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

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	0 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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

Model: WH-ADC0309J3E5AN / 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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	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 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	140 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	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 l

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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	0 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
COP	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
COP Tj = +7°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
PTO	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

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°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
PTO	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

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
PTO	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
PTO	0 W	W
PSB	8 W	W
PCK	0 W	W
Annual energy consumption Qce	482 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	116 %
COP	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 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	134 %
COP	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 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	98 %
COP	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 l

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
COP	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
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Pdh Tj = +7°C	3.00 kW	2.70 kW
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
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WTOL	55 °C	55 °C

Poff	2 W	2 W
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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

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	Low temperature	**Medium temperature**
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Cdh	0.980	0.980
Pdh Tj = +7°C	4.50 kW	3.80 kW
COP Tj = +7°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
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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	
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EN 16147

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COP	2.45
Heating up time	1:01 h:min
Standby power input	45.0 W
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