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Summary of	ESTIA HWS-P1105H8/HWS-P1405H8R-E	Reg. No.	011-1W0348
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		
Name of testing laboratory	Heat Pump Test Center WPZ		
Subtype title	ESTIA HWS-P1105H8/HWS-P1405H8R-E		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.7 kg		
Certification Date	26.11.2019		



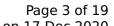
Model: HWS-P1105H8R-E/HWS-P1105XWHM3-E

General Data		
Power supply 1x230V 50Hz		

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	67 dB(A)	67 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	173 %	130 %
Prated	12.00 kW	11.00 kW
SCOP	4.43	3.35
Tbiv	-7 °C	-7 °C
TOL	-9 °C	-9 °C
Pdh Tj = -7°C	10.30 kW	9.80 kW
COP Tj = -7 °C	2.68	1.87
Pdh Tj = $+2$ °C	6.30 kW	6.00 kW
COP Tj = +2°C	4.30	3.55
Pdh Tj = +7°C	4.00 kW	3.60 kW





This information was	generated by the HP	KEYMARK database on 17 Dec 202
$COP Tj = +7^{\circ}C$	6.22	4.13
Pdh Tj = 12°C	4.50 kW	4.20 kW
COP Tj = 12°C	8.28	6.32
Pdh Tj = Tbiv	10.30 kW	9.80 kW
COP Tj = Tbiv	2.68	1.87
Pdh Tj = TOL	10.30 kW	8.20 kW
COP Tj = TOL	2.54	1.67
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	120 W	120 W
PSB	20 W	20 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	12.00 kW	11.00 kW

Heating

Annual energy consumption Qhe

5476 kWh

6872 kWh



 $$\operatorname{\textit{Page}}\xspace$ 4 of 19 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 14511-2			
	Low temperature	Medium temperature	
Heat output	11.20 kW	10.21 kW	
El input	2.34 kW	3.31 kW	
СОР	4.80	3.09	
Indoor water flow rate	1.92 m³/h	1.10 m³/h	

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

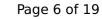
Model: HWS-P1105H8R-E/HWS-P1105XWHT6-E

General Data		
Power supply	1x230V 50Hz	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	67 dB(A)	67 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{S}	173 %	130 %
Prated	12.00 kW	11.00 kW
SCOP	4.43	3.35
Tbiv	-7 °C	-7 °C
TOL	-9 °C	-9 °C
Pdh Tj = -7°C	10.30 kW	9.80 kW
COP Tj = -7°C	2.68	1.87
Pdh Tj = +2°C	6.30 kW	6.00 kW
COP Tj = +2°C	4.30	3.55
Pdh Tj = $+7^{\circ}$ C	4.00 kW	3.60 kW





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COP Tj = +7°C	6.22	4.13
Pdh Tj = 12°C	4.50 kW	4.20 kW
COP Tj = 12°C	8.28	6.32
Pdh Tj = Tbiv	10.30 kW	9.80 kW
COP Tj = Tbiv	2.68	1.87
Pdh Tj = TOL	10.30 kW	8.20 kW
COP Tj = TOL	2.54	1.67
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	120 W	120 W
PSB	20 W	20 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	12.00 kW	11.00 kW
Annual energy consumption Qhe	5476 kWh	6872 kWh



EN 14511-2			
	Low temperature	Medium temperature	
Heat output	11.20 kW	10.21 kW	
El input	2.34 kW	3.31 kW	
СОР	4.80	3.09	
Indoor water flow rate	1.92 m³/h	1.10 m³/h	

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

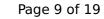
Model: HWS-P1105H8R-E/HWS-P1105XWHT9-E

General Data	
Power supply 1x230V 50Hz	

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	173 %	130 %
Prated	12.00 kW	11.00 kW
SCOP	4.43	3.35
Tbiv	-7 °C	-7 °C
TOL	-9 °C	-9 °C
Pdh Tj = -7°C	10.30 kW	9.80 kW
$COP Tj = -7^{\circ}C$	2.68	1.87
Pdh Tj = +2°C	6.30 kW	6.00 kW
COP Tj = +2°C	4.30	3.55
Pdh Tj = +7°C	4.00 kW	3.60 kW





COP Tj = +7°C	6.22	4.13
Pdh Tj = 12°C	4.50 kW	4.20 kW
COP Tj = 12°C	8.28	6.32
Pdh Tj = Tbiv	10.30 kW	9.80 kW
COP Tj = Tbiv	2.68	1.87
Pdh Tj = TOL	10.30 kW	8.20 kW
COP Tj = TOL	2.54	1.67
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	120 W	120 W
PSB	20 W	20 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	12.00 kW	11.00 kW
Annual energy consumption Qhe	5476 kWh	6872 kWh



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EN 14511-2		
	Low temperature	Medium temperature
Heat output	11.20 kW	10.21 kW
El input	2.34 kW	3.31 kW
СОР	4.80	3.09
Indoor water flow rate	1.92 m³/h	1.10 m³/h

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



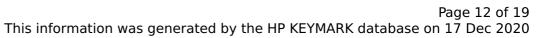
Model: HWS-P1405H8R-E/HWS-P1105XWHM3-E

General Data	
Power supply 1x230V 50Hz	

Average Climate

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
η_{s}	173 %	130 %
Prated	14.00 kW	12.00 kW
SCOP	4.43	3.34
Tbiv	-7 °C	-7 °C
TOL	-9 °C	-9 °C
Pdh Tj = -7°C	12.40 kW	10.80 kW
COP Tj = -7°C	2.68	1.85
Pdh Tj = +2°C	7.70 kW	7.30 kW
COP Tj = +2°C	4.30	3.55
Pdh Tj = +7°C	5.40 kW	3.60 kW





COP Tj = +7°C	6.22	4.13
Pdh Tj = 12°C	4.50 kW	4.20 kW
COP Tj = 12°C	8.28	6.32
Pdh Tj = Tbiv	12.40 kW	10.80 kW
COP Tj = Tbiv	2.68	1.85
Pdh Tj = TOL	11.90 kW	9.30 kW
COP Tj = TOL	2.54	1.67
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	120 W	120 W
PSB	20 W	20 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	14.00 kW	12.00 kW
Annual energy consumption Qhe	6588 kWh	7571 kWh



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EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.00 kW	13.03 kW
El input	3.16 kW	4.22 kW
СОР	4.44	3.09
Indoor water flow rate	2.40 m³/h	1.40 m³/h

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



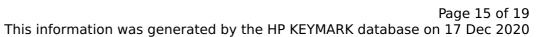
Model: HWS-P1405H8R-E/HWS-P1105XWHT6-E

General Data	
Power supply 1x230V 50Hz	

Average Climate

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
η_{s}	173 %	130 %
Prated	14.00 kW	12.00 kW
SCOP	4.43	3.34
Tbiv	-7 °C	-7 °C
TOL	-9 °C	-9 °C
Pdh Tj = -7°C	12.40 kW	10.80 kW
COP Tj = -7°C	2.68	1.85
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COP Tj = +2°C	4.30	3.55
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$COPTj = +7^{\circ}C$	6.22	4.13
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Pdh Tj = TOL	11.90 kW	9.30 kW
COP Tj = TOL	2.54	1.67
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	120 W	120 W
PSB	20 W	20 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	14.00 kW	12.00 kW
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Heating

Annual energy consumption Qhe

6588 kWh

7571 kWh



 $$\operatorname{\textit{Page}}\ 16$$ of 19 This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 14511-2		
	Low temperature	Medium temperature
Heat output	14.00 kW	13.03 kW
El input	3.16 kW	4.22 kW
СОР	4.44	3.09
Indoor water flow rate	2.40 m³/h	1.40 m³/h

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

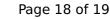
Model: HWS-P1405H8R-E/HWS-P1105XWHT9-E

General Data		
Power supply 1x230V 50Hz		

Average Climate

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	43 dB(A)	43 dB(A)
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EN 14825		
	Low temperature	Medium temperature
η_{s}	173 %	130 %
Prated	14.00 kW	12.00 kW
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COP Tj = +2°C	4.30	3.55
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 $$\operatorname{\textit{Page}}\ 18$ of 19$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

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COP Tj = +7°C	6.22	4.13
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COP Tj = 12°C	8.28	6.32
Pdh Tj = Tbiv	12.40 kW	10.80 kW
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COP Tj = TOL	2.54	1.67
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WTOL	60 °C	60 °C
Poff	20 W	20 W
РТО	120 W	120 W
PSB	20 W	20 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	14.00 kW	12.00 kW
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 $$\operatorname{Page}\ 19$$ of 19 This information was generated by the HP KEYMARK database on 17 Dec 2020

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	Low temperature	Medium temperature
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СОР	4.44	3.09
Indoor water flow rate	2.40 m³/h	1.40 m³/h

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Defrost test	passed
Starting and operating test	passed