

This information was generated by the HP KEYMARK database on 2 May 2023

Summary of	Aquarea AiO Split 5-9 kW STD (K Series)	Reg. No.	011-1W0605
Certificate Holder			
Name	Panasonic Marketing Europe GmbH		
Address	Hagenauer Strasse 43, Wiesbaden	ZIP	65203
City	Wiesbaden	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Aquarea AiO Split 5-9 kW STD (K Series)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.3 kg		
Certification Date	28.04.2023		
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 11 (as of 2022-09)		

## Model: WH-ADC0309K3E5 / WH-UDZ05KE5

Configure model	
Model name	WH-ADC0309K3E5 / WH-UDZ05KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.00 kW	5.00 kW
El input	0.98 kW	1.65 kW
COP	5.10	3.03

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 14511-2</b>	
	<b>+7°C/+12°C</b>
El input	1.64 kW
Cooling capacity	5.00
EER	3.05

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	5.00 kW
SEER	5.72
P <sub>dc Tj = 35°C</sub>	5.00 kW
EER Tj = 35°C	3.64
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	3.68 kW
EER Tj = 30°C	5.18
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.37 kW
EER Tj = 25°C	6.47
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.05 kW
EER Tj = 20°C	8.94
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	306 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	237 %	165 %
Prated	5.00 kW	4.00 kW
SCOP	6.00	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.12 kW	4.05 kW
COP Tj = +2°C	3.05	3.00
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.27 kW	2.61 kW
COP Tj = +7°C	5.75	3.63
Cdh Tj = +7 °C	0.920	0.940
Pdh Tj = 12°C	3.45 kW	3.32 kW
COP Tj = 12°C	8.58	6.17
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	5.00 kW	4.00 kW
COP Tj = Tbiv	3.89	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.89	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1113 kWh	1274 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	115 %
Prated	6.00 kW	4.00 kW
SCOP	4.08	2.95
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.58 kW	2.40 kW
COP Tj = -7°C	3.73	2.53
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	4.50	3.53
Cdh Tj = +2 °C	0.920	0.930
Pdh Tj = +7°C	2.99 kW	2.85 kW
COP Tj = +7°C	7.25	5.61
Cdh Tj = +7 °C	0.900	0.910
Pdh Tj = 12°C	3.49 kW	3.44 kW
COP Tj = 12°C	8.45	7.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.89 kW	3.26 kW
COP Tj = Tbiv	2.80	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.99 kW	3.97 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.01 kW	0.03 kW
Annual energy consumption Qhe	3625 kWh	3338 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.94	3.32
COP Tj = -15°C (if TOL<-20°C)	2.80	1.77
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	202 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.12	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.41 kW	4.46 kW
COP Tj = -7°C	2.76	2.30
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.64 kW	2.65 kW
COP Tj = +2°C	5.44	3.58
Cdh Tj = +2 °C	0.910	0.940
Pdh Tj = +7°C	2.95 kW	2.77 kW
COP Tj = +7°C	7.15	4.89
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.46 kW	3.37 kW
COP Tj = 12°C	9.55	6.92
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	2.50	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.03 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2018 kWh	2894 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:32 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:32 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5UK / WH-UDZ05KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5UK / WH-UDZ05KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	5.00 kW	5.00 kW
El input	0.98 kW	1.65 kW
COP	5.10	3.03

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

1.64 kW

Cooling capacity

5.00

EER

3.05

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	5.00 kW
SEER	5.72
P <sub>dc Tj = 35°C</sub>	5.00 kW
EER Tj = 35°C	3.64
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	3.68 kW
EER Tj = 30°C	5.18
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.37 kW
EER Tj = 25°C	6.47
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.05 kW
EER Tj = 20°C	8.94
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	306 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	237 %	165 %
Prated	5.00 kW	4.00 kW
SCOP	6.00	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.12 kW	4.05 kW
COP Tj = +2°C	3.05	3.00
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.27 kW	2.61 kW
COP Tj = +7°C	5.75	3.63
Cdh Tj = +7 °C	0.920	0.940
Pdh Tj = 12°C	3.45 kW	3.32 kW
COP Tj = 12°C	8.58	6.17
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	5.00 kW	4.00 kW
COP Tj = Tbiv	3.89	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.89	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1113 kWh	1274 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	115 %
Prated	6.00 kW	4.00 kW
SCOP	4.08	2.95
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.58 kW	2.40 kW
COP Tj = -7°C	3.73	2.53
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	4.50	3.53
Cdh Tj = +2 °C	0.920	0.930
Pdh Tj = +7°C	2.99 kW	2.85 kW
COP Tj = +7°C	7.25	5.61
Cdh Tj = +7 °C	0.900	0.910
Pdh Tj = 12°C	3.49 kW	3.44 kW
COP Tj = 12°C	8.45	7.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.89 kW	3.26 kW
COP Tj = Tbiv	2.80	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.99 kW	3.97 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.01 kW	0.03 kW
Annual energy consumption Qhe	3625 kWh	3338 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.94	3.32
COP Tj = -15°C (if TOL<-20°C)	2.80	1.77
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	202 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.12	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.41 kW	4.46 kW
COP Tj = -7°C	2.76	2.30
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.64 kW	2.65 kW
COP Tj = +2°C	5.44	3.58
Cdh Tj = +2 °C	0.910	0.940
Pdh Tj = +7°C	2.95 kW	2.77 kW
COP Tj = +7°C	7.15	4.89
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.46 kW	3.37 kW
COP Tj = 12°C	9.55	6.92
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	2.50	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.03 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2018 kWh	2894 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:32 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:32 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5AN / WH-UDZ05KE5

Configure model	
Model name	WH-ADC0309K3E5AN / WH-UDZ05KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.00 kW	5.00 kW
El input	0.98 kW	1.65 kW
COP	5.10	3.03

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

1.64 kW

Cooling capacity

5.00

EER

3.05

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	5.00 kW
SEER	5.72
P <sub>dc Tj = 35°C</sub>	5.00 kW
EER Tj = 35°C	3.64
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	3.68 kW
EER Tj = 30°C	5.18
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.37 kW
EER Tj = 25°C	6.47
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.05 kW
EER Tj = 20°C	8.94
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	306 kWh

## Warmer Climate



<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	237 %	165 %
Prated	5.00 kW	4.00 kW
SCOP	6.00	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.12 kW	4.05 kW
COP Tj = +2°C	3.05	3.00
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.27 kW	2.61 kW
COP Tj = +7°C	5.75	3.63
Cdh Tj = +7 °C	0.920	0.940
Pdh Tj = 12°C	3.45 kW	3.32 kW
COP Tj = 12°C	8.58	6.17
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	5.00 kW	4.00 kW
COP Tj = Tbiv	3.89	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.89	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1113 kWh	1274 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	115 %
Prated	6.00 kW	4.00 kW
SCOP	4.08	2.95
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.58 kW	2.40 kW
COP Tj = -7°C	3.73	2.53
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	4.50	3.53
Cdh Tj = +2 °C	0.920	0.930
Pdh Tj = +7°C	2.99 kW	2.85 kW
COP Tj = +7°C	7.25	5.61
Cdh Tj = +7 °C	0.900	0.910
Pdh Tj = 12°C	3.49 kW	3.44 kW
COP Tj = 12°C	8.45	7.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.89 kW	3.26 kW
COP Tj = Tbiv	2.80	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.99 kW	3.97 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.01 kW	0.03 kW
Annual energy consumption Qhe	3625 kWh	3338 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.94	3.32
COP Tj = -15°C (if TOL<-20°C)	2.80	1.77
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	202 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.12	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.41 kW	4.46 kW
COP Tj = -7°C	2.76	2.30
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.64 kW	2.65 kW
COP Tj = +2°C	5.44	3.58
Cdh Tj = +2 °C	0.910	0.940
Pdh Tj = +7°C	2.95 kW	2.77 kW
COP Tj = +7°C	7.15	4.89
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.46 kW	3.37 kW
COP Tj = 12°C	9.55	6.92
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	2.50	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.03 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2018 kWh	2894 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:32 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:32 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5B / WH-UDZ05KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5B / WH-UDZ05KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	5.00 kW	5.00 kW
El input	0.98 kW	1.65 kW
COP	5.10	3.03

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling



This information was generated by the HP KEYMARK database on 2 May 2023

**EN 14511-2****+7°C/+12°C**

El input

1.64 kW

Cooling capacity

5.00

EER

3.05

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	5.00 kW
SEER	5.72
P <sub>dc Tj = 35°C</sub>	5.00 kW
EER Tj = 35°C	3.64
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	3.68 kW
EER Tj = 30°C	5.18
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.37 kW
EER Tj = 25°C	6.47
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.05 kW
EER Tj = 20°C	8.94
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	306 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	237 %	165 %
Prated	5.00 kW	4.00 kW
SCOP	6.00	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.12 kW	4.05 kW
COP Tj = +2°C	3.05	3.00
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.27 kW	2.61 kW
COP Tj = +7°C	5.75	3.63
Cdh Tj = +7 °C	0.920	0.940
Pdh Tj = 12°C	3.45 kW	3.32 kW
COP Tj = 12°C	8.58	6.17
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	5.00 kW	4.00 kW
COP Tj = Tbiv	3.89	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.89	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1113 kWh	1274 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	115 %
Prated	6.00 kW	4.00 kW
SCOP	4.08	2.95
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.58 kW	2.40 kW
COP Tj = -7°C	3.73	2.53
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	4.50	3.53
Cdh Tj = +2 °C	0.920	0.930
Pdh Tj = +7°C	2.99 kW	2.85 kW
COP Tj = +7°C	7.25	5.61
Cdh Tj = +7 °C	0.900	0.910
Pdh Tj = 12°C	3.49 kW	3.44 kW
COP Tj = 12°C	8.45	7.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.89 kW	3.26 kW
COP Tj = Tbiv	2.80	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.99 kW	3.97 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.01 kW	0.03 kW
Annual energy consumption Qhe	3625 kWh	3338 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.94	3.32
COP Tj = -15°C (if TOL<-20°C)	2.80	1.77
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	202 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.12	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.41 kW	4.46 kW
COP Tj = -7°C	2.76	2.30
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.64 kW	2.65 kW
COP Tj = +2°C	5.44	3.58
Cdh Tj = +2 °C	0.910	0.940
Pdh Tj = +7°C	2.95 kW	2.77 kW
COP Tj = +7°C	7.15	4.89
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.46 kW	3.37 kW
COP Tj = 12°C	9.55	6.92
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	2.50	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.03 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2018 kWh	2894 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l



## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:32 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:32 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K6E5 / WH-UDZ05KE5

<b>Configure model</b>	
Model name	WH-ADC0309K6E5 / WH-UDZ05KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	5.00 kW	5.00 kW
El input	0.98 kW	1.65 kW
COP	5.10	3.03

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2**

	<b>+7°C/+12°C</b>
El input	1.64 kW
Cooling capacity	5.00
EER	3.05

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	5.00 kW
SEER	5.72
P <sub>dc Tj = 35°C</sub>	5.00 kW
EER Tj = 35°C	3.64
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	3.68 kW
EER Tj = 30°C	5.18
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.37 kW
EER Tj = 25°C	6.47
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.05 kW
EER Tj = 20°C	8.94
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	306 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	237 %	165 %
Prated	5.00 kW	4.00 kW
SCOP	6.00	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.12 kW	4.05 kW
COP Tj = +2°C	3.05	3.00
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.27 kW	2.61 kW
COP Tj = +7°C	5.75	3.63
Cdh Tj = +7 °C	0.920	0.940
Pdh Tj = 12°C	3.45 kW	3.32 kW
COP Tj = 12°C	8.58	6.17
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	5.00 kW	4.00 kW
COP Tj = Tbiv	3.89	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.89	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1113 kWh	1274 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	115 %
Prated	6.00 kW	4.00 kW
SCOP	4.08	2.95
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.58 kW	2.40 kW
COP Tj = -7°C	3.73	2.53
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	4.50	3.53
Cdh Tj = +2 °C	0.920	0.930
Pdh Tj = +7°C	2.99 kW	2.85 kW
COP Tj = +7°C	7.25	5.61
Cdh Tj = +7 °C	0.900	0.910
Pdh Tj = 12°C	3.49 kW	3.44 kW
COP Tj = 12°C	8.45	7.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.89 kW	3.26 kW
COP Tj = Tbiv	2.80	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.99 kW	3.97 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.01 kW	0.03 kW
Annual energy consumption Qhe	3625 kWh	3338 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.94	3.32
COP Tj = -15°C (if TOL<-20°C)	2.80	1.77
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	202 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.12	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.41 kW	4.46 kW
COP Tj = -7°C	2.76	2.30
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.64 kW	2.65 kW
COP Tj = +2°C	5.44	3.58
Cdh Tj = +2 °C	0.910	0.940
Pdh Tj = +7°C	2.95 kW	2.77 kW
COP Tj = +7°C	7.15	4.89
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.46 kW	3.37 kW
COP Tj = 12°C	9.55	6.92
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	2.50	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.03 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.50	1.98
C <sub>dh</sub> $T_j = TOL$ or P <sub>dh</sub> $T_j = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
P <sub>off</sub>	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	2018 kWh	2894 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:32 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:32 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K6E5AN / WH-UDZ05KE5

<b>Configure model</b>	
Model name	WH-ADC0309K6E5AN / WH-UDZ05KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	5.00 kW	5.00 kW
El input	0.98 kW	1.65 kW
COP	5.10	3.03

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2**

	<b>+7°C/+12°C</b>
El input	1.64 kW
Cooling capacity	5.00
EER	3.05

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	5.00 kW
SEER	5.72
P <sub>dc Tj = 35°C</sub>	5.00 kW
EER Tj = 35°C	3.64
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	3.68 kW
EER Tj = 30°C	5.18
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.37 kW
EER Tj = 25°C	6.47
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.05 kW
EER Tj = 20°C	8.94
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	306 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	237 %	165 %
Prated	5.00 kW	4.00 kW
SCOP	6.00	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.12 kW	4.05 kW
COP Tj = +2°C	3.05	3.00
Cdh Tj = +2 °C	0.970	0.970
Pdh Tj = +7°C	3.27 kW	2.61 kW
COP Tj = +7°C	5.75	3.63
Cdh Tj = +7 °C	0.920	0.940
Pdh Tj = 12°C	3.45 kW	3.32 kW
COP Tj = 12°C	8.58	6.17
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	5.00 kW	4.00 kW
COP Tj = Tbiv	3.89	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.12 kW	4.05 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.89	2.46
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1113 kWh	1274 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	160 %	115 %
Prated	6.00 kW	4.00 kW
SCOP	4.08	2.95
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	3.58 kW	2.40 kW
COP Tj = -7°C	3.73	2.53
Cdh Tj = -7 °C	0.950	0.950
Pdh Tj = +2°C	2.47 kW	2.30 kW
COP Tj = +2°C	4.50	3.53
Cdh Tj = +2 °C	0.920	0.930
Pdh Tj = +7°C	2.99 kW	2.85 kW
COP Tj = +7°C	7.25	5.61
Cdh Tj = +7 °C	0.900	0.910
Pdh Tj = 12°C	3.49 kW	3.44 kW
COP Tj = 12°C	8.45	7.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.89 kW	3.26 kW
COP Tj = Tbiv	2.80	1.77
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.99 kW	3.97 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.19	1.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.01 kW	0.03 kW
Annual energy consumption Qhe	3625 kWh	3338 kWh
Pdh Tj = -15°C (if TOL<-20°C)	4.94	3.32
COP Tj = -15°C (if TOL<-20°C)	2.80	1.77
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	202 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.12	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.41 kW	4.46 kW
COP Tj = -7°C	2.76	2.30
Cdh Tj = -7 °C	0.970	0.980
Pdh Tj = +2°C	2.64 kW	2.65 kW
COP Tj = +2°C	5.44	3.58
Cdh Tj = +2 °C	0.910	0.940
Pdh Tj = +7°C	2.95 kW	2.77 kW
COP Tj = +7°C	7.15	4.89
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.46 kW	3.37 kW
COP Tj = 12°C	9.55	6.92
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	2.50	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.03 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.98
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2018 kWh	2894 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:32 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:32 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5 / WH-UDZ07KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5 / WH-UDZ07KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	7.00 kW	7.00 kW
El input	1.44 kW	2.40 kW
COP	4.86	2.92

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

2.21 kW

Cooling capacity

6.70

EER

3.03

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	6.00 kW
SEER	5.43
P <sub>dc Tj = 35°C</sub>	6.00 kW
EER Tj = 35°C	3.13
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	4.42 kW
EER Tj = 30°C	4.35
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.84 kW
EER Tj = 25°C	6.52
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.26 kW
EER Tj = 20°C	8.73
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	386 kWh

## Warmer Climate



This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## EN 14825

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.25 kW	6.23 kW
COP Tj = -7°C	2.80	2.18
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.78 kW	3.82 kW
COP Tj = +2°C	5.03	3.69
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.95 kW	2.50 kW
COP Tj = +7°C	6.56	4.50
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.44 kW	3.10 kW
COP Tj = 12°C	8.47	6.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.00 kW	6.19 kW
COP Tj = Tbiv	2.60	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.18 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.82 kW
Annual energy consumption Qhe	2949 kWh	3999 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5UK / WH-UDZ07KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5UK / WH-UDZ07KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	7.00 kW	7.00 kW
El input	1.44 kW	2.40 kW
COP	4.86	2.92

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling



**EN 14511-2****+7°C/+12°C**

El input

2.21 kW

Cooling capacity

6.70

EER

3.03

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	6.00 kW
SEER	5.43
P <sub>dc Tj = 35°C</sub>	6.00 kW
EER Tj = 35°C	3.13
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	4.42 kW
EER Tj = 30°C	4.35
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.84 kW
EER Tj = 25°C	6.52
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.26 kW
EER Tj = 20°C	8.73
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	386 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.25 kW	6.23 kW
COP Tj = -7°C	2.80	2.18
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.78 kW	3.82 kW
COP Tj = +2°C	5.03	3.69
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.95 kW	2.50 kW
COP Tj = +7°C	6.56	4.50
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.44 kW	3.10 kW
COP Tj = 12°C	8.47	6.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.00 kW	6.19 kW
COP Tj = Tbiv	2.60	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.18 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.82 kW
Annual energy consumption Qhe	2949 kWh	3999 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l



## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5AN / WH-UDZ07KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5AN / WH-UDZ07KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	7.00 kW	7.00 kW
El input	1.44 kW	2.40 kW
COP	4.86	2.92

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

<b>EN 14511-2</b>	
	<b>+7°C/+12°C</b>
El input	2.21 kW
Cooling capacity	6.70
EER	3.03

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	6.00 kW
SEER	5.43
P <sub>dc Tj = 35°C</sub>	6.00 kW
EER Tj = 35°C	3.13
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	4.42 kW
EER Tj = 30°C	4.35
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.84 kW
EER Tj = 25°C	6.52
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.26 kW
EER Tj = 20°C	8.73
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	386 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.25 kW	6.23 kW
COP Tj = -7°C	2.80	2.18
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.78 kW	3.82 kW
COP Tj = +2°C	5.03	3.69
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.95 kW	2.50 kW
COP Tj = +7°C	6.56	4.50
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.44 kW	3.10 kW
COP Tj = 12°C	8.47	6.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.00 kW	6.19 kW
COP Tj = Tbiv	2.60	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.18 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.82 kW
Annual energy consumption Qhe	2949 kWh	3999 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5B / WH-UDZ07KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5B / WH-UDZ07KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	7.00 kW	7.00 kW
El input	1.44 kW	2.40 kW
COP	4.86	2.92

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

2.21 kW

Cooling capacity

6.70

EER

3.03

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	6.00 kW
SEER	5.43
P <sub>dc Tj = 35°C</sub>	6.00 kW
EER Tj = 35°C	3.13
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	4.42 kW
EER Tj = 30°C	4.35
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.84 kW
EER Tj = 25°C	6.52
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.26 kW
EER Tj = 20°C	8.73
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	386 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP T_j = TOL$ or $COP T_j = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh T_j = TOL$ or $Pdh T_j = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh T_j = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP T_j = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh T_j = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## EN 14825

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.25 kW	6.23 kW
COP Tj = -7°C	2.80	2.18
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.78 kW	3.82 kW
COP Tj = +2°C	5.03	3.69
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.95 kW	2.50 kW
COP Tj = +7°C	6.56	4.50
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.44 kW	3.10 kW
COP Tj = 12°C	8.47	6.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.00 kW	6.19 kW
COP Tj = Tbiv	2.60	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.18 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.82 kW
Annual energy consumption Qhe	2949 kWh	3999 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K6E5 / WH-UDZ07KE5

<b>Configure model</b>	
Model name	WH-ADC0309K6E5 / WH-UDZ07KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	7.00 kW	7.00 kW
El input	1.44 kW	2.40 kW
COP	4.86	2.92

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

2.21 kW

Cooling capacity

6.70

EER

3.03

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	6.00 kW
SEER	5.43
P <sub>dc Tj = 35°C</sub>	6.00 kW
EER Tj = 35°C	3.13
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	4.42 kW
EER Tj = 30°C	4.35
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.84 kW
EER Tj = 25°C	6.52
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.26 kW
EER Tj = 20°C	8.73
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	386 kWh

## Warmer Climate



This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.72	4.86
COP Tj = -15°C (if TOL<-20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.25 kW	6.23 kW
COP Tj = -7°C	2.80	2.18
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.78 kW	3.82 kW
COP Tj = +2°C	5.03	3.69
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.95 kW	2.50 kW
COP Tj = +7°C	6.56	4.50
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.44 kW	3.10 kW
COP Tj = 12°C	8.47	6.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.00 kW	6.19 kW
COP Tj = Tbiv	2.60	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.18 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.82 kW
Annual energy consumption Qhe	2949 kWh	3999 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K6E5AN / WH-UDZ07KE5

<b>Configure model</b>	
Model name	WH-ADC0309K6E5AN / WH-UDZ07KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	7.00 kW	7.00 kW
El input	1.44 kW	2.40 kW
COP	4.86	2.92

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling



**EN 14511-2****+7°C/+12°C**

El input

2.21 kW

Cooling capacity

6.70

EER

3.03

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	6.00 kW
SEER	5.43
P <sub>dc Tj = 35°C</sub>	6.00 kW
EER Tj = 35°C	3.13
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	4.42 kW
EER Tj = 30°C	4.35
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	2.84 kW
EER Tj = 25°C	6.52
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.26 kW
EER Tj = 20°C	8.73
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	386 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	193 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.25 kW	6.23 kW
COP Tj = -7°C	2.80	2.18
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	3.78 kW	3.82 kW
COP Tj = +2°C	5.03	3.69
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = +7°C	2.95 kW	2.50 kW
COP Tj = +7°C	6.56	4.50
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.44 kW	3.10 kW
COP Tj = 12°C	8.47	6.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.00 kW	6.19 kW
COP Tj = Tbiv	2.60	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.18 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.82 kW
Annual energy consumption Qhe	2949 kWh	3999 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l



## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5 / WH-UDZ09KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5 / WH-UDZ09KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	9.00 kW	8.90 kW
El input	1.98 kW	3.04 kW
COP	4.55	2.93

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

3.01 kW

Cooling capacity

8.20

EER

2.72

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	7.00 kW
SEER	5.27
P <sub>dc Tj = 35°C</sub>	7.00 kW
EER Tj = 35°C	3.09
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	5.16 kW
EER Tj = 30°C	4.16
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	3.32 kW
EER Tj = 25°C	6.08
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.47 kW
EER Tj = 20°C	8.69
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	465 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	175 %	133 %
Prated	8.00 kW	8.00 kW
SCOP	4.44	3.41
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.05 kW	7.08 kW
COP Tj = -7°C	2.81	2.34
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	4.26 kW	4.30 kW
COP Tj = +2°C	3.89	3.16
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.77 kW	2.60 kW
COP Tj = +7°C	7.16	4.54
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.04 kW	3.15 kW
COP Tj = 12°C	8.74	6.61
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.08 kW
COP Tj = Tbiv	2.78	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.08 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.92 kW
Annual energy consumption Qhe	3720 kWh	4851 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5UK / WH-UDZ09KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5UK / WH-UDZ09KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	9.00 kW	8.90 kW
El input	1.98 kW	3.04 kW
COP	4.55	2.93

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

<b>EN 14511-2</b>	
	<b>+7°C/+12°C</b>
El input	3.01 kW
Cooling capacity	8.20
EER	2.72

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	7.00 kW
SEER	5.27
P <sub>dc Tj = 35°C</sub>	7.00 kW
EER Tj = 35°C	3.09
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	5.16 kW
EER Tj = 30°C	4.16
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	3.32 kW
EER Tj = 25°C	6.08
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.47 kW
EER Tj = 20°C	8.69
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	465 kWh

## Warmer Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.72	4.86
COP Tj = -15°C (if TOL<-20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	175 %	133 %
Prated	8.00 kW	8.00 kW
SCOP	4.44	3.41
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.05 kW	7.08 kW
COP Tj = -7°C	2.81	2.34
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	4.26 kW	4.30 kW
COP Tj = +2°C	3.89	3.16
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.77 kW	2.60 kW
COP Tj = +7°C	7.16	4.54
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.04 kW	3.15 kW
COP Tj = 12°C	8.74	6.61
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.08 kW
COP Tj = Tbiv	2.78	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.08 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.92 kW
Annual energy consumption Qhe	3720 kWh	4851 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5AN / WH-UDZ09KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5AN / WH-UDZ09KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	9.00 kW	8.90 kW
El input	1.98 kW	3.04 kW
COP	4.55	2.93

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

3.01 kW

Cooling capacity

8.20

EER

2.72

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	7.00 kW
SEER	5.27
P <sub>dc Tj = 35°C</sub>	7.00 kW
EER Tj = 35°C	3.09
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	5.16 kW
EER Tj = 30°C	4.16
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	3.32 kW
EER Tj = 25°C	6.08
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.47 kW
EER Tj = 20°C	8.69
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	465 kWh

## Warmer Climate



This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.72	4.86
COP Tj = -15°C (if TOL<-20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	175 %	133 %
Prated	8.00 kW	8.00 kW
SCOP	4.44	3.41
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.05 kW	7.08 kW
COP Tj = -7°C	2.81	2.34
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	4.26 kW	4.30 kW
COP Tj = +2°C	3.89	3.16
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.77 kW	2.60 kW
COP Tj = +7°C	7.16	4.54
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.04 kW	3.15 kW
COP Tj = 12°C	8.74	6.61
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.08 kW
COP Tj = Tbiv	2.78	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.08 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.78	2.03
C <sub>dh</sub> $T_j = TOL$ or P <sub>dh</sub> $T_j = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
P <sub>off</sub>	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.92 kW
Annual energy consumption Q <sub>he</sub>	3720 kWh	4851 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K3E5B / WH-UDZ09KE5

<b>Configure model</b>	
Model name	WH-ADC0309K3E5B / WH-UDZ09KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	9.00 kW	8.90 kW
El input	1.98 kW	3.04 kW
COP	4.55	2.93

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling



<b>EN 14511-2</b>	
	<b>+7°C/+12°C</b>
El input	3.01 kW
Cooling capacity	8.20
EER	2.72

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	7.00 kW
SEER	5.27
P <sub>dc Tj = 35°C</sub>	7.00 kW
EER Tj = 35°C	3.09
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	5.16 kW
EER Tj = 30°C	4.16
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	3.32 kW
EER Tj = 25°C	6.08
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.47 kW
EER Tj = 20°C	8.69
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	465 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## EN 14825

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	175 %	133 %
Prated	8.00 kW	8.00 kW
SCOP	4.44	3.41
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.05 kW	7.08 kW
COP Tj = -7°C	2.81	2.34
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	4.26 kW	4.30 kW
COP Tj = +2°C	3.89	3.16
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.77 kW	2.60 kW
COP Tj = +7°C	7.16	4.54
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.04 kW	3.15 kW
COP Tj = 12°C	8.74	6.61
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.08 kW
COP Tj = Tbiv	2.78	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.08 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.92 kW
Annual energy consumption Qhe	3720 kWh	4851 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l



## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K6E5 / WH-UDZ09KE5

<b>Configure model</b>	
Model name	WH-ADC0309K6E5 / WH-UDZ09KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	9.00 kW	8.90 kW
El input	1.98 kW	3.04 kW
COP	4.55	2.93

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2**

	<b>+7°C/+12°C</b>
El input	3.01 kW
Cooling capacity	8.20
EER	2.72

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	7.00 kW
SEER	5.27
P <sub>dc Tj = 35°C</sub>	7.00 kW
EER Tj = 35°C	3.09
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	5.16 kW
EER Tj = 30°C	4.16
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	3.32 kW
EER Tj = 25°C	6.08
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.47 kW
EER Tj = 20°C	8.69
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	465 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	175 %	133 %
Prated	8.00 kW	8.00 kW
SCOP	4.44	3.41
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.05 kW	7.08 kW
COP Tj = -7°C	2.81	2.34
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	4.26 kW	4.30 kW
COP Tj = +2°C	3.89	3.16
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.77 kW	2.60 kW
COP Tj = +7°C	7.16	4.54
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.04 kW	3.15 kW
COP Tj = 12°C	8.74	6.61
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.08 kW
COP Tj = Tbiv	2.78	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.08 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.92 kW
Annual energy consumption Qhe	3720 kWh	4851 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Model: WH-ADC0309K6E5AN / WH-UDZ09KE5

<b>Configure model</b>	
Model name	WH-ADC0309K6E5AN / WH-UDZ09KE5
Application	Heating + DHW + low temp
Units	Indoor + Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C

<b>General Data</b>	
Power supply	1x230V 50Hz

### Heating

<b>EN 14511-2</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Heat output	9.00 kW	8.90 kW
El input	1.98 kW	3.04 kW
COP	4.55	2.93

<b>EN 14511-4</b>	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

### Cooling

**EN 14511-2****+7°C/+12°C**

El input

3.01 kW

Cooling capacity

8.20

EER

2.72

**EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>+7°C/+12°C</b>
P <sub>designc</sub>	7.00 kW
SEER	5.27
P <sub>dc Tj = 35°C</sub>	7.00 kW
EER Tj = 35°C	3.09
C <sub>dc Tj = 35 °C</sub>	1.000
P <sub>dc Tj = 30°C</sub>	5.16 kW
EER Tj = 30°C	4.16
C <sub>dc Tj = 30 °C</sub>	1.000
P <sub>dc Tj = 25°C</sub>	3.32 kW
EER Tj = 25°C	6.08
C <sub>dc Tj = 25 °C</sub>	1.000
P <sub>dc Tj = 20°C</sub>	1.47 kW
EER Tj = 20°C	8.69
C <sub>dc Tj = 20 °C</sub>	1.000
P <sub>off</sub>	12 W
PTO	0 W
PSB	12 W
PCK	0 W
Annual energy consumption Q <sub>ce</sub>	465 kWh

## Warmer Climate

This information was generated by the HP KEYMARK database on 2 May 2023

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.07 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.51 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.45 kW	3.25 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920

This information was generated by the HP KEYMARK database on 2 May 2023

Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.07 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

<b>EN 14825</b>		
-----------------	--	--



This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.17 kW	3.64 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.54 kW	2.25 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	2.96 kW	2.81 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.33 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.900	0.910
Pdh Tj = Tbiv	5.71 kW	4.89 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.72 kW	3.74 kW

This information was generated by the HP KEYMARK database on 2 May 2023

$COP_{Tj} = TOL$ or $COP_{Tj} = T_{designh}$ if $TOL < T_{designh}$	1.82	1.08
$Cdh_{Tj} = TOL$ or $Pdh_{Tj} = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.28 kW	2.26 kW
Annual energy consumption $Q_{he}$	4132 kWh	4967 kWh
$Pdh_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	5.72	4.86
$COP_{Tj} = -15^{\circ}C$ (if $TOL < -20^{\circ}C$ )	2.44	1.72
$Cdh_{Tj} = -15^{\circ}C$	0.980	0.980

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

## **EN 14825**

This information was generated by the HP KEYMARK database on 2 May 2023

	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	175 %	133 %
Prated	8.00 kW	8.00 kW
SCOP	4.44	3.41
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.05 kW	7.08 kW
COP Tj = -7°C	2.81	2.34
Cdh Tj = -7 °C	0.980	0.980
Pdh Tj = +2°C	4.26 kW	4.30 kW
COP Tj = +2°C	3.89	3.16
Cdh Tj = +2 °C	0.960	0.970
Pdh Tj = +7°C	2.77 kW	2.60 kW
COP Tj = +7°C	7.16	4.54
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.04 kW	3.15 kW
COP Tj = 12°C	8.74	6.61
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.00 kW	7.08 kW
COP Tj = Tbiv	2.78	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.00 kW	7.08 kW

This information was generated by the HP KEYMARK database on 2 May 2023

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	46 W	46 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.92 kW
Annual energy consumption Qhe	3720 kWh	4851 kWh

## Domestic Hot Water (DHW)

### Warmer Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	161 %
COP	4.03
Heating up time	1:06 h:min
Standby power input	28.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Colder Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	113 %
COP	2.82
Heating up time	1:06 h:min
Standby power input	36.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l

## Average Climate

<b>EN 16147</b>	
Declared load profile	L
Efficiency $\eta_{DHW}$	140 %
COP	3.51
Heating up time	1:06 h:min
Standby power input	32.0 W
Reference hot water temperature	52.8 °C
Mixed water at 40°C	245 l