

## Subtype Buderus Logatherm WPS 8-1

Certificate Holder	Bosch Thermotechnik GmbH (Buderus)
Address	Sophienstraße 30-32
ZIP	35576
City	Wetzlar
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Buderus Logatherm WPS 8-1
Registration number	011-1W0181
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	1.95 kg
Certification Date	17.11.2017

## Model Buderus Logatherm WPS 8-1

Model name	Buderus Logatherm WPS 8-1
Application	Heating (medium 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 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 12102-1 | Average Climate

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

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	182 %	134 %
Prated	9 kW	8 kW
SCOP	4.75	3.54
Tbiv	-5 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.48 kW	6.97 kW
COP Tj = -7°C	4.53	2.95
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	7.54 kW	7.15 kW
COP Tj = +2°C	4.8	3.53
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	7.60 kW	7.27 kW
COP Tj = +7°C	5.03	3.94
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	7.65 kW	7.38 kW
COP Tj = 12°C	5.28	4.39
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	7.5 kW	6.99 kW
COP Tj = Tbiv	4.62	3.02

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.45 kW	6.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.42	2.73
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	1.55 kW	1.12 kW
Annual energy consumption Qhe	3918 kWh	4671 kWh

#### EN 12102-1 | Colder Climate

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

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	137 %
Prated	9.00 kW	8.00 kW
SCOP	4.87	3.63
Tbiv	-15 °C	-17 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.56 kW	7.12 kW
COP Tj = -7°C	4.85	3.4
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	7.6 kW	7.25 kW
COP Tj = +2°C	5.05	3.86
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	7.64 kW	7.35 kW
COP Tj = +7°C	5.21	4.25
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	7.64 kW	7.42 kW
COP Tj = 12°C	5.24	4.57
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	7.51 kW	6.98 kW
COP Tj = Tbiv	4.68	3
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.45 kW	6.88 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.42	2.73
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	1.55 kW	1.12 kW
Annual energy consumption Q <sub>he</sub>	4551 kWh	5425 kWh
C <sub>dh</sub> T <sub>j</sub> = -15 °C	1.00	1.00

#### EN 12102-1 | Warmer Climate

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

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η <sub>s</sub>	183 %	134 %
Prated	9.00 kW	8.00 kW
SCOP	4.77	3.55
T <sub>biv</sub>	5 °C	4 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	7.45 kW	6.88 kW
COP T <sub>j</sub> = +2°C	4.42	2.73
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = +7°C	7.53 kW	7.07 kW
COP T <sub>j</sub> = +7°C	4.75	3.26
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = 12°C	7.62 kW	7.31 kW
COP T <sub>j</sub> = 12°C	5.12	4.09
C <sub>dh</sub> T <sub>j</sub> = +12 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = T <sub>biv</sub>	7.51 kW	6.98 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.66	2.99
P <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	7.45 kW	6.88 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.42	2.73
C <sub>dh</sub> T <sub>j</sub> = TOL or P <sub>dh</sub> T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	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	1.55 kW	1.12 kW

Annual energy consumption  $Q_{he}$ 

2521 kWh

3015 kWh

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