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#### This information was generated by the HP KEYMARK database on 21 Jun 2022

#### Login

Summary of	ESTIA HWS-1105/HWS-1405H	Reg. No.	011-1W0343
Certificate Holder			
Name	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 HWS-1105/HWS-1405H		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.7 kg		
Certification Date	26.11.2019		



## Model: HWS-1105H-E/HWS-1405XWHM3-E

Configure model		
Model name	HWS-1105H-E/HWS-1405XWHM3-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	10.52 kW	10.05 kW
El input	2.15 kW	3.43 kW
СОР	4.88	2.93

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	43 dB(A)	43 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	163 %	130 %
Prated	10.00 kW	9.00 kW
SCOP	4.17	3.35
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	8.50 kW	8.20 kW
COP Tj = $-7$ °C	2.86	2.12
Pdh Tj = $+2$ °C	4.80 kW	4.90 kW
COP Tj = +2°C	4.61	3.56
Pdh Tj = $+7^{\circ}$ C	3.20 kW	3.20 kW
COP Tj = +7°C	5.34	4.34
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	6.37	5.54
Pdh Tj = Tbiv	8.50 kW	8.20 kW



This information was generated by the Till KETHWIKK addabase on 21 jun 2022			
COP Tj = Tbiv	2.86	2.12	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.50 kW	8.20 kW	
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.12	
Rated airflow rate	5310 m³/h	5310 m³/h	
WTOL	55 °C	55 °C	
Poff	17 W	17 W	
РТО	120 W	120 W	
PSB	17 W	17 W	
PCK	14 W	14 W	
Supplementary Heater: Type of energy input	Electricity	Electricity	
Supplementary Heater: PSUP	10.00 kW	9.00 kW	
Annual energy consumption Qhe	4785 kWh	5718 kWh	

CEN heat pump KEYMARK

## Model: HWS-1105H-E/HWS-1405XWHT6-E

Configure model		
Model name	HWS-1105H-E/HWS-1405XWHT6-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

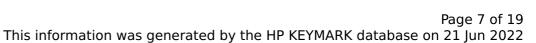
EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.52 kW	10.05 kW
El input	2.15 kW	3.43 kW
СОР	4.88	2.93

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	43 dB(A)	43 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	163 %	130 %
Prated	10.00 kW	9.00 kW
SCOP	4.17	3.35
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	8.50 kW	8.20 kW
COP Tj = -7°C	2.86	2.12
Pdh Tj = +2°C	4.80 kW	4.90 kW
COP Tj = +2°C	4.61	3.56
Pdh Tj = $+7^{\circ}$ C	3.20 kW	3.20 kW
COP Tj = +7°C	5.34	4.34
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	6.37	5.54
Pdh Tj = Tbiv	8.50 kW	8.20 kW



	<u> </u>	
COP Tj = Tbiv	2.86	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.50 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.12
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	55 °C	55 °C
Poff	17 W	17 W
РТО	120 W	120 W
PSB	17 W	17 W
РСК	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.00 kW
Annual energy consumption Qhe	4785 kWh	5718 kWh

CEN heat pump KEYMARK



## Model: HWS-1105H-E/HWS-1405XWHT9-E

Configure model		
Model name	HWS-1105H-E/HWS-1405XWHT9-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	10.52 kW	10.05 kW
El input	2.15 kW	3.43 kW
СОР	4.88	2.93

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	43 dB(A)	43 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	163 %	130 %
Prated	10.00 kW	9.00 kW
SCOP	4.17	3.35
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	8.50 kW	8.20 kW
COP Tj = -7°C	2.86	2.12
Pdh Tj = +2°C	4.80 kW	4.90 kW
COP Tj = +2°C	4.61	3.56
Pdh Tj = +7°C	3.20 kW	3.20 kW
COP Tj = +7°C	5.34	4.34
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	6.37	5.54
Pdh Tj = Tbiv	8.50 kW	8.20 kW



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COP Tj = Tbiv	2.86	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.50 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	2.12
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	55 °C	55 °C
Poff	17 W	17 W
РТО	120 W	120 W
PSB	17 W	17 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.00 kW
Annual energy consumption Qhe	4785 kWh	5718 kWh



## Model: HWS-1405H-E/HWS-1405XWHM3-E

Configure model		
Model name	HWS-1405H-E/HWS-1405XWHM3-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	13.15 kW	11.52 kW	
El input	2.92 kW	3.98 kW	
СОР	4.50	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	43 dB(A)	43 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	159 %	129 %
Prated	10.00 kW	9.00 kW
SCOP	4.08	3.31
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	9.20 kW	8.00 kW
COP Tj = -7°C	2.68	2.07
Pdh Tj = +2°C	5.10 kW	4.80 kW
COP Tj = +2°C	4.43	3.48
Pdh Tj = +7°C	3.40 kW	3.20 kW
COP Tj = +7°C	5.39	4.34
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	6.37	5.93
Pdh Tj = Tbiv	9.20 kW	8.00 kW



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		-
COP Tj = Tbiv	2.68	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.20 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.07
Rated airflow rate	5590 m³/h	5590 m³/h
WTOL	55 °C	55 °C
Poff	17 W	17 W
РТО	120 W	120 W
PSB	17 W	17 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.00 kW
Annual energy consumption Qhe	5278 kWh	5701 kWh



# Model: HWS-1405H-E/HWS-1405XWHT6-E

Configure model			
Model name	HWS-1405H-E/HWS-1405XWHT6-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	13.15 kW	11.52 kW	
El input	2.92 kW	3.98 kW	
СОР	4.50	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	43 dB(A)	43 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	159 %	129 %
Prated	10.00 kW	9.00 kW
SCOP	4.08	3.31
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	9.20 kW	8.00 kW
COP Tj = -7°C	2.68	2.07
Pdh Tj = +2°C	5.10 kW	4.80 kW
COP Tj = +2°C	4.43	3.48
Pdh Tj = +7°C	3.40 kW	3.20 kW
COP Tj = +7°C	5.39	4.34
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	6.37	5.93
Pdh Tj = Tbiv	9.20 kW	8.00 kW



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COP Tj = Tbiv	2.68	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.20 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.07
Rated airflow rate	5590 m³/h	5590 m³/h
WTOL	55 °C	55 °C
Poff	17 W	17 W
РТО	120 W	120 W
PSB	17 W	17 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.00 kW
Annual energy consumption Qhe	5278 kWh	5701 kWh



## Model: HWS-1405H-E/HWS-1405XWHT9-E

Configure model		
Model name	HWS-1405H-E/HWS-1405XWHT9-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	13.15 kW	11.52 kW	
El input	2.92 kW	3.98 kW	
СОР	4.50	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	43 dB(A)	43 dB(A)
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825		
	Low temperature	Medium temperature
$\eta_{s}$	159 %	129 %
Prated	10.00 kW	9.00 kW
SCOP	4.08	3.31
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	9.20 kW	8.00 kW
COP Tj = -7°C	2.68	2.07
Pdh Tj = +2°C	5.10 kW	4.80 kW
COP Tj = +2°C	4.43	3.48
Pdh Tj = $+7^{\circ}$ C	3.40 kW	3.20 kW
COP Tj = +7°C	5.39	4.34
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	6.37	5.93
Pdh Tj = Tbiv	9.20 kW	8.00 kW



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	<u> </u>	
COP Tj = Tbiv	2.68	2.07
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.20 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.07
Rated airflow rate	5590 m³/h	5590 m³/h
WTOL	55 °C	55 °C
Poff	17 W	17 W
РТО	120 W	120 W
PSB	17 W	17 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.00 kW
Annual energy consumption Qhe	5278 kWh	5701 kWh