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Summary of	Aquarea Split 9 kW STD (J Series)	Reg. No.	011-1W0209
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 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

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 %



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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°C	2.80	1.86
Cdh	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = +7°C	3.00 kW	2.70 kW
$COP Tj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
	+	



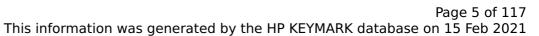


Poff	2 W	2 W
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2949 kWh	4354 kWh

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)

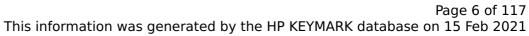
Warmer Climate

EN 14825		
Low temperature	Medium temperature	
227 %	160 %	
7.00 kW	6.00 kW	
5.75	4.07	
2 °C	2 °C	
2 °C	2 °C	
	Low temperature 227 % 7.00 kW 5.75 2 °C	





This information was genera		
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	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	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh
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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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.980	0.980



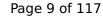
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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

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





The internation trac general	+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 I	



Model: WH-ADC0309J3E5B / WH-UD09JE5

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 %



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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°C	2.80	1.86
Cdh	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = +7°C	3.00 kW	2.70 kW
$COP Tj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
	+	



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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	230V 1ph 50Hz	230V 1ph 50Hz
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	
5.75	4.07	
2 °C	2 °C	
2 °C	2 °C	
	Low temperature 227 % 7.00 kW 5.75 2 °C	



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Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



	<u> </u>	
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 15 Feb 2021

The internation trac general	+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-ADC0309J3E5AN / WH-UD09JE5

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 %



This information was generated by the HP KEYMARK database on 15 Feb 20		
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	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
$COPTj = +2^{\circ}C$	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = $+7^{\circ}$ C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
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This information was generated by the HP KEYMARK database on 15 Feb 2021

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	230V 1ph 50Hz	230V 1ph 50Hz
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	
5.75	4.07	
2 °C	2 °C	
2 °C	2 °C	
	Low temperature 227 % 7.00 kW 5.75 2 °C	



Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh



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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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



		TIR database on 15 Teb 202
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 15 Feb 2021

The internation trac general	+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

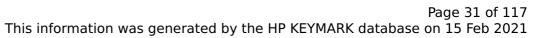


EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

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-ADC0309J3E5UK / WH-UD09JE5

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 %



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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°C	2.80	1.86
Cdh	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = +7°C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
	+	1



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This information was generated by the HP KEYMARK database on 15 Feb 2021

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	230V 1ph 50Hz	230V 1ph 50Hz
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		
5.75	4.07		
2 °C	2 °C		
2 °C	2 °C		
	Low temperature 227 % 7.00 kW 5.75 2 °C		



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Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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	, 	TR database on 15 Teb 202.
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 15 Feb 2021

	+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

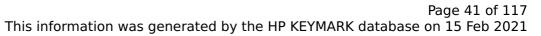


EN 16147		
Declared load profile	L	
Efficiency ηDHW	120 %	
СОР	3.00	
Heating up time	1:22 h:min	
Standby power input	31.0 W	
Reference hot water temperature	52.3 °C	
Mixed water at 40°C	234	

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





EN 16147		
Deale and lead morfile		
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 I	

Model: WH-SDC0709J3E5 / WH-UD09JE5

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 %
	-	



		7 00 kW
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° C	2.80	1.86
Cdh	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COP Tj = +2^{\circ}C$	5.03	3.33
Cdh	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	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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



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This information was generated by the HP KEYMARK database on 15 Feb 2021

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	230V 1ph 50Hz	230V 1ph 50Hz
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
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
	'	- 1



	ted by the HE KLIMAI	RK database on 15 Feb 2021
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



	, 	TR database on 15 Teb 202.
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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
РСК	o w	W
Annual energy consumption Qce	482 kWh	kWh

Model: WH-ADC0309J3E5 / WH-UD09JE5-1

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°C	2.80	1.86
Cdh	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = +7°C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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



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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	230V 1ph 50Hz	230V 1ph 50Hz
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
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
	'	1



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Pdh Tj = +2°C	7.10 kW	6.10 kW
$COP Tj = +2^{\circ}C$	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 15 Feb 2021

	+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





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

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 %
	-	



 $$\operatorname{\textit{Page}}\xspace$ 61 of 117 This information was generated by the HP KEYMARK database on 15 Feb 2021

This information was generated by the HP KEYMARK database on 15 Feb 202				
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°C	2.80	1.86		
Cdh	0.980	0.990		
Pdh Tj = +2°C	3.80 kW	3.80 kW		
COP Tj = +2°C	5.03	3.33		
Cdh	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	0.900	0.920		
Pdh Tj = 12°C	3.40 kW	3.30 kW		
COP Tj = 12°C	8.47	6.26		
Cdh	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		



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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	230V 1ph 50Hz	230V 1ph 50Hz
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 temperat				
η_{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	
			1	



This information was genera	ated by the HE KLIMA	IN database on 13 Teb 202
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COPTj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



	, 	TR database on 15 Teb 202.
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 15 Feb 2021

	+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

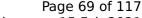


EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	3.00
Heating up time	1:22 h:min
Standby power input	31.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

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-UD09JE5-1

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 %
	•	



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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°C	2.80	1.86
Cdh	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = +7°C	3.00 kW	2.70 kW
$COP Tj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
	•	



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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	230V 1ph 50Hz	230V 1ph 50Hz
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
SCOP		5.75	4.07
Tbiv		2 °C	2 °C
TOL		2 °C	2 °C



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,	iii database on 15 reb 202.
7.10 kW	6.10 kW
2.80	2.14
0.980	0.980
4.50 kW	3.80 kW
5.37	3.51
0.950	0.960
3.40 kW	3.30 kW
7.77	5.80
0.900	0.920
7.10 kW	6.10 kW
2.80	2.14
7.10 kW	6.10 kW
2.80	2.14
55 °C	55 °C
2 W	2 W
44 W	44 W
10 W	10 W
10 W	10 W
230V 1-ph 50Hz	230V 1-ph 50Hz
0.00 kW	0.00 kW
1627 kWh	1971 kWh
	2.80 0.980 4.50 kW 5.37 0.950 3.40 kW 7.77 0.900 7.10 kW 2.80 7.10 kW 2.80 55 °C 2 W 44 W 10 W 10 W 230V 1-ph 50Hz 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)

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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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	, 	tik database on 15 leb 202.
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.980	0.980



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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 15 Feb 2021

	+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-ADC0309J3E5UK / WH-UD09JE5-1

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	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = $+7$ °C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
РТО	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
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	
5.75	4.07	
2 °C	2 °C	
2 °C	2 °C	
	Low temperature 227 % 7.00 kW 5.75 2 °C	



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Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.980	0.980

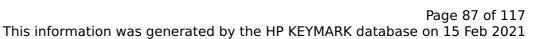


EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

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

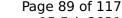


EN 16147	
Declared load profile	L
Efficiency ηDHW	120 %
СОР	3.00
Heating up time	1:22 h:min
Standby power input	31.0 W
Reference hot water temperature	52.3 °C
Mixed water at 40°C	234

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

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 %



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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	0.980	0.990
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	5.03	3.33
Cdh	0.940	0.960
Pdh Tj = $+7$ °C	3.00 kW	2.70 kW
$COPTj = +7^{\circ}C$	6.56	4.52
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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
	+	+



$$\operatorname{\textit{Page}}\xspace$ 92 of 117 This information was generated by the HP KEYMARK database on 15 Feb 2021

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	230V 1ph 50Hz	230V 1ph 50Hz
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
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
	'	- 1



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Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 wa	generated by the HF KLT	MARK database on 13 Feb 202
	+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



Model: WH-ADC0309J3E5C / WH-UD09JE5-1

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

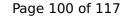
EN 14825		
	Low temperature	Medium temperature
η_s	193 %	130 %



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This information was generated by the HP KEYMARK database on 15 Feb 2021

SCOP 4.90 Tbiv $-10 ^{\circ}$ C TOL $-10 ^{\circ}$ C Pdh Tj = $-7 ^{\circ}$ C 6.30kW COP Tj = $-7 ^{\circ}$ C 2.80 Cdh 0.980 Pdh Tj = $+2 ^{\circ}$ C 3.80kW COP Tj = $+2 ^{\circ}$ C 5.03 Cdh 0.940 Pdh Tj = $+7 ^{\circ}$ C 3.00kW	3.32 -7 °C
TOL $-10 ^{\circ}$ C Pdh Tj = -7° C 6.30kW COP Tj = -7° C 2.80 Cdh 0.980 Pdh Tj = $+2^{\circ}$ C 3.80kW COP Tj = $+2^{\circ}$ C 5.03 Cdh 0.940	-7 °C
Pdh Tj = -7°C 6.30 kW COP Tj = -7°C 2.80 Cdh 0.980 Pdh Tj = +2°C 3.80 kW COP Tj = +2°C 5.03 Cdh 0.940	
COP Tj = -7°C 2.80 Cdh 0.980 Pdh Tj = $+2$ °C 3.80 kW COP Tj = $+2$ °C 5.03 Cdh 0.940	-10 °C
Cdh 0.980 Pdh Tj = $+2^{\circ}$ C 3.80 kW COP Tj = $+2^{\circ}$ C 5.03 Cdh 0.940	6.20 kW
$Pdh Tj = +2^{\circ}C$ 3.80 kW $COP Tj = +2^{\circ}C$ 5.03 Cdh 0.940	1.86
COP Tj = $+2^{\circ}$ C 5.03 Cdh 0.940	0.990
Cdh 0.940	3.80 kW
	3.33
$Pdh Tj = +7^{\circ}C$ 3.00 kW	0.960
	2.70 kW
$COP Tj = +7^{\circ}C $ 6.56	4.52
Cdh 0.900	0.920
$Pdh Tj = 12^{\circ}C$ 3.40 kW	3.30 kW
COP Tj = 12°C 8.47	6.26
Cdh 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	





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	230V 1ph 50Hz	230V 1ph 50Hz
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	
5.75	4.07	
2 °C	2 °C	
2 °C	2 °C	
	Low temperature 227 % 7.00 kW 5.75 2 °C	



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7.10 kW	6.10 kW
2.80	2.14
0.980	0.980
4.50 kW	3.80 kW
5.37	3.51
0.950	0.960
3.40 kW	3.30 kW
7.77	5.80
0.900	0.920
7.10 kW	6.10 kW
2.80	2.14
7.10 kW	6.10 kW
2.80	2.14
55 °C	55 °C
2 W	2 W
44 W	44 W
10 W	10 W
10 W	10 W
230V 1-ph 50Hz	230V 1-ph 50Hz
0.00 kW	0.00 kW
1627 kWh	1971 kWh
	2.80 0.980 4.50 kW 5.37 0.950 3.40 kW 7.77 0.900 7.10 kW 2.80 7.10 kW 2.80 55 °C 2 W 44 W 10 W 10 W 230V 1-ph 50Hz 0.00 kW

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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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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	aced by the Th RETHIN	TIN database on 15 reb 202.
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	0.980	0.980

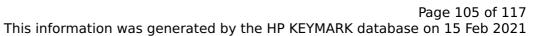


EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

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

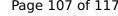


EN 16147	
Declared load profile	L
Efficiency ηDHW	116 %
СОР	2.90
Heating up time	1:01 h:min
Standby power input	39.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	232 I

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 I	

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

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

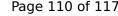
EN 14825		
	Low temperature	Medium temperature
η_s	193 %	130 %



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This information was generated by the HP KEYMARK database on 15 Feb 2021

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	0.980	0.990
Pdh Tj = $+2$ °C	3.80 kW	3.80 kW
$COP Tj = +2^{\circ}C$	5.03	3.33
Cdh	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	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.26
Cdh	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





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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	230V 1ph 50Hz	230V 1ph 50Hz
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

Low temperature	Medium temperature
227 %	160 %
7.00 kW	6.00 kW
5.75	4.07
2 °C	2 °C
2 °C	2 °C
	227 % 7.00 kW 5.75 2 °C



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rnis information was genera	ated by the HP KETMA	RK database on 15 Feb 202
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
$COP Tj = +7^{\circ}C$	5.37	3.51
Cdh	0.950	0.960
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh



 $$\operatorname{\textit{Page}}\ 112$$ of 117 This information was generated by the HP KEYMARK database on 15 Feb 2021

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	
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	0.960	0.970
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh	0.900	0.920
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01



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- This information was genera	ted by the fit RETHA	RK database on 15 Feb 202
Cdh	0.900	0.920
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh	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	230V 1-ph 50Hz	230V 1-ph 50Hz
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	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 15 Feb 2021

	+7°C/+12°C	+18°C/+23°C
	., 5, 122 6	3
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)

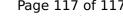
Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	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 I

Colder Climate





 $$\operatorname{\textit{Page}}\ 117$$ of 117 This information was generated by the HP KEYMARK database on 15 Feb 2021

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