

Subtype Aquarea T-CAP 9-12 kW (M Series)

Certificate Holder	Panasonic Marketing Europe GmbH
Address	Hagenauer Strasse 43, Wiesbaden
ZIP	65203
City	Wiesbaden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Aquarea T-CAP 9-12 kW (M Series)
Registration number	011-1W0850
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.78 kg
Certification Date	22.07.2024
Testing basis	HP KEYMARK certification scheme rules V14

Model WH-WXG09ME8 (Outdoor unit Stand-alone)

Model name	WH-WXG09ME8 (Outdoor unit Stand-alone)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	1.72 kW	2.78 kW
COP	5.23	3.24

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.49 kW	1.71 kW
Cooling capacity	9.00	9.00
EER	3.61	5.26

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	197 %	137 %
Prated	9.00 kW	9.00 kW
SCOP	5.00	3.50
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.00 kW	8.00 kW
COP Tj = -7°C	3.52	2.49
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.90 kW	4.90 kW
COP Tj = +2°C	7.84	3.29
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	4.80 kW	4.70 kW
COP Tj = +7°C	6.15	4.42
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.80	5.78
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.19	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3721 kWh	5318 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	125 %
Prated	9.00 kW	9.00 kW
SCOP	4.45	3.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.50 kW	5.50 kW
COP Tj = -7°C	3.94	2.66
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.30 kW	3.80 kW
COP Tj = +2°C	4.94	3.60
Cdh Tj = +2 °C	0.980	0.980

Pdh Tj = +7°C	4.90 kW	4.90 kW
COP Tj = +7°C	6.27	4.80
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.80 kW	5.70 kW
COP Tj = 12°C	7.61	6.10
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4990 kWh	6939 kWh
Pdh Tj = -15°C (if TOL	7.30	7.30
COP Tj = -15°C (if TOL	3.00	2.21
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	250 %	173 %
Prated	9.00 kW	9.00 kW
SCOP	6.33	4.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.00 kW	9.00 kW
COP Tj = +2°C	3.85	2.67
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.80 kW	5.80 kW
COP Tj = +7°C	5.89	3.81
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	5.70 kW	5.30 kW
COP Tj = 12°C	7.55	5.54
Cdh Tj = +12 °C	0.980	0.980

Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.85	2.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1901 kWh	2735 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh

Model WH-CME8 / WH-WXG09ME8

Model name	WH-CME8 / WH-WXG09ME8
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	1.72 kW	2.78 kW
COP	5.23	3.24

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.49 kW	1.71 kW
Cooling capacity	9.00	9.00
EER	3.61	5.26

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	197 %	137 %
Prated	9.00 kW	9.00 kW
SCOP	5.00	3.50
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	8.00 kW	8.00 kW
COP Tj = -7°C	3.52	2.49
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.90 kW	4.90 kW
COP Tj = +2°C	7.84	3.29
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	4.80 kW	4.70 kW
COP Tj = +7°C	6.15	4.42
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.80	5.78
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.19	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3721 kWh	5318 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	175 %	125 %
Prated	9.00 kW	9.00 kW
SCOP	4.45	3.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.50 kW	5.50 kW
COP Tj = -7°C	3.94	2.66
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.30 kW	3.80 kW
COP Tj = +2°C	4.94	3.60
Cdh Tj = +2 °C	0.980	0.980

Pdh Tj = +7°C	4.90 kW	4.90 kW
COP Tj = +7°C	6.27	4.80
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.80 kW	5.70 kW
COP Tj = 12°C	7.61	6.10
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4990 kWh	6939 kWh
Pdh Tj = -15°C (if TOL	7.30	7.30
COP Tj = -15°C (if TOL	3.00	2.21
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	250 %	173 %
Prated	9.00 kW	9.00 kW
SCOP	6.33	4.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.00 kW	9.00 kW
COP Tj = +2°C	3.85	2.67
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.80 kW	5.80 kW
COP Tj = +7°C	5.89	3.81
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	5.70 kW	5.30 kW
COP Tj = 12°C	7.55	5.54
Cdh Tj = +12 °C	0.980	0.980

Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.85	2.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1901 kWh	2735 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh

Model WH-ADC0316M9E82 / WH-WXG09ME8

Model name	WH-ADC0316M9E82 / WH-WXG09ME8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	123 %
COP	3.00
Heating up time	0:56 h:min
Standby power input	44.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.20
Heating up time	0:56 h:min
Standby power input	66.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	0:56 h:min
Standby power input	43.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

Defrost test	passed	
Starting and operating test	passed	
EN 14511-2 Heating		
	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	1.72 kW	2.78 kW
COP	5.23	3.24
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.49 kW	1.71 kW
Cooling capacity	9.00	9.00
EER	3.61	5.26
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
ηs	197 %	137 %
Prated	9.00 kW	9.00 kW
SCOP	5.00	3.50
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.00 kW
COP Tj = -7°C	3.52	2.49
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.90 kW	4.90 kW
COP Tj = +2°C	7.84	3.29
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	4.80 kW	4.70 kW
COP Tj = +7°C	6.15	4.42
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.80	5.78
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.19	2.17

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3721 kWh	5318 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	175 %	125 %
Prated	9.00 kW	9.00 kW
SCOP	4.45	3.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.50 kW	5.50 kW
COP Tj = -7°C	3.94	2.66
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.30 kW	3.80 kW
COP Tj = +2°C	4.94	3.60
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.90 kW	4.90 kW
COP Tj = +7°C	6.27	4.80
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.80 kW	5.70 kW
COP Tj = 12°C	7.61	6.10
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W

PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	4990 kWh	6939 kWh
P _{dh} T _j = -15 °C (if TOL	7.30	7.30
COP T _j = -15 °C (if TOL	3.00	2.21
C _{dh} T _j = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	250 %	173 %
Prated	9.00 kW	9.00 kW
SCOP	6.33	4.40
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2 °C	9.00 kW	9.00 kW
COP T _j = +2 °C	3.85	2.67
C _{dh} T _j = +2 °C	0.990	0.990
P _{dh} T _j = +7 °C	5.80 kW	5.80 kW
COP T _j = +7 °C	5.89	3.81
C _{dh} T _j = +7 °C	0.980	0.990
P _{dh} T _j = 12 °C	5.70 kW	5.30 kW
COP T _j = 12 °C	7.55	5.54
C _{dh} T _j = +12 °C	0.980	0.980
P _{dh} T _j = T _{biv}	9.00 kW	9.00 kW
COP T _j = T _{biv}	3.85	2.67
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	9.00 kW	9.00 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.85	2.67
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	55 °C	55 °C
P _{off}	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Q _{he}	1901 kWh	2735 kWh
EN 14825 Cooling		
	+7°C/+12°C	+18°C/+23°C
P _{designc}	9.00 kW	9.00 kW
SEER	5.34	7.53
P _{dc} T _j = 35°C	9.00 kW	9.00 kW
EER T _j = 35°C	3.61	5.26
C _{dc} T _j = 35 °C	1.000	0.990
P _{dc} T _j = 30°C	6.63 kW	6.63 kW
EER T _j = 30°C	4.72	6.96
C _{dc} T _j = 30 °C	1.000	0.990
P _{dc} T _j = 25°C	4.72 kW	6.03 kW
EER T _j = 25°C	5.95	8.46
C _{dc} T _j = 25 °C	0.990	0.990
P _{dc} T _j = 20°C	4.84 kW	5.94 kW
EER T _j = 20°C	7.18	10.20
C _{dc} T _j = 20 °C	0.990	0.990
P _{off}	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Q _{ce}	589 kWh	419 kWh

Model WH-ADC0316M9E8AN2 / WH-WXG09ME8

Model name	WH-ADC0316M9E8AN2 / WH-WXG09ME8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	123 %
COP	3.00
Heating up time	0:56 h:min
Standby power input	44.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.20
Heating up time	0:56 h:min
Standby power input	66.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	0:56 h:min
Standby power input	43.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

Defrost test	passed	
Starting and operating test	passed	
EN 14511-2 Heating		
	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	1.72 kW	2.78 kW
COP	5.23	3.24
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	2.49 kW	1.71 kW
Cooling capacity	9.00	9.00
EER	3.61	5.26
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	197 %	137 %
Prated	9.00 kW	9.00 kW
SCOP	5.00	3.50
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.00 kW
COP Tj = -7°C	3.52	2.49
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.90 kW	4.90 kW
COP Tj = +2°C	7.84	3.29
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	4.80 kW	4.70 kW
COP Tj = +7°C	6.15	4.42
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.80	5.78
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.19	2.17

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3721 kWh	5318 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	175 %	125 %
Prated	9.00 kW	9.00 kW
SCOP	4.45	3.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.50 kW	5.50 kW
COP Tj = -7°C	3.94	2.66
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.30 kW	3.80 kW
COP Tj = +2°C	4.94	3.60
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.90 kW	4.90 kW
COP Tj = +7°C	6.27	4.80
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.80 kW	5.70 kW
COP Tj = 12°C	7.61	6.10
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W

PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	4990 kWh	6939 kWh
P _{dh} T _j = -15 °C (if TOL	7.30	7.30
COP T _j = -15 °C (if TOL	3.00	2.21
C _{dh} T _j = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	250 %	173 %
Prated	9.00 kW	9.00 kW
SCOP	6.33	4.40
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2 °C	9.00 kW	9.00 kW
COP T _j = +2 °C	3.85	2.67
C _{dh} T _j = +2 °C	0.990	0.990
P _{dh} T _j = +7 °C	5.80 kW	5.80 kW
COP T _j = +7 °C	5.89	3.81
C _{dh} T _j = +7 °C	0.980	0.990
P _{dh} T _j = 12 °C	5.70 kW	5.30 kW
COP T _j = 12 °C	7.55	5.54
C _{dh} T _j = +12 °C	0.980	0.980
P _{dh} T _j = T _{biv}	9.00 kW	9.00 kW
COP T _j = T _{biv}	3.85	2.67
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	9.00 kW	9.00 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.85	2.67
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	0.990
WTOL	55 °C	55 °C
P _{off}	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Q _{he}	1901 kWh	2735 kWh
EN 14825 Cooling		
	+7°C/+12°C	+18°C/+23°C
P _{designc}	9.00 kW	9.00 kW
SEER	5.34	7.53
P _{dc} T _j = 35°C	9.00 kW	9.00 kW
EER T _j = 35°C	3.61	5.26
C _{dc} T _j = 35 °C	1.000	0.990
P _{dc} T _j = 30°C	6.63 kW	6.63 kW
EER T _j = 30°C	4.72	6.96
C _{dc} T _j = 30 °C	1.000	0.990
P _{dc} T _j = 25°C	4.72 kW	6.03 kW
EER T _j = 25°C	5.95	8.46
C _{dc} T _j = 25 °C	0.990	0.990
P _{dc} T _j = 20°C	4.84 kW	5.94 kW
EER T _j = 20°C	7.18	10.20
C _{dc} T _j = 20 °C	0.990	0.990
P _{off}	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Q _{ce}	589 kWh	419 kWh

Model WH-SDC0316M9E8 / WH-WXG09ME8

Model name	WH-SDC0316M9E8 / WH-WXG09ME8
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	9.00 kW	9.00 kW
El input	1.72 kW	2.78 kW
COP	5.23	3.24

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.49 kW	1.71 kW
Cooling capacity	9.00	9.00
EER	3.61	5.26

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	197 %	137 %
Prated	9.00 kW	9.00 kW
SCOP	5.00	3.50
Tbiv	-10 °C	-10 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.00 kW	8.00 kW
COP Tj = -7°C	3.52	2.49
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.90 kW	4.90 kW
COP Tj = +2°C	7.84	3.29
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	4.80 kW	4.70 kW
COP Tj = +7°C	6.15	4.42
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.80	5.78
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.19	2.17
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.19	2.17
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	3721 kWh	5318 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	175 %	125 %
Prated	9.00 kW	9.00 kW
SCOP	4.45	3.20
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.50 kW	5.50 kW
COP Tj = -7°C	3.94	2.66
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.30 kW	3.80 kW

COP Tj = +2°C	4.94	3.60
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	4.90 kW	4.90 kW
COP Tj = +7°C	6.27	4.80
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.80 kW	5.70 kW
COP Tj = 12°C	7.61	6.10
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	2.25	1.65
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.25	1.65
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4990 kWh	6939 kWh
Pdh Tj = -15°C (if TOL	7.30	7.30
COP Tj = -15°C (if TOL	3.00	2.21
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	250 %	173 %
Prated	9.00 kW	9.00 kW
SCOP	6.33	4.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	9.00 kW	9.00 kW
COP Tj = +2°C	3.85	2.67
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.80 kW	5.80 kW
COP Tj = +7°C	5.89	3.81
Cdh Tj = +7 °C	0.980	0.990

Pdh Tj = 12°C	5.70 kW	5.30 kW
COP Tj = 12°C	7.55	5.54
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	9.00 kW	9.00 kW
COP Tj = Tbiv	3.85	2.67
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	9.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.85	2.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1901 kWh	2735 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh

Model WH-WXG12ME8 (Outdoor unit Stand-alone)

Model name	WH-WXG12ME8 (Outdoor unit Stand-alone)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.37 kW	3.71 kW
COP	5.06	3.23

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.21 kW	2.80 kW
Cooling capacity	12.00	12.00
EER	2.85	4.29

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	143 %
Prated	12.00 kW	12.00 kW
SCOP	4.73	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.79	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.25	4.57
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	6.10 kW	5.70 kW
COP Tj = 12°C	7.78	5.84
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.91	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5244 kWh	6792 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	172 %	127 %
Prated	12.00 kW	12.00 kW
SCOP	4.38	3.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.30 kW	7.30 kW
COP Tj = -7°C	3.72	2.69
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.40 kW	5.50 kW
COP Tj = +2°C	4.95	3.70
Cdh Tj = +2 °C	0.980	0.990

Pdh Tj = +7°C	5.30 kW	4.40 kW
COP Tj = +7°C	6.21	4.86
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.60 kW	5.70 kW
COP Tj = 12°C	7.54	5.95
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.13	1.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.13	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6758 kWh	9111 kWh
Pdh Tj = -15°C (if TOL	9.80	9.80
COP Tj = -15°C (if TOL	2.98	2.19
Cdh Tj = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	245 %	173 %
Prated	12.00 kW	12.00 kW
SCOP	6.20	4.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	12.00 kW
COP Tj = +2°C	3.53	2.51
Cdh Tj = +2 °C	0.990	1.000
Pdh Tj = +7°C	7.70 kW	7.70 kW
COP Tj = +7°C	5.62	3.94
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.54	5.36
Cdh Tj = +12 °C	0.980	0.980

Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.53	2.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2586 kWh	3647 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh

Model WH-CME8 / WH-WXG12ME8

Model name	WH-CME8 / WH-WXG12ME8
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.37 kW	3.71 kW
COP	5.06	3.23

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.21 kW	2.80 kW
Cooling capacity	12.00	12.00
EER	2.85	4.29

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	143 %
Prated	12.00 kW	12.00 kW
SCOP	4.73	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.79	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.25	4.57
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	6.10 kW	5.70 kW
COP Tj = 12°C	7.78	5.84
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.91	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5244 kWh	6792 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	172 %	127 %
Prated	12.00 kW	12.00 kW
SCOP	4.38	3.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.30 kW	7.30 kW
COP Tj = -7°C	3.72	2.69
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.40 kW	5.50 kW
COP Tj = +2°C	4.95	3.70
Cdh Tj = +2 °C	0.980	0.990

Pdh Tj = +7°C	5.30 kW	4.40 kW
COP Tj = +7°C	6.21	4.86
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.60 kW	5.70 kW
COP Tj = 12°C	7.54	5.95
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.13	1.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.13	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6758 kWh	9111 kWh
Pdh Tj = -15°C (if TOL	9.80	9.80
COP Tj = -15°C (if TOL	2.98	2.19
Cdh Tj = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	245 %	173 %
Prated	12.00 kW	12.00 kW
SCOP	6.20	4.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	12.00 kW
COP Tj = +2°C	3.53	2.51
Cdh Tj = +2 °C	0.990	1.000
Pdh Tj = +7°C	7.70 kW	7.70 kW
COP Tj = +7°C	5.62	3.94
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.54	5.36
Cdh Tj = +12 °C	0.980	0.980

Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.53	2.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2586 kWh	3647 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh

Model WH-ADC0316M9E82 / WH-WXG12ME8

Model name	WH-ADC0316M9E82 / WH-WXG12ME8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	123 %
COP	3.00
Heating up time	0:56 h:min
Standby power input	44.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.20
Heating up time	0:56 h:min
Standby power input	66.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	0:56 h:min
Standby power input	43.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

Defrost test	passed	
Starting and operating test	passed	
EN 14511-2 Heating		
	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.37 kW	3.71 kW
COP	5.06	3.23
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	4.21 kW	2.80 kW
Cooling capacity	12.00	12.00
EER	2.85	4.29
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	186 %	143 %
Prated	12.00 kW	12.00 kW
SCOP	4.73	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.79	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.25	4.57
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	6.10 kW	5.70 kW
COP Tj = 12°C	7.78	5.84
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.91	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.12

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5244 kWh	6792 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	172 %	127 %
Prated	12.00 kW	12.00 kW
SCOP	4.38	3.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.30 kW	7.30 kW
COP Tj = -7°C	3.72	2.69
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.40 kW	5.50 kW
COP Tj = +2°C	4.95	3.70
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	5.30 kW	4.40 kW
COP Tj = +7°C	6.21	4.86
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.60 kW	5.70 kW
COP Tj = 12°C	7.54	5.95
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.13	1.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.13	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W

PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	6758 kWh	9111 kWh
P _{dh} T _j = -15 °C (if TOL	9.80	9.80
COP T _j = -15 °C (if TOL	2.98	2.19
C _{dh} T _j = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	245 %	173 %
Prated	12.00 kW	12.00 kW
SCOP	6.20	4.40
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2 °C	12.00 kW	12.00 kW
COP T _j = +2 °C	3.53	2.51
C _{dh} T _j = +2 °C	0.990	1.000
P _{dh} T _j = +7 °C	7.70 kW	7.70 kW
COP T _j = +7 °C	5.62	3.94
C _{dh} T _j = +7 °C	0.990	0.990
P _{dh} T _j = 12 °C	5.70 kW	5.60 kW
COP T _j = 12 °C	7.54	5.36
C _{dh} T _j = +12 °C	0.980	0.980
P _{dh} T _j = T _{biv}	12.00 kW	12.00 kW
COP T _j = T _{biv}	3.53	2.51
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	12.00 kW	12.00 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.53	2.51
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	1.000
WTOL	55 °C	55 °C
P _{off}	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Qhe	2586 kWh	3647 kWh
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EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh

Model WH-ADC0316M9E8AN2 / WH-WXG12ME8

Model name	WH-ADC0316M9E8AN2 / WH-WXG12ME8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	123 %
COP	3.00
Heating up time	0:56 h:min
Standby power input	44.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.20
Heating up time	0:56 h:min
Standby power input	66.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	132 %
COP	3.30
Heating up time	0:56 h:min
Standby power input	43.0 W
Reference hot water temperature	53.0 °C
Mixed water at 40°C	246 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure passed

Defrost test	passed	
Starting and operating test	passed	
EN 14511-2 Heating		
	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.37 kW	3.71 kW
COP	5.06	3.23
EN 14511-2 Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	4.21 kW	2.80 kW
Cooling capacity	12.00	12.00
EER	2.85	4.29
EN 12102-1 Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
η_s	186 %	143 %
Prated	12.00 kW	12.00 kW
SCOP	4.73	3.65
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.79	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.25	4.57
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	6.10 kW	5.70 kW
COP Tj = 12°C	7.78	5.84
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.91	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.12

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5244 kWh	6792 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	172 %	127 %
Prated	12.00 kW	12.00 kW
SCOP	4.38	3.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.30 kW	7.30 kW
COP Tj = -7°C	3.72	2.69
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.40 kW	5.50 kW
COP Tj = +2°C	4.95	3.70
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	5.30 kW	4.40 kW
COP Tj = +7°C	6.21	4.86
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.60 kW	5.70 kW
COP Tj = 12°C	7.54	5.95
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.13	1.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.13	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W

PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	6758 kWh	9111 kWh
P _{dh} T _j = -15 °C (if TOL	9.80	9.80
COP T _j = -15 °C (if TOL	2.98	2.19
C _{dh} T _j = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	245 %	173 %
Prated	12.00 kW	12.00 kW
SCOP	6.20	4.40
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2 °C	12.00 kW	12.00 kW
COP T _j = +2 °C	3.53	2.51
C _{dh} T _j = +2 °C	0.990	1.000
P _{dh} T _j = +7 °C	7.70 kW	7.70 kW
COP T _j = +7 °C	5.62	3.94
C _{dh} T _j = +7 °C	0.990	0.990
P _{dh} T _j = 12 °C	5.70 kW	5.60 kW
COP T _j = 12 °C	7.54	5.36
C _{dh} T _j = +12 °C	0.980	0.980
P _{dh} T _j = T _{biv}	12.00 kW	12.00 kW
COP T _j = T _{biv}	3.53	2.51
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	12.00 kW	12.00 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.53	2.51
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.990	1.000
WTOL	55 °C	55 °C
P _{off}	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW

Annual energy consumption Q _{he}	2586 kWh	3647 kWh
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EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	9.00 kW	9.00 kW
SEER	5.34	7.53
P _{dc} T _j = 35°C	9.00 kW	9.00 kW
EER T _j = 35°C	3.61	5.26
C _{dc} T _j = 35 °C	1.000	0.990
P _{dc} T _j = 30°C	6.63 kW	6.63 kW
EER T _j = 30°C	4.72	6.96
C _{dc} T _j = 30 °C	1.000	0.990
P _{dc} T _j = 25°C	4.72 kW	6.03 kW
EER T _j = 25°C	5.95	8.46
C _{dc} T _j = 25 °C	0.990	0.990
P _{dc} T _j = 20°C	4.84 kW	5.94 kW
EER T _j = 20°C	7.18	10.20
C _{dc} T _j = 20 °C	0.990	0.990
P _{off}	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Q _{ce}	589 kWh	419 kWh

Model WH-SDC0316M9E8 / WH-WXG12ME8

Model name	WH-SDC0316M9E8 / WH-WXG12ME8
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.37 kW	3.71 kW
COP	5.06	3.23

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.21 kW	2.80 kW
Cooling capacity	12.00	12.00
EER	2.85	4.29

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	186 %	143 %
Prated	12.00 kW	12.00 kW
SCOP	4.73	3.65
Tbiv	-10 °C	-10 °C

TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.60 kW	10.60 kW
COP Tj = -7°C	2.79	2.22
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.50 kW	6.50 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.25	4.57
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	6.10 kW	5.70 kW
COP Tj = 12°C	7.78	5.84
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.91	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.91	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5244 kWh	6792 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	172 %	127 %
Prated	12.00 kW	12.00 kW
SCOP	4.38	3.25
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.30 kW	7.30 kW
COP Tj = -7°C	3.72	2.69
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	4.40 kW	5.50 kW

COP Tj = +2°C	4.95	3.70
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	5.30 kW	4.40 kW
COP Tj = +7°C	6.21	4.86
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	5.60 kW	5.70 kW
COP Tj = 12°C	7.54	5.95
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	2.13	1.56
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.13	1.56
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6758 kWh	9111 kWh
Pdh Tj = -15°C (if TOL	9.80	9.80
COP Tj = -15°C (if TOL	2.98	2.19
Cdh Tj = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	35 dB(A)	35 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	245 %	173 %
Prated	12.00 kW	12.00 kW
SCOP	6.20	4.40
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.00 kW	12.00 kW
COP Tj = +2°C	3.53	2.51
Cdh Tj = +2 °C	0.990	1.000
Pdh Tj = +7°C	7.70 kW	7.70 kW
COP Tj = +7°C	5.62	3.94
Cdh Tj = +7 °C	0.990	0.990

Pdh Tj = 12°C	5.70 kW	5.60 kW
COP Tj = 12°C	7.54	5.36
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	12.00 kW	12.00 kW
COP Tj = Tbiv	3.53	2.51
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.00 kW	12.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.53	2.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	11 W	11 W
PTO	18 W	18 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	2586 kWh	3647 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	9.00 kW	9.00 kW
SEER	5.34	7.53
Pdc Tj = 35°C	9.00 kW	9.00 kW
EER Tj = 35°C	3.61	5.26
Cdc Tj = 35 °C	1.000	0.990
Pdc Tj = 30°C	6.63 kW	6.63 kW
EER Tj = 30°C	4.72	6.96
Cdc Tj = 30 °C	1.000	0.990
Pdc Tj = 25°C	4.72 kW	6.03 kW
EER Tj = 25°C	5.95	8.46
Cdc Tj = 25 °C	0.990	0.990
Pdc Tj = 20°C	4.84 kW	5.94 kW
EER Tj = 20°C	7.18	10.20
Cdc Tj = 20 °C	0.990	0.990
Poff	11 W	11 W
PTO	7 W	7 W
PSB	11 W	11 W
PCK	0 W	0 W
Annual energy consumption Qce	589 kWh	419 kWh