

## Subtype Buderus Logatherm WPS 38.2 HT

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 38.2 HT
Registration number	011-1W0162
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	6.3 kg
Certification Date	09.10.2017

## Model Buderus Logatherm WPS 38.2 HT

Model name	Buderus Logatherm WPS 38.2 HT
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	55 dB(A)	55 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	195 %	164 %
Prated	38.7 kW	38.39 kW
SCOP	5.06	4.29
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	34.23 kW	33.96 kW
COP Tj = -7°C	4.62	3.63
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	20.29 kW	20.55 kW
COP Tj = +2°C	5.31	4.32
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	20.23 kW	20.49 kW
COP Tj = +7°C	5.44	4.61
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	20.19 kW	20.39 kW
COP Tj = 12°C	5.56	5.12
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	38.7 kW	38.39 kW
COP Tj = Tbiv	4.45	3.72

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	38.70 kW	38.39 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.45	3.72
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00
WTOL	68 °C	68 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	15792 kWh	18477 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	55 dB(A)	55 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	204 %	166 %
Prated	33.00 kW	33.00 kW
SCOP	5.31	4.35
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	20.29 kW	20.58 kW
COP Tj = -7°C	5.31	4.13
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	20.25 kW	20.51 kW
COP Tj = +2°C	5.41	4.48
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	20.21 kW	20.43 kW
COP Tj = +7°C	5.51	4.91
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	20.21 kW	20.36 kW
COP Tj = 12°C	5.5	5.29
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	33 kW	33 kW
COP Tj = Tbiv	4.56	3.59
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	33 kW	33 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.56	3.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.00	1.00

WTOL	68 °C	68 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0 kW
Annual energy consumption Q <sub>he</sub>	15319 kWh	18715 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	55 dB(A)	55 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η <sub>s</sub>	201 %	162 %
Prated	31.00 kW	32.00 kW
SCOP	5.22	4.24
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	31.00 kW	32 kW
COP T <sub>j</sub> = +2°C	4.59	3.56
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = +7°C	20.32 kW	20.61 kW
COP T <sub>j</sub> = +7°C	5.2	3.94
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = 12°C	20.24 kW	20.47 kW
COP T <sub>j</sub> = 12°C	5.43	4.69
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>	31 kW	32.00 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.59	3.56
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>	31 kW	32 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.59	3.56
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	68 °C	68 °C
Poff	11 W	11 W
PTO	11 W	11 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0 kW

Annual energy consumption  $Q_{he}$ 

7929 kWh

10075 kWh

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