

Page 1 of 29

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Summary of	ESTIA HWT-401/601	Reg. No.	011-1W0467	
Certificate Holder				
Name	TOSHIBA AIR CONDITIONING	TOSHIBA AIR CONDITIONING		
Address	Porsham Close, Belliver Industrial Estate Zip PL6 7DB			
City	Plymouth	Country	United Kingdom	
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH			
Subtype title	ESTIA HWT-401/601			
Heat Pump Type	Outdoor Air/Water			
Refrigerant	R32			
Mass of Refrigerant	0.9 kg			
Certification Date	21.12.2021			
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 9 (2021-03)			

# Model: HWT-401HW-E / HWT-601XWHM3W-E

Configure model		
Model name	HWT-401HW-E / HWT-601XWHM3W-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4 kW	6.51 kW
El input	0.77 kW	2.15 kW
СОР	5.2	3.03

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed





EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	178 %	135 %
Prated	4.97 kW	4.54 kW
SCOP	4.53	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.4 kW	4 kW
COP Tj = -7°C	3.11	2.18
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	2.99 kW	2.5 kW
COP Tj = +2°C	4.45	3.48
Cdh Tj = +2 °C	0.94	0.94
Pdh Tj = +7°C	1.8 kW	1.6 kW
COP Tj = +7°C	5.87	4.28
Cdh Tj = +7 °C	0.9	0.9





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	4.4 kW	4 kW
COP Tj = Tbiv	3.11	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.97 kW	1.04 kW
Annual energy consumption Qhe	2268 kWh	2721 kWh

# Model: HWT-401HW-E / HWT-601XWHT6W-E

Configure model			
Model name	HWT-401HW-E / HWT-601XWHT6W-E		
Application	Heating (medium temp)		
Units	Indoor + Outdoor		
Climate Zone	n/a		
Reversibility	Yes		
Cooling mode application (optional)	n/a		

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	4 kW	6.51 kW
El input	0.77 kW	2.15 kW
СОР	5.2	3.03

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	178 %	135 %
Prated	4.97 kW	4.54 kW
SCOP	4.53	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.4 kW	4 kW
COP Tj = -7°C	3.11	2.18
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	2.99 kW	2.5 kW
COP Tj = +2°C	4.45	3.48
Cdh Tj = +2 °C	0.94	0.94
Pdh Tj = +7°C	1.8 kW	1.6 kW
COP Tj = +7°C	5.87	4.28
Cdh Tj = +7 °C	0.9	0.9





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	4.4 kW	4 kW
COP Tj = Tbiv	3.11	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
PTO	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.97 kW	1.04 kW
Annual energy consumption Qhe	2268 kWh	2721 kWh



# Model: HWT-601HW-E / HWT-601XWHM3W-E

Configure model		
Model name	HWT-601HW-E / HWT-601XWHM3W-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

## Heating

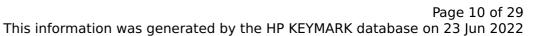
EN 14511-2		
	Low temperature	Medium temperature
Heat output	6 kW	7.53 kW
El input	1.25 kW	2.61 kW
СОР	4.8	2.89

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	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		
	Low temperature	Medium temperature
$\eta_{s}$	180 %	132 %
Prated	5.97 kW	5.7 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.28 kW	5 kW
COP Tj = -7°C	3.02	2.1
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	3.41 kW	3.4 kW
COP Tj = +2°C	4.45	3.22
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	2.14 kW	2 kW
COP Tj = +7°C	6.05	4.58
Cdh Tj = +7 °C	0.9	0.91





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.28 kW	5 kW
COP Tj = Tbiv	3.02	2.1
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.1 kW	4.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.87 kW	1.2 kW
Annual energy consumption Qhe	2691 kWh	3497 kWh

# Model: HWT-601HW-E / HWT-601XWHT6W-E

Configure model		
Model name	HWT-601HW-E / HWT-601XWHT6W-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	6 kW	7.53 kW		
El input	1.25 kW	2.61 kW		
СОР	4.8	2.89		

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	





EN 12102-1			
	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		
	Low temperature	Medium temperature
$\eta_{s}$	180 %	132 %
Prated	5.97 kW	5.7 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.28 kW	5 kW
COP Tj = -7°C	3.02	2.1
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	3.41 kW	3.4 kW
COP Tj = +2°C	4.45	3.22
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	2.14 kW	2 kW
COP Tj = +7°C	6.05	4.58
Cdh Tj = +7 °C	0.9	0.91



Page 13 of 29

Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.28 kW	5 kW
COP Tj = Tbiv	3.02	2.1
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.1 kW	4.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.87 kW	1.2 kW
Annual energy consumption Qhe	2691 kWh	3497 kWh

# Model: HWT-401HW-E / HWT-601F21SM3W-E

Configure model		
Model name HWT-401HW-E / HWT-601F21SM3W-E		
Application	Heating + DHW + low temp	
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility	Yes	
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

## Heating

EN 14511-2				
Low temperature Medium temperature				
Heat output	4 kW	6.51 kW		
El input	0.77 kW	2.15 kW		
СОР	5.2	3.03		

EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	





EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	178 %	135 %
Prated	4.97 kW	4.54 kW
SCOP	4.53	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.4 kW	4 kW
COP Tj = -7°C	3.11	2.18
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	2.99 kW	2.5 kW
COP Tj = +2°C	4.45	3.48
Cdh Tj = +2 °C	0.94	0.94
Pdh Tj = +7°C	1.8 kW	1.6 kW
COP Tj = +7°C	5.87	4.28
Cdh Tj = +7 °C	0.9	0.9





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	4.4 kW	4 kW
COP Tj = Tbiv	3.11	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.97 kW	1.04 kW
Annual energy consumption Qhe	2268 kWh	2721 kWh

## Domestic Hot Water (DHW)



EN 16147		
Declared load profile	L	
Efficiency ηDHW	136 %	
СОР	3.21	
Heating up time	1:36 h:min	
Standby power input	37 W	
Reference hot water temperature	48.2 °C	
Mixed water at 40°C	220 l	

# Model: HWT-401HW-E / HWT-601F21ST6W-E

Configure model		
Model name HWT-401HW-E / HWT-601F21ST6W-E		
Application Heating + DHW + low temp		
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

## Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	4 kW	6.51 kW	
El input	0.77 kW	2.15 kW	
СОР	5.2	3.03	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	178 %	135 %
Prated	4.97 kW	4.54 kW
SCOP	4.53	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.4 kW	4 kW
COP Tj = -7°C	3.11	2.18
Cdh Tj = -7 °C	0.97	0.98
Pdh Tj = +2°C	2.99 kW	2.5 kW
$COP Tj = +2^{\circ}C$	4.45	3.48
Cdh Tj = +2 °C	0.94	0.94
Pdh Tj = +7°C	1.8 kW	1.6 kW
COP Tj = +7°C	5.87	4.28
Cdh Tj = +7 °C	0.9	0.9





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	4.4 kW	4 kW
COP Tj = Tbiv	3.11	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4 kW	3.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.97 kW	1.04 kW
Annual energy consumption Qhe	2268 kWh	2721 kWh

## Domestic Hot Water (DHW)



EN 16147		
Declared load profile	L	
Efficiency ηDHW	136 %	
СОР	3.21	
Heating up time	1:36 h:min	
Standby power input	37 W	
Reference hot water temperature	48.2 °C	
Mixed water at 40°C	220	
Mixed water at 40 C	2201	

# Model: HWT-601HW-E / HWT-601F21SM3W-E

Configure model		
Model name HWT-601HW-E / HWT-601F21SM3W-E		
Application Heating + DHW + low temp		
Units Indoor + Outdoor		
Climate Zone n/a		
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

## Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	6 kW	7.53 kW	
El input	1.25 kW	2.61 kW	
СОР	4.8	2.89	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	180 %	132 %
Prated	5.97 kW	5.7 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.28 kW	5 kW
COP Tj = -7°C	3.02	2.1
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	3.41 kW	3.4 kW
COP Tj = +2°C	4.45	3.22
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	2.14 kW	2 kW
COP Tj = +7°C	6.05	4.58
Cdh Tj = +7 °C	0.9	0.91





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.28 kW	5 kW
COP Tj = Tbiv	3.02	2.1
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.1 kW	4.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.87 kW	1.2 kW
Annual energy consumption Qhe	2691 kWh	3497 kWh

## Domestic Hot Water (DHW)



EN 16147		
Declared load profile	L	
Efficiency ηDHW	136 %	
СОР	3.21	
Heating up time	1:36 h:min	
Standby power input	37 W	
Reference hot water temperature	48.2 °C	
Mixed water at 40°C	220	

# Model: HWT-601HW-E / HWT-601F21ST6W-E

Configure model		
Model name	HWT-601HW-E / HWT-601F21ST6W-E	
Application	Heating + DHW + low temp	
Units	Indoor + Outdoor	
Climate Zone n/a		
Reversibility Yes		
Cooling mode application (optional)	n/a	

General Data		
Power supply 1x230V 50Hz		

## Heating

EN 14511-2			
Low temperature Medium temperature			
Heat output	6 kW	7.53 kW	
El input	1.25 kW	2.61 kW	
СОР	4.8	2.89	

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	180 %	132 %
Prated	5.97 kW	5.7 kW
SCOP	4.58	3.37
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.28 kW	5 kW
COP Tj = -7°C	3.02	2.1
Cdh Tj = -7 °C	0.98	0.98
Pdh Tj = +2°C	3.41 kW	3.4 kW
COP Tj = +2°C	4.45	3.22
Cdh Tj = +2 °C	0.95	0.96
Pdh Tj = +7°C	2.14 kW	2 kW
COP Tj = +7°C	6.05	4.58
Cdh Tj = +7 °C	0.9	0.91





Pdh Tj = 12°C	1.48 kW	1.5 kW
COP Tj = 12°C	7.38	6.35
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.28 kW	5 kW
COP Tj = Tbiv	3.02	2.1
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.1 kW	4.5 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.83	1.81
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.8	0.8
WTOL	55 °C	55 °C
Poff	8 W	8 W
РТО	40 W	40 W
PSB	8 W	8 W
PCK	8 W	8 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.87 kW	1.2 kW
Annual energy consumption Qhe	2691 kWh	3497 kWh

## Domestic Hot Water (DHW)



EN 16147	
Declared load profile	L
Efficiency ηDHW	136 %
СОР	3.21
Heating up time	1:36 h:min
Standby power input	37 W
Reference hot water temperature	48.2 °C
Mixed water at 40°C	220