

## Subtype ESTIA HWT-801/1101H8

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-801/1101H8
Registration number	011-1W0608
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.3 kg
Certification Date	06.06.2023
Testing basis	HP KEYMARK certification scheme rules V11

## Model HWT-801H8W-E / HWT-1101XWHM3W-E

Model name	HWT-801H8W-E / HWT-1101XWHM3W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW

COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8W-E / HWT-1101XWHM6W-E

Model name	HWT-801H8W-E / HWT-1101XWHM6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW

COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8W-E / HWT-1101XWHT6W-E

Model name	HWT-801H8W-E / HWT-1101XWHT6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW

COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8W-E / HWT-1101XWHT9W-E

Model name	HWT-801H8W-E / HWT-1101XWHT9W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW



COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8RW-E / HWT-1101XWHM3W-E

Model name	HWT-801H8RW-E / HWT-1101XWHM3W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW

COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8RW-E / HWT-1101XWHM6W-E

Model name	HWT-801H8RW-E / HWT-1101XWHM6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW

COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8RW-E / HWT-1101XWHT6W-E

Model name	HWT-801H8RW-E / HWT-1101XWHT6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW

COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-801H8RW-E / HWT-1101XWHT9W-E

Model name	HWT-801H8RW-E / HWT-1101XWHT9W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	132 %	132 %
Prated	8.61 kW	8.30 kW
SCOP	4.51	3.36
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.61 kW	7.34 kW
COP Tj = -7°C	2.94	2.28
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	4.66 kW	8.55 kW
COP Tj = +2°C	4.33	3.12
Cdh Tj = +2 °C	0.95	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	4.67
Cdh Tj = +7 °C	0.92	0.94
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	7.51
Cdh Tj = +12 °C	0.9	0.91
Pdh Tj = Tbiv	7.61 kW	7.34 kW



COP $T_j = T_{biv}$	2.94	2.28
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.92 kW	7.7 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.68	1.93
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.91
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.69 kW	0.6 kW
Annual energy consumption Q <sub>he</sub>	3945 kWh	5097 kWh

## Model HWT-1101H8W-E / HWT-1101XWHM3W-E

Model name	HWT-1101H8W-E / HWT-1101XWHM3W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW

COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8W-E / HWT-1101XWHM6W-E

Model name	HWT-1101H8W-E / HWT-1101XWHM6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW

COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8W-E / HWT-1101XWHT6W-E

Model name	HWT-1101H8W-E / HWT-1101XWHT6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW

COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8W-E / HWT-1101XWHT9W-E

Model name	HWT-1101H8W-E / HWT-1101XWHT9W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW



COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8RW-E / HWT-1101XWHM3W-E

Model name	HWT-1101H8RW-E / HWT-1101XWHM3W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW

COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8RW-E / HWT-1101XWHM6W-E

Model name	HWT-1101H8RW-E / HWT-1101XWHM6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW

COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8RW-E / HWT-1101XWHT6W-E

Model name	HWT-1101H8RW-E / HWT-1101XWHT6W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW

COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh

## Model HWT-1101H8RW-E / HWT-1101XWHT9W-E

Model name	HWT-1101H8RW-E / HWT-1101XWHT9W-E
Application	Heating (medium 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 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	38 dB(A)	38 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	138 %	138 %
Prated	10 kW	10 kW
SCOP	4.56	3.52
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.13 kW	9.04 kW
COP Tj = -7°C	2.88	2.24
Cdh Tj = -7 °C	0.98	0.99
Pdh Tj = +2°C	5.58 kW	8.55 kW
COP Tj = +2°C	4.38	3.23
Cdh Tj = +2 °C	0.96	0.98
Pdh Tj = +7°C	3.8 kW	3.86 kW
COP Tj = +7°C	6.16	5.03
Cdh Tj = +7 °C	0.92	0.93
Pdh Tj = 12°C	4.31 kW	4.42 kW
COP Tj = 12°C	8.76	8.43
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	9.13 kW	9.04 kW



COP $T_j = T_{biv}$	2.88	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.4 kW	7.54 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.69	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.89	0.9
WTOL	65 °C	65 °C
P <sub>off</sub>	11 W	11 W
PTO	52 W	52 W
PSB	11 W	11 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.6 kW	2.5 kW
Annual energy consumption Q <sub>he</sub>	4677 kWh	6005 kWh