

Subtype Aquarea Hydro Split 5-7 kW STD (L 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 Hydro Split 5-7 kW STD (L Series)
Registration number	011-1W0631
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.96 kg
Certification Date	22.05.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 11 (as of 2022-09)

Model WH-ADC0509L3E5 / WH-WDG05LE5

Model name	WH-ADC0509L3E5 / WH-WDG05LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:14 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:14 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:14 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L3E5UK / WH-WDG05LE5

Model name	WH-ADC0509L3E5UK / WH-WDG05LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:14 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

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EN 16147 | Warmer Climate

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COP	4.00
Heating up time	1:14 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L3E5AN / WH-WDG05LE5

Model name	WH-ADC0509L3E5AN / WH-WDG05LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:14 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:14 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:14 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L3E5B / WH-WDG05LE5

Model name	WH-ADC0509L3E5B / WH-WDG05LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:14 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:14 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:14 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L6E5 / WH-WDG05LE5

Model name	WH-ADC0509L6E5 / WH-WDG05LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:14 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
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Model WH-ADC0509L6E5AN / WH-WDG05LE5

Model name	WH-ADC0509L6E5AN / WH-WDG05LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

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Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
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Standby power input	33.0 W
Reference hot water temperature	52.9 °C
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EN 16147 | Colder Climate

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EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:14 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-SDC0509L3E5 / WH-WDG05LE5

Model name	WH-SDC0509L3E5 / WH-WDG05LE5
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	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	41 dB(A)	41 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	200 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.06	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.25	2.27
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	5.01	3.55
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.60 kW	2.40 kW
COP Tj = +7°C	6.44	4.69
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	3.00 kW	2.90 kW
COP Tj = 12°C	8.28	6.08
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	5.00 kW	5.00 kW

COP $T_j = T_{biv}$	2.82	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	5.00 kW	5.00 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.82	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.990	0.990
WTOL	55 °C	55 °C
P _{off}	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 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}	2040 kWh	2849 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	167 %	128 %
Prated	6.00 kW	6.00 kW
SCOP	4.25	3.28
T_{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	3.60 kW	3.60 kW
COP $T_j = -7^{\circ}\text{C}$	3.53	2.66
$C_{dh} T_j = -7^{\circ}\text{C}$	0.990	0.990
$P_{dh} T_j = +2^{\circ}\text{C}$	2.20 kW	2.20 kW
COP $T_j = +2^{\circ}\text{C}$	5.20	3.97
$C_{dh} T_j = +2^{\circ}\text{C}$	0.970	0.980
$P_{dh} T_j = +7^{\circ}\text{C}$	2.60 kW	2.50 kW
COP $T_j = +7^{\circ}\text{C}$	6.59	5.25
$C_{dh} T_j = +7^{\circ}\text{C}$	0.970	0.970
$P_{dh} T_j = 12^{\circ}\text{C}$	3.00 kW	2.90 kW
COP $T_j = 12^{\circ}\text{C}$	8.03	6.61
$C_{dh} T_j = +12^{\circ}\text{C}$	0.970	0.970
$P_{dh} T_j = T_{biv}$	4.90 kW	4.90 kW
COP $T_j = T_{biv}$	2.55	2.01
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	4.50 kW	4.00 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	1.96	1.53

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	2.00 kW
Annual energy consumption Qhe	3483 kWh	4516 kWh
Pdh Tj = -15°C (if TOL	4.90	4.90
COP Tj = -15°C (if TOL	2.55	2.01
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	237 %	168 %
Prated	5.00 kW	5.00 kW
SCOP	6.00	4.27
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.52	2.34
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	5.71	3.72
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	3.00 kW	2.80 kW
COP Tj = 12°C	7.12	5.49
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.52	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.34
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W

PSB	9 W	9 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}	1113 kWh	1565 kWh

Model WH-SDC0509L6E5 / WH-WDG05LE5

Model name	WH-SDC0509L6E5 / WH-WDG05LE5
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	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	41 dB(A)	41 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	200 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	5.06	3.63
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.40 kW	4.40 kW
COP Tj = -7°C	3.25	2.27
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.70 kW	2.70 kW
COP Tj = +2°C	5.01	3.55
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.60 kW	2.40 kW
COP Tj = +7°C	6.44	4.69
Cdh Tj = +7 °C	0.970	0.970
Pdh Tj = 12°C	3.00 kW	2.90 kW
COP Tj = 12°C	8.28	6.08
Cdh Tj = +12 °C	0.960	0.970
Pdh Tj = Tbiv	5.00 kW	5.00 kW

COP $T_j = T_{biv}$	2.82	2.03
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	5.00 kW	5.00 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.82	2.03
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.990	0.990
WTOL	55 °C	55 °C
P _{off}	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 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}	2040 kWh	2849 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	167 %	128 %
Prated	6.00 kW	6.00 kW
SCOP	4.25	3.28
T_{biv}	-15 °C	-15 °C
TOL	-22 °C	-22 °C
$P_{dh} T_j = -7^{\circ}C$	3.60 kW	3.60 kW
COP $T_j = -7^{\circ}C$	3.53	2.66
$C_{dh} T_j = -7^{\circ}C$	0.990	0.990
$P_{dh} T_j = +2^{\circ}C$	2.20 kW	2.20 kW
COP $T_j = +2^{\circ}C$	5.20	3.97
$C_{dh} T_j = +2^{\circ}C$	0.970	0.980
$P_{dh} T_j = +7^{\circ}C$	2.60 kW	2.50 kW
COP $T_j = +7^{\circ}C$	6.59	5.25
$C_{dh} T_j = +7^{\circ}C$	0.970	0.970
$P_{dh} T_j = 12^{\circ}C$	3.00 kW	2.90 kW
COP $T_j = 12^{\circ}C$	8.03	6.61
$C_{dh} T_j = +12^{\circ}C$	0.970	0.970
$P_{dh} T_j = T_{biv}$	4.90 kW	4.90 kW
COP $T_j = T_{biv}$	2.55	2.01
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	4.50 kW	4.00 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	1.96	1.53

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.50 kW	2.00 kW
Annual energy consumption Qhe	3483 kWh	4516 kWh
Pdh Tj = -15°C (if TOL	4.90	4.90
COP Tj = -15°C (if TOL	2.55	2.01
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	237 %	168 %
Prated	5.00 kW	5.00 kW
SCOP	6.00	4.27
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	5.00 kW	5.00 kW
COP Tj = +2°C	3.52	2.34
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	5.71	3.72
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	3.00 kW	2.80 kW
COP Tj = 12°C	7.12	5.49
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	5.00 kW	5.00 kW
COP Tj = Tbiv	3.52	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.00 kW	5.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.52	2.34
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W

PSB	9 W	9 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}	1113 kWh	1565 kWh

Model WH-ADC0509L3E5 / WH-WDG07LE5

Model name	WH-ADC0509L3E5 / WH-WDG07LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:04 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:04 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

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Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:04 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

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COP	4.00
Heating up time	1:04 h:min
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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}	148 %
COP	3.61
Heating up time	1:04 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:04 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:04 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L3E5B / WH-WDG07LE5

Model name	WH-ADC0509L3E5B / WH-WDG07LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:04 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:04 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:04 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L6E5 / WH-WDG07LE5

Model name	WH-ADC0509L6E5 / WH-WDG07LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:04 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:04 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:04 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-ADC0509L6E5AN / WH-WDG07LE5

Model name	WH-ADC0509L6E5AN / WH-WDG07LE5
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	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.61
Heating up time	1:04 h:min
Standby power input	33.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Colder Climate

Declared load profile	L
Efficiency η_{DHW}	112 %
COP	2.80
Heating up time	1:04 h:min
Standby power input	36.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

EN 16147 | Warmer Climate

Declared load profile	L
Efficiency η_{DHW}	160 %
COP	4.00
Heating up time	1:04 h:min
Standby power input	28.0 W
Reference hot water temperature	52.9 °C
Mixed water at 40°C	251 l

Model WH-SDC0509L3E5 / WH-WDG07LE5

Model name	WH-SDC0509L3E5 / WH-WDG07LE5
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	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	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.96	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.20 kW	6.20 kW
COP Tj = -7°C	3.26	2.33
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	4.83	3.49
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.90 kW	2.70 kW
COP Tj = +7°C	6.29	4.66
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.92	6.37
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.00 kW	6.20 kW

COP $T_j = T_{biv}$	2.83	2.33
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	7.00 kW	6.20 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.83	2.08
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.990	1.000
WTOL	55 °C	55 °C
P _{off}	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Q _{he}	2916 kWh	3991 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	167 %	129 %
Prated	7.00 kW	7.00 kW
SCOP	4.25	3.29
T_{biv}	-17 °C	-15 °C
TOL	-22 °C	-22 °C
$P_{dh} T_j = -7^{\circ}\text{C}$	4.20 kW	4.20 kW
COP $T_j = -7^{\circ}\text{C}$	3.69	2.77
$C_{dh} T_j = -7^{\circ}\text{C}$	0.990	0.990
$P_{dh} T_j = +2^{\circ}\text{C}$	2.60 kW	2.60 kW
COP $T_j = +2^{\circ}\text{C}$	4.92	3.81
$C_{dh} T_j = +2^{\circ}\text{C}$	0.980	0.980
$P_{dh} T_j = +7^{\circ}\text{C}$	2.80 kW	2.80 kW
COP $T_j = +7^{\circ}\text{C}$	6.39	5.33
$C_{dh} T_j = +7^{\circ}\text{C}$	0.970	0.980
$P_{dh} T_j = 12^{\circ}\text{C}$	3.20 kW	3.30 kW
COP $T_j = 12^{\circ}\text{C}$	7.50	6.94
$C_{dh} T_j = +12^{\circ}\text{C}$	0.970	0.970
$P_{dh} T_j = T_{biv}$	6.10 kW	5.70 kW
COP $T_j = T_{biv}$	2.41	2.09
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	5.30 kW	4.70 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.04	1.60

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.70 kW	2.30 kW
Annual energy consumption Qhe	4060 kWh	5241 kWh
Pdh Tj = -15°C (if TOL	5.70	5.70
COP Tj = -15°C (if TOL	2.64	2.09
Cdh Tj = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	195 %	178 %
Prated	7.00 kW	6.00 kW
SCOP	6.31	4.52
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.00 kW	6.00 kW
COP Tj = +2°C	3.47	2.47
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.50 kW	3.90 kW
COP Tj = +7°C	5.95	3.90
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.47	5.83
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	3.47	2.47
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.47	2.47
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W

PSB	9 W	9 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}	1483 kWh	1775 kWh

Model WH-SDC0509L6E5 / WH-WDG07LE5

Model name	WH-SDC0509L6E5 / WH-WDG07LE5
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	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	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	195 %	142 %
Prated	7.00 kW	7.00 kW
SCOP	4.96	3.62
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.20 kW	6.20 kW
COP Tj = -7°C	3.26	2.33
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	3.80 kW	3.80 kW
COP Tj = +2°C	4.83	3.49
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.90 kW	2.70 kW
COP Tj = +7°C	6.29	4.66
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.92	6.37
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	7.00 kW	6.20 kW

COP Tj = Tbiv	2.83	2.33
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	2.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.80 kW
Annual energy consumption Qhe	2916 kWh	3991 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	167 %	129 %
Prated	7.00 kW	7.00 kW
SCOP	4.25	3.29
Tbiv	-17 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.20 kW	4.20 kW
COP Tj = -7°C	3.69	2.77
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.60 kW	2.60 kW
COP Tj = +2°C	4.92	3.81
Cdh Tj = +2 °C	0.980	0.980
Pdh Tj = +7°C	2.80 kW	2.80 kW
COP Tj = +7°C	6.39	5.33
Cdh Tj = +7 °C	0.970	0.980
Pdh Tj = 12°C	3.20 kW	3.30 kW
COP Tj = 12°C	7.50	6.94
Cdh Tj = +12 °C	0.970	0.970
Pdh Tj = Tbiv	6.10 kW	5.70 kW
COP Tj = Tbiv	2.41	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.30 kW	4.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.04	1.60

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	1.000
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.70 kW	2.30 kW
Annual energy consumption Qhe	4060 kWh	5241 kWh
Pdh Tj = -15°C (if TOL	5.70	5.70
COP Tj = -15°C (if TOL	2.64	2.09
Cdh Tj = -15 °C	0.990	1.000

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	195 %	178 %
Prated	7.00 kW	6.00 kW
SCOP	6.31	4.52
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.00 kW	6.00 kW
COP Tj = +2°C	3.47	2.47
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.50 kW	3.90 kW
COP Tj = +7°C	5.95	3.90
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	3.30 kW	3.20 kW
COP Tj = 12°C	7.47	5.83
Cdh Tj = +12 °C	0.970	0.980
Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	3.47	2.47
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.47	2.47
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	55 °C	55 °C
Poff	9 W	9 W
PTO	13 W	13 W

PSB	9 W	9 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}	1483 kWh	1775 kWh