

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	LW 101	Reg. No.	041-K001-36
Certificate Holder			
Name	ait-deutschland GmbH		
Address	Industriestr. 3	Zip	95359
City	Kasendorf	Country	Germany
Certification Body	BRE Energy & Communications Division		
Name of testing laboratory	HLK Stuttgart		
Subtype title	LW 101		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R407c		
Mass Of Refrigerant	4.8 kg		
Certification Date	08.10.2019		

## Model: LW 101

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.40 kW	10.27 kW
El input	2.49 kW	3.71 kW
COP	4.18	2.64
Indoor water flow rate	2.00 m <sup>3</sup> /h	2.00 m <sup>3</sup> /h

## Average Climate

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	149 %	121 %

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Prated	9.90 kW	9.35 kW
SCOP	3.81	3.11
Tbiv	-5 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.53 kW	6.98 kW
COP Tj = -7°C	2.97	2.03
Cdh	1.00	1.00
Pdh Tj = +2°C	9.54 kW	9.41 kW
COP Tj = +2°C	3.78	3.11
Cdh	1.00	1.00
Pdh Tj = +7°C	10.43 kW	10.40 kW
COP Tj = +7°C	4.69	4.04
Cdh	1.00	1.00
Pdh Tj = 12°C	12.19 kW	12.17 kW
COP Tj = 12°C	5.15	5.02
Cdh	1.00	1.00
Pdh Tj = Tbiv	8.00 kW	7.55 kW
COP Tj = Tbiv	3.19	2.25
Pdh Tj = TOL	6.84 kW	6.27 kW
COP Tj = TOL	2.70	1.79
WTOL	65 °C	65 °C

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Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	3.06 kW	3.08 kW
Annual energy consumption Qhe	5367 kWh	6216 kWh

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	58 dB(A)	58 dB(A)

## Warmer Climate

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	179 %	145 %
Prated	11.53 kW	11.30 kW
SCOP	4.56	3.71
Tbiv	4 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.50 kW	9.23 kW

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COP Tj = +2°C	3.56	2.52
Cdh	1.00	1.00
Pdh Tj = +7°C	10.42 kW	10.33 kW
COP Tj = +7°C	4.46	3.27
Cdh	1.00	1.00
Pdh Tj = 12°C	12.17 kW	12.10 kW
COP Tj = 12°C	5.08	4.61
Cdh	1.00	1.00
Pdh Tj = Tbiv	9.88 kW	9.68 kW
COP Tj = Tbiv	3.94	2.78
Pdh Tj = TOL	9.50 kW	9.23 kW
COP Tj = TOL	3.56	2.52
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	2.03 kW	2.07 kW
Annual energy consumption Qhe	3376 kWh	4069 kWh

## Colder Climate

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**EN 14825**

	Low temperature	Medium temperature
$\eta_s$	132 %	108 %
Prated	8.82 kW	8.22 kW
SCOP	3.38	2.77
Tbiv	-12 °C	-12 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.62 kW	7.23 kW
COP Tj = -7°C	3.18	2.37
Cdh	1.00	1.00
Pdh Tj = +2°C	9.57 kW	9.48 kW
COP Tj = +2°C	3.92	3.40
Cdh	1.00	1.00
Pdh Tj = +7°C	10.44 kW	10.42 kW
COP Tj = +7°C	4.83	4.44
Cdh	1.00	1.00
Pdh Tj = 12°C	12.18 kW	12.20 kW
COP Tj = 12°C	5.00	5.18
Cdh	1.00	1.00
Pdh Tj = Tbiv	6.50 kW	6.06 kW
COP Tj = Tbiv	2.77	1.95

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Pdh Tj = TOL	4.66 kW	4.24 kW
COP Tj = TOL	1.99	1.34
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	8.82 kW	8.22 kW
Annual energy consumption Qhe	6437 kWh	7306 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.80	5.37
COP Tj = -15°C (if TOL<-20°C)	2.47	1.72
Cdh	1.00	1.00

## Model: LW 101A

### General Data

Power supply	3x400V 50Hz
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## Heating

### EN 14511-4

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Starting and operating test	passed

### EN 14511-2

	Low temperature	Medium temperature
Heat output	10.40 kW	10.27 kW
El input	2.49 kW	3.71 kW
COP	4.18	2.64
Indoor water flow rate	2.00 m <sup>3</sup> /h	2.00 m <sup>3</sup> /h

## Average Climate



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### EN 12102-1

	Low temperature	Medium temperature
Sound power level indoor	50 dB(A)	50 dB(A)
Sound power level outdoor	58 dB(A)	58 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	149 %	121 %
Prated	9.90 kW	9.35 kW
SCOP	3.81	3.11
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## Warmer Climate

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## Colder Climate

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