

European Heat Pump KEYMARK Scheme Certificate of Conformity Assessment

Certificate holder **Bosch Thermotechnik GmbH (Buderus)**
Sophienstrasse 30-32
35576 Wetzlar
Germany

Manufacturing Site Hefei, Anhui and Shunde, Foshan, P.R. China

Product Heat Pumps

Product Type Outdoor Air to Water Heat Pump

Sub-type and Models **Buderus Logatherm WLW156-18/22/26/30 MB**
WLW156-18 MB AR P3
WLW156-22 MB AR P3
WLW156-26 MB AR P3
WLW156-30 MB AR P3

Testing basis EN 14511:2018
EN 14825:2018
EN 12102:2017
KEYMARK Certification Scheme for Heat Pumps (2023)

Mark of conformity



Registration number **041-K045-04**

Right of use This certificate entitles the holder to use the mark of conformity shown above in conjunction with the specified Registration number. This certificate is maintained and held in force through periodic review and verification.

See Heat Pump KEYMARK database for detailed information

Validity


for BRE Global Ltd.
Laura Critien
Certification Team Manager

13 June 2023
Date of issue

12 June 2033
Date of expiry:



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To check the validity of this certificate please visit <http://www.greenbooklive.com/check>

Subtype Buderus Logatherm WLW156-18/22/26/30 MB

Certificate Holder	Bosch Thermotechnik GmbH (Buderus)
Address	Sophienstraße 30-32
ZIP	35576
City	Wetzlar
Country	DE
Certification Body	BRE Global Limited
Subtype title	Buderus Logatherm WLW156-18/22/26/30 MB
Registration number	041-K045-04
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	5 kg
Certification Date	13.06.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 11

Model WLW156-18 MB AR P3

Model name	WLW156-18 MB AR P3
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

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	18.32 kW	18.10 kW
El input	3.96 kW	6.63 kW
COP	4.63	2.73

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	71 dB(A)	71 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	181 %	125 %
Prated	17.99 kW	17.67 kW
SCOP	4.60	3.21
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	15.90 kW	15.61 kW
COP Tj = -7°C	2.85	1.72
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	9.66 kW	9.59 kW
COP Tj = +2°C	4.59	3.32
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	6.56 kW	6.37 kW

COP Tj = +7°C	5.99	4.48
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.76 kW	3.57 kW
COP Tj = 12°C	7.08	5.27
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	15.90 kW	15.61 kW
COP Tj = Tbiv	2.85	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.99 kW	15.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.49	1.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	2.64 kW
Annual energy consumption Qhe	8086 kWh	11375 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	71 dB(A)	71 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	146 %	97 %
Prated	17.76 kW	18.38 kW
SCOP	3.73	2.50
Tbiv	-15 °C	-7 °C
TOL	-22 °C	-15 °C
Pdh Tj = -7°C	11.21 kW	11.13 kW
COP Tj = -7°C	3.09	1.98
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	6.64 kW	6.65 kW
COP Tj = +2°C	4.50	3.44
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	4.77 kW	4.66 kW
COP Tj = +7°C	5.85	4.35
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.95 kW	3.74 kW
COP Tj = 12°C	7.18	5.68
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	14.49 kW	11.13 kW

COP Tj = Tbiv	2.42	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.14 kW	13.56 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.67	1.21
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.62 kW	18.38 kW
Annual energy consumption Qhe	11740 kWh	18156 kWh
Pdh Tj = -15°C (if TOL	14.49	13.56
COP Tj = -15°C (if TOL	2.42	1.21
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	71 dB(A)	71 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	226 %	157 %
Prated	17.67 kW	18.07 kW
SCOP	5.74	4.00
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	17.67 kW	18.07 kW
COP Tj = +2°C	3.53	2.12
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	11.36 kW	11.62 kW
COP Tj = +7°C	5.16	3.49
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	5.45 kW	5.35 kW
COP Tj = 12°C	7.01	5.09
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.36 kW	11.62 kW
COP Tj = Tbiv	5.16	3.49
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	17.67 kW	18.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C

Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 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	4116 kWh	6041 kWh

Model WLW156-22 MB AR P3

Model name	WLW156-22 MB AR P3
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

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	22.30 kW	22.10 kW
El input	5.13 kW	8.33 kW
COP	4.35	2.65

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	73 dB(A)	73 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	126 %
Prated	22.31 kW	22.43 kW
SCOP	4.53	3.22
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	19.72 kW	19.82 kW
COP Tj = -7°C	2.74	1.74
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	12.03 kW	11.89 kW
COP Tj = +2°C	4.41	3.32
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	8.00 kW	7.97 kW

COP Tj = +7°C	6.29	4.66
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.79 kW	3.60 kW
COP Tj = 12°C	7.14	5.32
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	19.72 kW	19.82 kW
COP Tj = Tbiv	2.74	1.74
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.33 kW	13.81 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.35	1.08
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.97 kW	8.60 kW
Annual energy consumption Qhe	10180 kWh	14390 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	73 dB(A)	73 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	146 %	102 %
Prated	21.40 kW	22.36 kW
SCOP	3.72	2.62
Tbiv	-15 °C	-7 °C
TOL	-22 °C	-15 °C
Pdh Tj = -7°C	13.30 kW	13.53 kW
COP Tj = -7°C	3.12	2.07
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	8.25 kW	8.61 kW
COP Tj = +2°C	4.42	3.70
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.45 kW	5.21 kW
COP Tj = +7°C	5.87	4.49
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	3.98 kW	3.74 kW
COP Tj = 12°C	7.19	5.76
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	17.46 kW	13.53 kW
COP Tj = Tbiv	2.36	2.07

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.27 kW	13.78 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.69	1.24
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	8.13 kW	22.36 kW
Annual energy consumption Qhe	14179 kWh	21067 kWh
Pdh Tj = -15°C (if TOL	17.46	13.78
COP Tj = -15°C (if TOL	2.36	1.24
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	73 dB(A)	73 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	234 %	161 %
Prated	21.90 kW	22.01 kW
SCOP	5.85	4.09
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	21.81 kW	22.01 kW
COP Tj = +2°C	3.31	2.12
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	14.08 kW	14.15 kW
COP Tj = +7°C	5.20	3.50
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	6.44 kW	6.38 kW
COP Tj = 12°C	7.50	5.34
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	14.08 kW	14.15 kW
COP Tj = Tbiv	5.20	3.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.81 kW	22.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.31	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	18 W	18 W

PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.09 kW	0.00 kW
Annual energy consumption Qhe	4945 kWh	7180 kWh

Model WLW156-26 MB AR P3

Model name	WLW156-26 MB AR P3
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

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	26.30 kW	26.06 kW
El input	6.50 kW	10.72 kW
COP	4.05	2.43

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	123 %
Prated	25.04 kW	26.15 kW
SCOP	4.50	3.14
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	22.12 kW	20.64 kW
COP Tj = -7°C	2.57	1.69
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	13.76 kW	14.26 kW
COP Tj = +2°C	4.44	3.12
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	9.36 kW	9.29 kW

COP Tj = +7°C	6.52	4.74
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.09 kW	3.89 kW
COP Tj = 12°C	7.35	5.48
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	22.12 kW	22.11 kW
COP Tj = Tbiv	2.57	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.33 kW	13.86 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.35	1.08
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.68 kW	12.28 kW
Annual energy consumption Qhe	11489 kWh	17204 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	143 %	101 %
Prated	25.75 kW	26.27 kW
SCOP	3.64	2.59
Tbiv	-12 °C	-7 °C
TOL	-22 °C	-15 °C
Pdh Tj = -7°C	15.91 kW	15.90 kW
COP Tj = -7°C	3.10	2.10
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	10.10 kW	10.17 kW
COP Tj = +2°C	4.45	3.58
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	6.30 kW	6.52 kW
COP Tj = +7°C	6.06	4.99
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.03 kW	3.63 kW
COP Tj = 12°C	7.13	5.68
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	18.97 kW	15.90 kW
COP Tj = Tbiv	2.36	2.10

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.07 kW	13.37 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.67	1.20
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	12.68 kW	26.27 kW
Annual energy consumption Qhe	17421 kWh	24967 kWh
Pdh Tj = -15°C (if TOL	18.95	13.37
COP Tj = -15°C (if TOL	2.27	1.20
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	75 dB(A)	75 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	231 %	168 %
Prated	26.08 kW	26.22 kW
SCOP	5.85	4.26
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	25.50 kW	26.22 kW
COP Tj = +2°C	3.00	1.99
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	16.77 kW	16.86 kW
COP Tj = +7°C	5.02	3.47
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	7.65 kW	7.58 kW
COP Tj = 12°C	7.78	5.94
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	16.77 kW	16.86 kW
COP Tj = Tbiv	5.02	3.47
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	25.50 kW	26.22 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.00	1.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	60 °C	60 °C
Poff	18 W	18 W

PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.58 kW	0.00 kW
Annual energy consumption Qhe	5959 kWh	8218 kWh

Model WLW156-30 MB AR P3

Model name	WLW156-30 MB AR P3
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

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	29.93 kW	29.68 kW
El input	8.02 kW	12.97 kW
COP	3.73	2.29

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	77 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	165 %	123 %
Prated	29.18 kW	29.69 kW
SCOP	4.19	3.14
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	21.90 kW	20.11 kW
COP Tj = -7°C	2.54	1.63
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	16.16 kW	16.49 kW
COP Tj = +2°C	4.16	3.09
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	10.64 kW	10.50 kW

COP Tj = +7°C	6.38	4.75
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.54 kW	4.64 kW
COP Tj = 12°C	7.72	5.91
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	23.51 kW	23.97 kW
COP Tj = Tbiv	2.71	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.37 kW	13.82 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.35	1.07
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	8.75 kW	15.86 kW
Annual energy consumption Qhe	14165 kWh	19316.17 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	77 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	138 %	100 %
Prated	29.13 kW	30.41 kW
SCOP	3.52	2.56
Tbiv	-10 °C	-7 °C
TOL	-22 °C	-15 °C
Pdh Tj = -7°C	18.49 kW	18.40 kW
COP Tj = -7°C	3.07	2.10
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	11.88 kW	11.22 kW
COP Tj = +2°C	4.42	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	7.53 kW	7.42 kW
COP Tj = +7°C	6.15	5.18
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	4.11 kW	3.64 kW
COP Tj = 12°C	6.87	5.73
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	19.93 kW	18.40 kW
COP Tj = Tbiv	2.44	2.10

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.17 kW	13.06 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.67	1.18
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	15.96 kW	30.41 kW
Annual energy consumption Qhe	20390 kWh	29238 kWh
Pdh Tj = -15°C (if TOL	18.61	13.06
COP Tj = -15°C (if TOL	2.24	1.18
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	77 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	213 %	163 %
Prated	30.44 kW	29.73 kW
SCOP	5.39	4.15
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	26.29 kW	26.41 kW
COP Tj = +2°C	2.94	1.99
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	19.57 kW	19.11 kW
COP Tj = +7°C	4.75	3.37
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	8.90 kW	8.92 kW
COP Tj = 12°C	7.53	6.09
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	19.57 kW	19.11 kW
COP Tj = Tbiv	4.75	3.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	26.29 kW	26.41 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.94	1.99
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	96 W	96 W
PSB	18 W	18 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.15 kW	3.32 kW
Annual energy consumption Qhe	7540 kWh	9580 kWh