

Subtype Mono Series 5 7 9kW

Certificate Holder	Wamsler Bioenergy GmbH
Address	Adalperostrasse 86
ZIP	85737
City	Ismaning
Country	DE
Certification Body	BRE Global Limited
Subtype title	Mono Series 5 7 9kW
Registration number	041-K075-05
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.25 kg
Certification Date	16.11.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 12
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

**Model HPM1P7KWEWA**

Model name	HPM1P7KWEWA
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	1x230V 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	8.40 kW	8.20 kW
El input	1.66 kW	2.60 kW
COP	5.05	3.15

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	203.99 %	143.64 %
Prated	7.90 kW	7.25 kW
SCOP	5.17	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.99 kW	6.42 kW
COP Tj = -7°C	3.29	2.31
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.51 kW	4.03 kW
COP Tj = +2°C	4.99	3.76
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.81 kW	2.56 kW

COP Tj = +7°C	6.72	4.48
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.99 kW	6.42 kW
COP Tj = Tbiv	3.29	2.31
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.85 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	1.98
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.44 kW	0.40 kW
Annual energy consumption Qhe	3155 kWh	4088 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	174.6 %	117.73 %
Prated	7.51 kW	6.06 kW
SCOP	4.44	3.02
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	4.42 kW	3.95 kW
COP Tj = -7°C	3.67	2.75
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.99 kW	2.25 kW
COP Tj = +2°C	5.50	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.03 kW	1.56 kW
COP Tj = +7°C	6.69	4.50
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.12 kW	4.94 kW
COP Tj = Tbiv	2.70	2.08

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.78 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.32
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.72 kW	2.82 kW
Annual energy consumption Qhe	4166 kWh	4948 kWh
Pdh Tj = -15°C (if TOL)	6.12	4.94
COP Tj = -15°C (if TOL	2.70	2.08
Cdh Tj = -15 °C	0.90	0.90

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
ηs	274.74 %	185.3 %
Prated	8.06 kW	8.10 kW
SCOP	6.94	4.71
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.23 kW	7.80 kW
COP Tj = +2°C	4.04	2.68
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.18 kW	5.22 kW
COP Tj = +7°C	6.35	4.07
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.46 kW	2.36 kW
COP Tj = 12°C	9.30	6.07
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.18 kW	5.22 kW
COP Tj = Tbiv	6.35	4.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.23 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.04	2.68
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W

PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.84 kW	0.32 kW
Annual energy consumption Qhe	1551 kWh	2303 kWh

**Model HPM1P9KWEWA**

Model name	HPM1P9KWEWA
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	1x230V 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	10 kW	9.4 kW
El input	2.13 kW	3.03 kW
COP	4.7	3.1

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	201.91 %	145.47 %
Prated	9.06 kW	8.16 kW
SCOP	5.12	3.71
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.02 kW	7.21 kW
COP Tj = -7°C	3.09	2.24
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	5.06 kW	4.56 kW
COP Tj = +2°C	4.92	3.86
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	3.22 kW	2.84 kW

COP Tj = +7°C	7.03	4.58
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	8.02 kW	7.21 kW
COP Tj = Tbiv	3.09	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.88 kW	7.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	1.97
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.18 kW	1.14 kW
Annual energy consumption Qhe	3654 kWh	4539 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
ηs	174.6 %	122.4 %
Prated	8.27 kW	7.21 kW
SCOP	4.44	3.14
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.42 kW	4.59 kW
COP Tj = -7°C	3.72	2.72
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	5.56	3.6
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	2.16 kW	1.76 kW
COP Tj = +7°C	6.55	4.84
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	6.75 kW	5.88 kW
COP Tj = Tbiv	2.59	2.1

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.01	1.32
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.19 kW	3.97 kW
Annual energy consumption Qhe	4591 kWh	5665 kWh
Pdh Tj = -15°C (if TOL)	6.75	5.88
COP Tj = -15°C (if TOL)	2.59	2.1
Cdh Tj = -15 °C	0.9	0.9

**EN 12102-1 | Warmer Climate**

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Warmer Climate**

	Low temperature	Medium temperature
$\eta_s$	279.05 %	193.4 %
Prated	9.04 kW	9.03 kW
SCOP	7.05	4.91
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.29 kW	8.42 kW
COP Tj = +2°C	3.85	2.68
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	5.81 kW	5.81 kW
COP Tj = +7°C	6.24	4.16
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	2.67 kW	2.74 kW
COP Tj = 12°C	9.63	6.64
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.81 kW	5.81 kW
COP Tj = Tbiv	6.24	4.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.29 kW	8.42 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.68
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	0.61 kW
Annual energy consumption Qhe	1714 kWh	2458 kWh