kW	7.25 kW
COP T _j = +2 °C	5.09	3.94
C _{dh} T _j = +2 °C	1.00	1.00
P _{dh} T _j = +7 °C	7.63 kW	7.35 kW
COP T _j = +7 °C	5.27	4.33
C _{dh} T _j = +7 °C	1.00	1.00
P _{dh} T _j = 12 °C	7.64 kW	7.42 kW
COP T _j = 12 °C	5.33	4.65
C _{dh} T _j = +12 °C	1.00	1.00
P _{dh} T _j = T _{biv}	7.45 kW	6.95 kW
COP T _j = T _{biv}	4.49	3.17
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.45 kW	6.79 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.49	2.89
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	1.00	1.00
WTOL	62 °C	62 °C
P _{off}	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	1.21 kW
Annual energy consumption Q _{he}	3498 kWh	5289 kWh
C _{dh} T _j = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)
EN 14825 Warmer Climate		
	Low temperature	Medium temperature
η_s	185 %	138 %
Prated	7.00 kW	8.00 kW
SCOP	4.83	3.65
Tbiv	2 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.45 kW	6.79 kW
COP Tj = +2°C	4.49	2.89
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	7.52 kW	7.04 kW
COP Tj = +7°C	4.75	3.37
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	7.61 kW	7.31 kW
COP Tj = 12°C	5.17	4.17
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	7.45 kW	6.93 kW
COP Tj = Tbiv	4.49	3.13
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.45 kW	6.79 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.49	2.89
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	62 °C	62 °C
Poff	6 W	6 W
PTO	6 W	6 W
PSB	6 W	6 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	1.21 kW
Annual energy consumption Qhe	1936 kWh	2932 kWh