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

Summary of	Aquarea Split 3-5 kW STD (J Series)	Reg. No.	011-1W0207
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 3-5 kW STD (J Series)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass Of Refrigerant	0.9 kg		
Certification Date	08.01.2020		
Testing basis	HP KEYMARK certification scheme rules V7		

Model: WH-ADC0309J3E5 / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5 / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5B / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5AN / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5UK / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5B / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5AN / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5UK / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	132 %
COP	3.30
Heating up time	1:28 h:min
Standby power input	30.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	155 %
COP	3.88
Heating up time	1:28 h:min
Standby power input	27.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:28 h:min
Standby power input	33.0 W
Reference hot water temperature	52.4 °C
Mixed water at 40°C	239 l

Model: WH-SDC0305J3E5 / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Model: WH-SDC0305J3E5 / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Model: WH-ADC0309J3E5C / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	129 %
COP	3.23
Heating up time	1:32 h:min
Standby power input	31.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.86
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:32 h:min
Standby power input	34.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5ANC / WH-UD03JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.20 kW	3.20 kW
El input	0.60 kW	1.14 kW
COP	5.33	2.81

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	4.00 kW	3.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.50 kW	2.60 kW
COP Tj = -7°C	2.80	2.18
Cdh	0.980	0.980
Pdh Tj = +2°C	2.00 kW	1.60 kW
COP Tj = +2°C	5.14	3.42
Cdh	0.930	0.940
Pdh Tj = +7°C	1.40 kW	1.10 kW
COP Tj = +7°C	6.80	4.43
Cdh	0.870	0.900
Pdh Tj = 12°C	1.60 kW	1.40 kW
COP Tj = 12°C	9.50	6.97
Cdh	0.840	0.570
Pdh Tj = Tbiv	4.00 kW	2.90 kW
COP Tj = Tbiv	2.60	1.66
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	2.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.66
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	1631 kWh	1788 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.940	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	0.91 kW	0.68 kW
Cooling capacity	3.20	3.20
EER	3.52	4.71

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	3.00 kW	kW
SEER	6.29	
Pdc Tj = 35°C	3.00 kW	kW
EER Tj = 35°C	3.95	
Pdc Tj = 30°C	2.21 kW	kW
EER Tj = 30°C	5.37	
Cdc	0.9	
Pdc Tj = 25°C	1.42 kW	kW
EER Tj = 25°C	7.44	
Cdc	0.9	
Pdc Tj = 20°C	0.63 kW	kW
EER Tj = 20°C	8.93	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	167 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	129 %
COP	3.23
Heating up time	1:32 h:min
Standby power input	31.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.86
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:32 h:min
Standby power input	34.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5C / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	129 %
COP	3.23
Heating up time	1:32 h:min
Standby power input	31.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.86
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:32 h:min
Standby power input	34.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Model: WH-ADC0309J3E5ANC / WH-UD05JE5

General Data	
Power supply	1x230V 50Hz

Heating

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

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	5.00 kW	5.00 kW
El input	1.00 kW	1.84 kW
COP	5.00	2.72

Average Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	200 %	136 %

Prated	5.00 kW	4.00 kW
SCOP	5.07	3.47
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.20 kW	3.40 kW
COP Tj = -7°C	2.66	1.93
Cdh	0.980	0.990
Pdh Tj = +2°C	2.50 kW	2.10 kW
COP Tj = +2°C	5.15	3.48
Cdh	0.950	0.960
Pdh Tj = +7°C	1.70 kW	1.40 kW
COP Tj = +7°C	6.95	4.60
Cdh	0.890	0.910
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.45	6.90
Cdh	0.850	0.880
Pdh Tj = Tbiv	4.70 kW	3.80 kW
COP Tj = Tbiv	2.50	1.55
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	1.55
WTOL	55 °C	55 °C

Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1ph 50Hz	230V 1ph 50Hz
Supplementary Heater: PSUP	0.30 kW	0.20 kW
Annual energy consumption Qhe	2038 kWh	2385 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Warmer Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	245 %	165 %
Prated	4.00 kW	4.00 kW
SCOP	6.20	4.20
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C

Pdh Tj = +2°C	4.00 kW	3.90 kW
COP Tj = +2°C	3.15	1.80
Cdh	0.980	0.990
Pdh Tj = +7°C	2.60 kW	2.50 kW
COP Tj = +7°C	5.61	3.55
Cdh	0.940	0.960
Pdh Tj = 12°C	1.50 kW	1.40 kW
COP Tj = 12°C	8.35	6.00
Cdh	0.860	0.890
Pdh Tj = Tbiv	4.00 kW	3.90 kW
COP Tj = Tbiv	3.15	1.80
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.00 kW	3.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.15	1.80
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	0.00 kW	0.10 kW
Annual energy consumption Qhe	862 kWh	1274 kWh

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Colder Climate

EN 14825		
	Low temperature	**Medium temperature**
η_s	157 %	110 %
Prated	3.00 kW	2.00 kW
SCOP	4.00	2.83
Tbiv	-20 °C	-20 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	1.80 kW	1.20 kW
COP Tj = -7°C	3.26	2.16
Cdh	0.950	0.950
Pdh Tj = +2°C	1.80 kW	1.40 kW
COP Tj = +2°C	5.17	3.80
Cdh	0.920	0.930
Pdh Tj = +7°C	1.30 kW	1.20 kW
COP Tj = +7°C	7.00	5.05

Cdh	0.860	0.890
Pdh Tj = 12°C	1.60 kW	1.50 kW
COP Tj = 12°C	9.00	7.60
Cdh	0.850	0.870
Pdh Tj = Tbiv	2.80 kW	1.80 kW
COP Tj = Tbiv	1.80	1.36
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	2.00 kW	2.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.81	1.05
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	26 W	26 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	230V 1-ph 50Hz	230V 1-ph 50Hz
Supplementary Heater: PSUP	1.00 kW	0.00 kW
Annual energy consumption Qhe	1848 kWh	1740 kWh
Pdh Tj = -15°C (if TOL<-20°C)	2.40	1.70
COP Tj = -15°C (if TOL<-20°C)	2.29	1.76
Cdh	0.980	0.970

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

Cooling

EN 14511-2		
	+7°C/+12°C	**+18°C/+23°C**
El input	1.50 kW	1.12 kW
Cooling capacity	4.50	4.80
EER	3.00	4.29

EN 14825

	+7°C/+12°C	**+18°C/+23°C**
Pdesignc	4.00 kW	kW
SEER	6.20	
Pdc Tj = 35°C	4.00 kW	kW
EER Tj = 35°C	3.47	
Pdc Tj = 30°C	2.95 kW	kW
EER Tj = 30°C	5.12	
Cdc	0.9	
Pdc Tj = 25°C	1.89 kW	kW
EER Tj = 25°C	7.31	
Cdc	0.9	
Pdc Tj = 20°C	0.84 kW	kW
EER Tj = 20°C	9.26	
Cdc	0.9	
Poff	5 W	W
PTO	0 W	W
PSB	5 W	W
PCK	0 W	W
Annual energy consumption Qce	226 kWh	kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	129 %
COP	3.23
Heating up time	1:32 h:min
Standby power input	31.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Warmer Climate

EN 16147	
Declared load profile	L
Efficiency ηDHW	154 %
COP	3.86
Heating up time	1:32 h:min
Standby power input	28.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l

Colder Climate

EN 16147

Declared load profile	L
Efficiency ηDHW	99 %
COP	2.48
Heating up time	1:32 h:min
Standby power input	34.0 W
Reference hot water temperature	53.3 °C
Mixed water at 40°C	239 l