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This information was generated by the HP KEYMARK database on 18 Mar 2022

Login

Summary of	Aquarea Split 9 kW STD (J Series)	Reg. No.	011-1W0209	
Certificate Holder				
Name	Panasonic Marketing Europe GmbH	Panasonic Marketing Europe GmbH		
Address	Hagenauer Strasse 43, Wiesbaden	Hagenauer Strasse 43, Wiesbaden Zip 65203		
City	Wiesbaden	Country	Germany	
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH			
Subtype title	Aquarea Split 9 kW STD (J Series)			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R32			
Mass of Refrigerant	1.27 kg			
Certification Date	08.01.2020			
Testing basis	HP KEYMARK certification scheme rules V7			



Model: WH-ADC0309J3E5 / WH-UD09JE5

Configure model		
Model name	WH-ADC0309J3E5 / WH-UD09JE5	
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	9.00 kW	8.95 kW	
El input	2.01 kW	3.22 kW	
СОР	4.48	2.78	

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

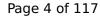
Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COPTj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1



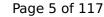


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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	59 dB(A)	59 dB(A)	

Warmer Climate

EN 14825		
Low temperature	Medium temperature	
227 %	160 %	
7.00 kW	6.00 kW	
	Low temperature 227 %	





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SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W





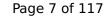
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	59 dB(A)	59 dB(A)	

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
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COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7$ °C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90





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COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	2.62 kW	1.74 kW
Cooling capacity	7.60	7.60
EER	2.90	4.37

EN 14825





	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	W
PCK	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

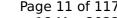


EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	140 %	
СОР	3.50	
Heating up time	1:22 h:min	
Standby power input	30.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Colder Climate





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EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.47
Heating up time	1:22 h:min
Standby power input	37.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5B / WH-UD09JE5

Configure model		
Model name	WH-ADC0309J3E5B / WH-UD09JE5	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

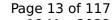
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	9.00 kW	8.95 kW	
El input	2.01 kW	3.22 kW	
СОР	4.48	2.78	

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
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Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
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7.00 kW	6.20 kW
2.60	1.70
55 °C	55 °C
2 W	2 W
44 W	44 W
10 W	10 W
10 W	10 W
Electricity	Electricity
0.00 kW	0.80 kW
2949 kWh	4354 kWh
	2.60 55 °C 2 W 44 W 10 W 10 W Electricity 0.00 kW

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Warmer Climate

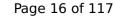
EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW



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9	-	
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW



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COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
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This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2			
	+7°C/+12°C	+18°C/+23°C	
El input	2.62 kW	1.74 kW	
Cooling capacity	7.60	7.60	
EER	2.90	4.37	

EN 14825



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This information was generated by the HP KEYMARK database on 18 Mar 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	w
РСК	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

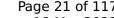


EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	140 %	
СОР	3.50	
Heating up time	1:22 h:min	
Standby power input	30.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Colder Climate





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EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.47
Heating up time	1:22 h:min
Standby power input	37.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5AN / WH-UD09JE5

Configure model		
Model name WH-ADC0309J3E5AN / WH-UD09JE5		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone Colder Climate + Warmer Climate		
Reversibility Yes		
Cooling mode application (optional)	+7°C/12°C	

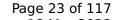
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	9.00 kW	8.95 kW	
El input	2.01 kW	3.22 kW	
СОР	4.48	2.78	

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
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$COP Tj = -7^{\circ}C$	2.80	1.86
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$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
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		1





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
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PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Warmer Climate

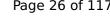
EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW



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9	-	
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
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Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 W





$$\operatorname{\textit{Page}}\xspace$ 26 of 117 This information was generated by the HP KEYMARK database on 18 Mar 2022

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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

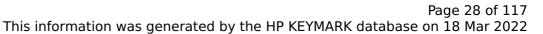
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW



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This information was generated by the HP KEYMARK database on 18 Mar 2022

This information was genera	ted by the HE KLIMAR	ik database on 10 Mai 2022
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	59 dB(A)	59 dB(A)	

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	2.62 kW	1.74 kW
Cooling capacity	7.60	7.60
EER	2.90	4.37

EN 14825



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This information was generated by the HP KEYMARK database on 18 Mar 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	w
РСК	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate



EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	140 %	
СОР	3.50	
Heating up time	1:22 h:min	
Standby power input	30.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Colder Climate





 $$\operatorname{\textit{Page}}\ 31\ \text{of}\ 117$$ This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.47
Heating up time	1:22 h:min
Standby power input	37.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5UK / WH-UD09JE5

Configure model		
Model name	WH-ADC0309J3E5UK / WH-UD09JE5	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

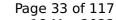
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	9.00 kW	8.95 kW	
El input	2.01 kW	3.22 kW	
СОР	4.48	2.78	

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1



$$\operatorname{\textit{Page}}\ 34\ \text{of}\ 117$$ This information was generated by the HP KEYMARK database on 18 Mar 2022

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

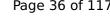
Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW



$$\operatorname{\textit{Page}}\ 35$$ of 117 This information was generated by the HP KEYMARK database on 18 Mar 2022

SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W





$$\operatorname{\textit{Page}}\ 36$$ of 117 This information was generated by the HP KEYMARK database on 18 Mar 2022

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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
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$$\operatorname{\textit{Page}}\xspace$ 37 of 117 This information was generated by the HP KEYMARK database on 18 Mar 2022

This information was genera	icoa o y cine in incentina	iii database sii 10 iilai 202
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	-	



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This information was generated by the HP KEYMARK database on 18 Mar 2022

COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	2.62 kW	1.74 kW
Cooling capacity	7.60	7.60
EER	2.90	4.37

EN 14825



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This information was generated by the HP KEYMARK database on 18 Mar 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	W
PCK	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

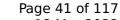


EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	140 %	
СОР	3.50	
Heating up time	1:22 h:min	
Standby power input	30.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Colder Climate





EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.47	
Heating up time	1:22 h:min	
Standby power input	37.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	



Model: WH-SDC0709J3E5 / WH-UD09JE5

Configure model		
Model name	WH-SDC0709J3E5 / WH-UD09JE5	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

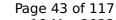
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
СОР	4.48	2.78

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

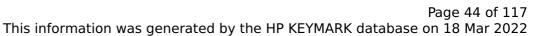
Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW



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This information was generated by the HP KEYMARK database on 18 Mar 2022

SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W



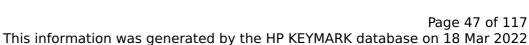


Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7° C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = $+2$ °C	2.50 kW	2.20 kW



CEN heat pump KEYMARK

This information was genera	ated by the HP KETMA	RK database on 18 Mar 202
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	1	1





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	2.62 kW	1.74 kW
Cooling capacity	7.60	7.60
EER	2.90	4.37

EN 14825



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This information was generated by the HP KETMARK database on 16 Mar 20		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	W
РСК	0 W	W
Annual energy consumption Qce	482 kWh	kWh



Model: WH-ADC0309J3E5 / WH-UD09JE5-1

Configure model		
Model name	WH-ADC0309J3E5 / WH-UD09JE5-1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

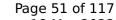
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
СОР	4.48	2.78

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1



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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Warmer Climate

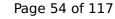
EN 14825		
Low temperature	Medium temperature	
227 %	160 %	
7.00 kW	6.00 kW	
	Low temperature 227 %	



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This information was generated by the HP KEYMARK database on 18 Mar 2022

9	-	
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

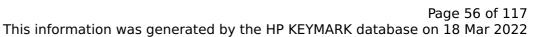
EN 14825		
	Low temperature	Medium temperature
η_{S}	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7 °C	4.20 kW	3.60 kW
COP Tj = -7° C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = $+2$ °C	2.50 kW	2.20 kW



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This information was generated by the HP KEYMARK database on 18 Mar 2022

	<u> </u>	
$COPTj = +2^{\circ}C$	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	1	1





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.02 kW	1.74 kW
Cooling capacity	8.20	7.60
EER	2.72	4.37

EN 14825



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This information was generated by the HP KEYMARK database on 18 Mar 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	w
РСК	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

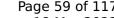


EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	3.00
Heating up time	1:22 h:min
Standby power input	31.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	140 %	
СОР	3.50	
Heating up time	1:22 h:min	
Standby power input	30.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Colder Climate





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EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.47
Heating up time	1:22 h:min
Standby power input	37.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5B / WH-UD09JE5-1

Configure model		
Model name	WH-ADC0309J3E5B / WH-UD09JE5-1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility Yes		
Cooling mode application (optional)	+7°C/12°C	

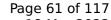
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
Low temperature Medium temperature		Medium temperature	
Heat output	9.00 kW	8.95 kW	
El input	2.01 kW	3.22 kW	
СОР	4.48	2.78	

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	59 dB(A)	59 dB(A)	

Warmer Climate

EN 14825		
Low temperature	Medium temperature	
227 %	160 %	
7.00 kW	6.00 kW	
	Low temperature 227 %	



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This information was generated by the HP KEYMARK database on 18 Mar 2022

9	-	
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 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

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	41 dB(A)	41 dB(A)	
Sound power level outdoor	59 dB(A)	59 dB(A)	

Colder Climate

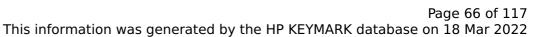
EN 14825		
	Low temperature	Medium temperature
η_{s}	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW



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This information was generated by the HP KEYMARK database on 18 Mar 2022

rins information was general		
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	•	





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.02 kW	1.74 kW
Cooling capacity	8.20	7.60
EER	2.72	4.37

EN 14825





	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	w
РТО	o w	w
PSB	8 W	W
PCK	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

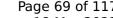


EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	3.00
Heating up time	1:22 h:min
Standby power input	31.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
СОР	3.50
Heating up time	1:22 h:min
Standby power input	30.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

Colder Climate





$$\operatorname{\textit{Page}}\xspace$ 69 of 117 This information was generated by the HP KEYMARK database on 18 Mar 2022

EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.47
Heating up time	1:22 h:min
Standby power input	37.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5AN / WH-UD09JE5-1

Configure model		
Model name WH-ADC0309J3E5AN / WH-UD09JE5-1		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	e Zone Colder Climate + Warmer Climate	
Reversibility	ersibility Yes	
Cooling mode application (optional)	+7°C/12°C	

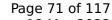
General Data		
Power supply 1x230V 50Hz		

Heating

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	9.00 kW	8.95 kW	
El input	2.01 kW	3.22 kW	
СОР	4.48	2.78	

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2^{\circ}$ C	3.80 kW	3.80 kW
$COP Tj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COP Tj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86



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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

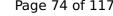
Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW



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9	-	
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 W





$$\operatorname{\textit{Page}}\ 74$ of 117 This information was generated by the HP KEYMARK database on 18 Mar 2022

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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW



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	<u> </u>	
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	1	1





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.02 kW	1.74 kW
Cooling capacity	8.20	7.60
EER	2.72	4.37

EN 14825



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This information was generated by the HP KEYMARK database on 18 Mar 2022

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	0 W	W
PSB	8 W	W
РСК	0 W	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

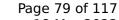


EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	3.00
Heating up time	1:22 h:min
Standby power input	31.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
СОР	3.50
Heating up time	1:22 h:min
Standby power input	30.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

Colder Climate





EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
СОР	2.47
Heating up time	1:22 h:min
Standby power input	37.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5UK / WH-UD09JE5-1

Configure model		
Model name WH-ADC0309J3E5UK / WH-UD09JE5-1		
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

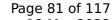
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
СОР	4.48	2.78

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

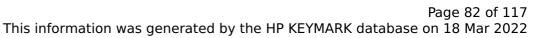
Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW



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SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
		1



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This information was genera	ted by the HE KLIMAR	ik database on 10 Mai 2022
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.80 kW
$COPTj = +7^{\circ}C$	6.69	5.01
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.02 kW	1.74 kW
Cooling capacity	8.20	7.60
EER	2.72	4.37

EN 14825





	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	W
PCK	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

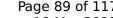


EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	140 %	
СОР	3.50	
Heating up time	1:22 h:min	
Standby power input	30.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

Colder Climate





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	99 %	
СОР	2.47	
Heating up time	1:22 h:min	
Standby power input	37.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	



Model: WH-SDC0709J3E5 / WH-UD09JE5-1

Configure model		
Model name	WH-SDC0709J3E5 / WH-UD09JE5-1	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

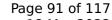
General Data		
Power supply	1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
СОР	4.48	2.78

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

Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Warmer Climate

EN 14825		
Low temperature	Medium temperature	
227 %	160 %	
7.00 kW	6.00 kW	
	Low temperature 227 %	



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SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = $+2$ °C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7° C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = $+2$ °C	2.50 kW	2.20 kW



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COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	-	





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.02 kW	1.74 kW
Cooling capacity	8.20	7.60
EER	2.72	4.37

EN 14825



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	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	0 W	W
PSB	8 W	W
РСК	0 W	W
Annual energy consumption Qce	482 kWh	kWh



Model: WH-ADC0309J3E5C / WH-UD09JE5-1

Configure model		
Model name	WH-ADC0309J3E5C / WH-UD09JE5-1	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone	Colder Climate + Warmer Climate	
Reversibility	Yes	
Cooling mode application (optional)	+7°C/12°C	

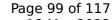
General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
СОР	4.48	2.78

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

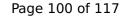
Average Climate





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	6.20 kW
$COP Tj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2^{\circ}$ C	3.80 kW	3.80 kW
$COP Tj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COP Tj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86





Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

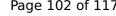
Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW
	I	



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SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W





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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

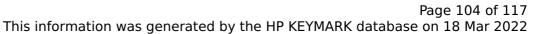
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW



This information was generation	ated by the HP KEYMA	ARK database on 18 Mar 20.
$COPTj = +2^{\circ}C$	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.80 kW
$COPTj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL $<$ Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90





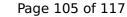
COP Tj = -15 °C (if TOL< -20 °C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	+18°C/+23°C
El input	3.02 kW	1.74 kW
Cooling capacity	8.20	7.60
EER	2.72	4.37

EN 14825





	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	W
PCK	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

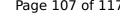


EN 16147	
Declared load profile	L
Efficiency ηDHW	116 %
СОР	2.90
Heating up time	1:01 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	232 I

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	134 %
СОР	3.35
Heating up time	1:01 h:min
Standby power input	34.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	232

Colder Climate





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EN 16147	
Declared load profile	L
Efficiency ηDHW	98 %
СОР	2.45
Heating up time	1:01 h:min
Standby power input	45.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	234



Model: WH-ADC0309J3E5ANC / WH-UD09JE5-1

Configure model	
Model name	WH-ADC0309J3E5ANC / WH-UD09JE5-1
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

COP

EN 14511-2		
Medium temperature		
8.95 kW		
3.22 kW		

2.78

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

Average Climate

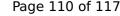
4.48





EN 14825

	Low temperature	Medium temperature
η_{S}	193 %	130 %
Prated	7.00 kW	7.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7 °C	6.30 kW	6.20 kW
$COPTj = -7^{\circ}C$	2.80	1.86
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh Tj = +2 °C	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh Tj = $+7$ °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	6.20 kW
COP Tj = Tbiv	2.60	1.86
		1





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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.70
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

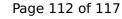
Warmer Climate

EN 14825		
	Low temperature	Medium temperature
η_{s}	227 %	160 %
Prated	7.00 kW	6.00 kW
	·	



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9	-	
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = $+7^{\circ}$ C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh Tj = +7 °C	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.900	0.920
Pdh Tj = Tbiv	7.10 kW	6.10 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.10 kW	6.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
РСК	10 W	10 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

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Colder Climate

EN 14825		
	Low temperature	Medium temperature
η_{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	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW



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rins information was general		
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
$COP Tj = +7^{\circ}C$	6.69	5.01
Cdh Tj = +7 °C	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.30 kW	2.30 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.70	4.90
	•	





COP Tj = -15°C (if TOL $<$ -20°C)	2.44	1.72
Cdh Tj = -15 °C	0.980	0.980

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

Cooling

EN 14511-2				
	+7°C/+12°C	+18°C/+23°C		
El input	3.02 kW	1.74 kW		
Cooling capacity	8.20	7.60		
EER	2.72	4.37		

EN 14825





	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	kW
SEER	5.08	
Pdc Tj = 35°C	7.00 kW	kW
EER Tj = 35°C	2.95	
Pdc Tj = 30°C	5.16 kW	kW
EER Tj = 30°C	4.00	
Cdc	0.9	
Pdc Tj = 25°C	3.32 kW	kW
EER Tj = 25°C	5.91	
Cdc	0.9	
Pdc Tj = 20°C	1.47 kW	kW
EER Tj = 20°C	7.54	
Cdc	0.9	
Poff	8 W	W
РТО	o w	W
PSB	8 W	W
PCK	o w	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

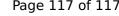


EN 16147		
Declared load profile	L	
Efficiency ηDHW	116 %	
СОР	2.90	
Heating up time	1:01 h:min	
Standby power input	39.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	232	

Warmer Climate

EN 16147		
Declared load profile	L	
Efficiency ηDHW	134 %	
СОР	3.35	
Heating up time	1:01 h:min	
Standby power input	34.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	232	

Colder Climate





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EN 16147		
Declared load profile	L	
Efficiency ηDHW	98 %	
СОР	2.45	
Heating up time	1:01 h:min	
Standby power input	45.0 W	
Reference hot water temperature	52.5 °C	
Mixed water at 40°C	234	