

## Subtype Buderus Logatherm WPS 28.2 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 28.2 HT
Registration number	011-1W0161
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	5 kg
Certification Date	09.10.2017

## Model Buderus Logatherm WPS 28.2 HT

Model name	Buderus Logatherm WPS 28.2 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	57 dB(A)	57 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	200 %	158 %
Prated	29.3 kW	29.25 kW
SCOP	5.2	4.16
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	25.92 kW	25.88 kW
COP Tj = -7°C	4.73	3.68
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	15.28 kW	15.13 kW
COP Tj = +2°C	5.49	4.29
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	15.29 kW	15.13 kW
COP Tj = +7°C	5.67	4.65
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	15.31 kW	15.13 kW
COP Tj = 12°C	5.83	4.97
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	29.3 kW	29.25 kW
COP Tj = Tbiv	4.57	3.82

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.30 kW	29.25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.57	3.82
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	11644 kWh	14525 kWh

#### EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	57 dB(A)	57 dB(A)

#### EN 14825 | Colder Climate

	Low temperature	Medium temperature
$\eta_s$	212 %	164 %
Prated	25.00 kW	25.00 kW
SCOP	5.5	4.31
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	15.28 kW	15.13 kW
COP Tj = -7°C	5.49	4.07
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	15.29 kW	15.13 kW
COP Tj = +2°C	5.63	4.49
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	15.3 kW	15.13 kW
COP Tj = +7°C	5.75	4.84
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	15.3 kW	15.13 kW
COP Tj = 12°C	5.74	5.08
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	25 kW	25 kW
COP Tj = Tbiv	4.64	3.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25 kW	25 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.64	3.62
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>	11200 kWh	14290 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	57 dB(A)	57 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η <sub>s</sub>	207 %	159 %
Prated	23.00 kW	23.00 kW
SCOP	5.38	4.18
T <sub>biv</sub>	2 °C	2 °C
TOL	2 °C	2 °C
P <sub>dh</sub> T <sub>j</sub> = +2°C	23.00 kW	23 kW
COP T <sub>j</sub> = +2°C	4.68	3.53
C <sub>dh</sub> T <sub>j</sub> = +2 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = +7°C	15.26 kW	15.14 kW
COP T <sub>j</sub> = +7°C	5.36	3.85
C <sub>dh</sub> T <sub>j</sub> = +7 °C	1.00	1.00
P <sub>dh</sub> T <sub>j</sub> = 12°C	15.29 kW	15.13 kW
COP T <sub>j</sub> = 12°C	5.65	4.66
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>	23 kW	23.00 kW
COP T <sub>j</sub> = T <sub>biv</sub>	4.68	3.53
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>	23 kW	23 kW
COP T <sub>j</sub> = TOL or COP T <sub>j</sub> = T <sub>designh</sub> if TOL < T <sub>designh</sub>	4.68	3.53
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  $Q_{he}$ 

5711 kWh

7359 kWh

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