

Subtype Aquarena Split 12-16 kW STD (H Series)

Certificate Holder	Panasonic Marketing Europe GmbH
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ZIP	65203
City	Wiesbaden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Aquarena Split 12-16 kW STD (H Series)
Registration number	011-1W0515
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.55 kg
Certification Date	08.12.2021
Testing basis	HP KEYMARK certification scheme rules rev. 9

Model WH-ADC1216H6E5 / WH-UD12HE5

Model name	WH-ADC1216H6E5 / WH-UD12HE5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	95 %
COP	2.37
Heating up time	0:58 h:min
Standby power input	42.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	75 %
COP	
Heating up time	h:min
Standby power input	W
Reference hot water temperature	°C
Mixed water at 40°C	l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	110 %
COP	2.75
Heating up time	0:58 h:min
Standby power input	36.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

Model WH-ADC1216H6E5UK / WH-UD12HE5

Model name	WH-ADC1216H6E5UK / WH-UD12HE5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	95 %
COP	2.37
Heating up time	0:58 h:min
Standby power input	42.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	75 %
COP	
Heating up time	h:min
Standby power input	W
Reference hot water temperature	°C
Mixed water at 40°C	l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	110 %
COP	2.75
Heating up time	0:58 h:min
Standby power input	36.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

Model WH-ADC1216H6E5C / WH-UD12HE5

Model name	WH-ADC1216H6E5C / WH-UD12HE5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	92 %
COP	2.31
Heating up time	0:54 h:min
Standby power input	39.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	228 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	75 %
COP	
Heating up time	h:min
Standby power input	W
Reference hot water temperature	°C
Mixed water at 40°C	l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	107 %
COP	2.68
Heating up time	0:54 h:min
Standby power input	32.0 W
Reference hot water temperature	53.1 °C
Mixed water at 40°C	228 l

Model WH-ADC0916H9E8 / WH-UD12HE8

Model name	WH-ADC0916H9E8 / WH-UD12HE8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
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}	95 %
COP	2.37
Heating up time	0:58 h:min
Standby power input	42.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	75 %
COP	
Heating up time	h:min
Standby power input	W
Reference hot water temperature	°C
Mixed water at 40°C	l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	110 %
COP	2.75
Heating up time	0:58 h:min
Standby power input	36.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

Model WH-ADC0916H9E8AN / WH-UD12HE8

Model name	WH-ADC0916H9E8AN / WH-UD12HE8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
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}	95 %
COP	2.37
Heating up time	0:58 h:min
Standby power input	42.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	75 %
COP	
Heating up time	h:min
Standby power input	W
Reference hot water temperature	°C
Mixed water at 40°C	l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	110 %
COP	2.75
Heating up time	0:58 h:min
Standby power input	36.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	256 l

Model WH-ADC1216H6E5 / WH-UD16HE5

Model name	WH-ADC1216H6E5 / WH-UD16HE5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	91 %
COP	2.27
Heating up time	0:44 h:min
Standby power input	41.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	107 %
COP	2.67
Heating up time	0:44 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

Model WH-ADC1216H6E5UK / WH-UD16HE5

Model name	WH-ADC1216H6E5UK / WH-UD16HE5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	91 %
COP	2.27
Heating up time	0:44 h:min
Standby power input	41.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	107 %
COP	2.67
Heating up time	0:44 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

Model WH-ADC1216H6E5C / WH-UD16HE5

Model name	WH-ADC1216H6E5C / WH-UD16HE5
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	88 %
COP	2.21
Heating up time	0:48 h:min
Standby power input	35.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	225 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	104 %
COP	2.60
Heating up time	0:44 h:min
Standby power input	32.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	225 l

Model WH-ADC0916H9E8 / WH-UD16HE8

Model name	WH-ADC0916H9E8 / WH-UD16HE8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
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}	91 %
COP	2.27
Heating up time	0:44 h:min
Standby power input	41.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	107 %
COP	2.67
Heating up time	0:44 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

Model WH-ADC0916H9E8AN / WH-UD16HE8

Model name	WH-ADC0916H9E8AN / WH-UD16HE8
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
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}	91 %
COP	2.27
Heating up time	0:44 h:min
Standby power input	41.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	107 %
COP	2.67
Heating up time	0:44 h:min
Standby power input	38.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	253 l

Model WH-SDC12H6E5 / WH-UD12HE5

Model name	WH-SDC12H6E5 / WH-UD12HE5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	134 %
Prated	10.00 kW	8.00 kW
SCOP	4.82	3.42
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	7.20 kW
COP Tj = -7°C	3.18	2.27
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	5.20 kW	4.30 kW
COP Tj = +2°C	4.67	3.25
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.20 kW	4.90 kW
COP Tj = +7°C	6.15	4.36
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.10 kW	5.80 kW
COP Tj = 12°C	7.88	6.12
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	10.00 kW	8.00 kW

COP Tj = Tbiv	2.68	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4286 kWh	4840 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	168 %	121 %
Prated	11.00 kW	9.00 kW
SCOP	4.29	3.10
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.00 kW	5.60 kW
COP Tj = -7°C	3.59	2.63
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.40 kW	3.90 kW
COP Tj = +2°C	5.12	3.52
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.71	4.91
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	6.30 kW	5.80 kW
COP Tj = 12°C	8.15	6.20
Cdh Tj = +12 °C	0.98	0.99
Pdh Tj = Tbiv	9.30 kW	7.50 kW
COP Tj = Tbiv	2.66	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.15	1.43

WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	6327 kWh	7147 kWh
Pdh Tj = -15°C (if TOL	9.30	7.50
COP Tj = -15°C (if TOL	2.66	2.07
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	245 %	159 %
Prated	11.00 kW	9.00 kW
SCOP	6.21	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.20 kW	9.40 kW
COP Tj = +2°C	3.61	2.43
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	7.10 kW	6.10 kW
COP Tj = +7°C	5.53	3.29
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.00 kW	5.90 kW
COP Tj = 12°C	7.82	5.51
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	11.20 kW	9.40 kW
COP Tj = Tbiv	3.61	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.20 kW	9.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.61	2.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	2368 kWh	2970 kWh

Model WH-SDC12H9E8 / WH-UD12HE8

Model name	WH-SDC12H9E8 / WH-UD12HE8
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	134 %
Prated	10.00 kW	8.00 kW
SCOP	4.82	3.42
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	7.20 kW
COP Tj = -7°C	3.18	2.27
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	5.20 kW	4.30 kW
COP Tj = +2°C	4.67	3.25
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.20 kW	4.90 kW
COP Tj = +7°C	6.15	4.36
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.10 kW	5.80 kW
COP Tj = 12°C	7.88	6.12
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	10.00 kW	8.00 kW

COP Tj = Tbiv	2.68	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4286 kWh	4840 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	168 %	121 %
Prated	11.00 kW	9.00 kW
SCOP	4.29	3.10
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	7.00 kW	5.60 kW
COP Tj = -7°C	3.59	2.63
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.40 kW	3.90 kW
COP Tj = +2°C	5.12	3.52
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.71	4.91
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	6.30 kW	5.80 kW
COP Tj = 12°C	8.15	6.20
Cdh Tj = +12 °C	0.98	0.99
Pdh Tj = Tbiv	9.30 kW	7.50 kW
COP Tj = Tbiv	2.66	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.15	1.43

WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	6.00 kW
Annual energy consumption Qhe	6327 kWh	7147 kWh
Pdh Tj = -15°C (if TOL	9.30	7.50
COP Tj = -15°C (if TOL	2.66	2.07
Cdh Tj = -15 °C	1.00	1.00

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	245 %	159 %
Prated	11.00 kW	9.00 kW
SCOP	6.21	4.05
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	11.20 kW	9.40 kW
COP Tj = +2°C	3.61	2.43
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	7.10 kW	6.10 kW
COP Tj = +7°C	5.53	3.29
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.00 kW	5.90 kW
COP Tj = 12°C	7.82	5.51
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	11.20 kW	9.40 kW
COP Tj = Tbiv	3.61	2.43
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.20 kW	9.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.61	2.43
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	2368 kWh	2970 kWh

Model WH-SDC12H6E5 / WH-UD16HE5

Model name	WH-SDC12H6E5 / WH-UD16HE5
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	130 %
Prated	12.00 kW	13.00 kW
SCOP	4.82	3.33
Tbiv	-10 °C	-3 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.10 kW	9.00 kW
COP Tj = -7°C	2.90	2.07
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.40 kW	7.10 kW
COP Tj = +2°C	4.83	3.29
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.11	4.85
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.20 kW	5.80 kW
COP Tj = 12°C	7.59	6.11
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	11.80 kW	9.50 kW

COP Tj = Tbiv	2.77	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	4.30 kW
Annual energy consumption Qhe	5146 kWh	8076 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	245 %	169 %
Prated	13.00 kW	10.00 kW
SCOP	6.20	4.30
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.50 kW	10.70 kW
COP Tj = +2°C	3.34	2.41
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	8.40 kW	6.70 kW
COP Tj = +7°C	5.61	3.79
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.20 kW	5.90 kW
COP Tj = 12°C	7.72	5.46
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	12.50 kW	10.70 kW
COP Tj = Tbiv	3.34	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.50 kW	10.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.34	2.41
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C

Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	0.00 kW
Annual energy consumption Qhe	2801 kWh	3104 kWh

Model WH-SDC16H9E8 / WH-UD16HE8

Model name	WH-SDC16H9E8 / WH-UD16HE8
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	130 %
Prated	12.00 kW	13.00 kW
SCOP	4.82	3.33
Tbiv	-10 °C	-3 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.10 kW	9.00 kW
COP Tj = -7°C	2.90	2.07
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.40 kW	7.10 kW
COP Tj = +2°C	4.83	3.29
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.11	4.85
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.20 kW	5.80 kW
COP Tj = 12°C	7.59	6.11
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	11.80 kW	9.50 kW

COP Tj = Tbiv	2.77	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	4.30 kW
Annual energy consumption Qhe	5146 kWh	8076 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	46 dB(A)	46 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	245 %	169 %
Prated	13.00 kW	10.00 kW
SCOP	6.20	4.30
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	12.50 kW	10.70 kW
COP Tj = +2°C	3.34	2.41
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	8.40 kW	6.70 kW
COP Tj = +7°C	5.61	3.79
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.20 kW	5.90 kW
COP Tj = 12°C	7.72	5.46
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	12.50 kW	10.70 kW
COP Tj = Tbiv	3.34	2.41
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.50 kW	10.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.34	2.41
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C

Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	0.00 kW
Annual energy consumption Qhe	2801 kWh	3104 kWh