

Subtype ESTIA HWT-801/1101 AIO s2

Certificate Holder	TOSHIBA AIR CONDITIONING
Address	Porsham Close, Belliver Industrial Estate
ZIP	PL6 7DB
City	Plymouth
Country	GB
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	ESTIA HWT-801/1101 AIO s2
Registration number	011-1W0611
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.25 kg
Certification Date	06.06.2023
Testing basis	HP KEYMARK certification scheme rules V11

**Model HWT-801HW-E / HWT-1102S21SM3W-E**

Model name	HWT-801HW-E / HWT-1102S21SM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21SM6W-E**

Model name	HWT-801HW-E / HWT-1102S21SM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21ST6W-E**

Model name	HWT-801HW-E / HWT-1102S21ST6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21ST9W-E**

Model name	HWT-801HW-E / HWT-1102S21ST9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21SM3W-E**

Model name	HWT-801HRW-E / HWT-1102S21SM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21SM6W-E**

Model name	HWT-801HRW-E / HWT-1102S21SM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21ST6W-E**

Model name	HWT-801HRW-E / HWT-1102S21ST6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21ST9W-E**

Model name	HWT-801HRW-E / HWT-1102S21ST9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21MM3W-E**

Model name	HWT-801HW-E / HWT-1102S21MM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21MM6W-E**

Model name	HWT-801HW-E / HWT-1102S21MM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21MT6W-E**

Model name	HWT-801HW-E / HWT-1102S21MT6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HW-E / HWT-1102S21MT9W-E**

Model name	HWT-801HW-E / HWT-1102S21MT9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21MM3W-E**

Model name	HWT-801HRW-E / HWT-1102S21MM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21MM6W-E**

Model name	HWT-801HRW-E / HWT-1102S21MM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21MT6W-E**

Model name	HWT-801HRW-E / HWT-1102S21MT6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-801HRW-E / HWT-1102S21MT9W-E**

Model name	HWT-801HRW-E / HWT-1102S21MT9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	135 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	8 kW	9.96 kW
El input	1.54 kW	3.47 kW
COP	5.19	2.87

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.63	3.63
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21SM3W-E**

Model name	HWT-1101HW-E / HWT-1102S21SM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21SM6W-E**

Model name	HWT-1101HW-E / HWT-1102S21SM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21ST6W-E**

Model name	HWT-1101HW-E / HWT-1102S21ST6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21ST9W-E**

Model name	HWT-1101HW-E / HWT-1102S21ST9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21SM3W-E**

Model name	HWT-1101HRW-E / HWT-1102S21SM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21SM6W-E**

Model name	HWT-1101HRW-E / HWT-1102S21SM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21ST6W-E**

Model name	HWT-1101HRW-E / HWT-1102S21ST6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21ST9W-E**

Model name	HWT-1101HRW-E / HWT-1102S21ST9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21MM3W-E**

Model name	HWT-1101HW-E / HWT-1102S21MM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21MM6W-E**

Model name	HWT-1101HW-E / HWT-1102S21MM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21MT6W-E**

Model name	HWT-1101HW-E / HWT-1102S21MT6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HW-E / HWT-1102S21MT9W-E**

Model name	HWT-1101HW-E / HWT-1102S21MT9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21MM3W-E**

Model name	HWT-1101HRW-E / HWT-1102S21MM3W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21MM6W-E**

Model name	HWT-1101HRW-E / HWT-1102S21MM6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21MT6W-E**

Model name	HWT-1101HRW-E / HWT-1102S21MT6W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh

**Model HWT-1101HRW-E / HWT-1102S21MT9W-E**

Model name	HWT-1101HRW-E / HWT-1102S21MT9W-E
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency $\eta_{DHW}$	130 %
COP	3.27
Heating up time	0:55 h:min
Standby power input	35 W
Reference hot water temperature	47.8 °C
Mixed water at 40°C	235 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	11 kW	10.17 kW
El input	2.39 kW	3.62 kW
COP	4.5	2.81

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	182 %	142 %

Prated	8 kW	8 kW
SCOP	4.65	3.62
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.2 kW	7.3 kW
COP Tj = -7°C	2.72	2.12
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	4.7 kW	4.6 kW
COP Tj = +2°C	4.56	3.6
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	3 kW	3 kW
COP Tj = +7°C	6.3	4.75
Cdh Tj = +7 °C	0.9	0.92
Pdh Tj = 12°C	2.3 kW	2.3 kW
COP Tj = 12°C	8.4	7
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	7.2 kW	7.3 kW
COP Tj = Tbiv	2.72	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.8 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.9
WTOL	65 °C	65 °C
Poff	7 W	7 W
PTO	49 W	49 W
PSB	7 W	7 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.2 kW	1.3 kW
Annual energy consumption Qhe	3655 kWh	4675 kWh