

This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	ESTIA HWS-P1105	Reg. No.	011-1W0347
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-P1105		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	2.7 kg		
Certification Date	26.11.2019		

# Model: HWS-P1105HR-E/HWS-P1105XWHM3-E

## General Data

Power supply	1x230V 50Hz
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## Average Climate

### 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
$\eta_s$	175 %	131 %
Prated	12.00 kW	9.00 kW
SCOP	4.48	3.38
Tbiv	-7 °C	-7 °C
TOL	-9 °C	-9 °C
Pdh Tj = -7°C	10.50 kW	7.70 kW
COP Tj = -7°C	2.71	1.93
Pdh Tj = +2°C	6.20 kW	4.80 kW
COP Tj = +2°C	4.37	3.43
Pdh Tj = +7°C	4.40 kW	3.10 kW

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COP Tj = +7°C	6.42	4.52
Pdh Tj = 12°C	2.60 kW	2.60 kW
COP Tj = 12°C	7.09	5.99
Pdh Tj = Tbiv	10.50 kW	7.70 kW
COP Tj = Tbiv	2.71	1.93
Pdh Tj = TOL	9.20 kW	7.10 kW
COP Tj = TOL	2.50	1.76
Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
Poff	17 W	17 W
PTO	120 W	120 W
PSB	17 W	17 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	12.00 kW	9.00 kW
Annual energy consumption Qhe	5523 kWh	5374 kWh

## Heating

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### EN 14511-2

	Low temperature	Medium temperature
Heat output	11.20 kW	10.21 kW
El input	2.30 kW	3.25 kW
COP	4.88	3.14
Indoor water flow rate	1.93 m <sup>3</sup> /h	1.10 m <sup>3</sup> /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-P1105HR-E/HWS-P1105XWHT6-E

## General Data

Power supply	1x230V 50Hz
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## Average Climate

### 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)

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	Low temperature	Medium temperature
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Rated airflow rate	5310 m³/h	5310 m³/h
WTOL	60 °C	60 °C
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PTO	120 W	120 W
PSB	17 W	17 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	electric	electric
Supplementary Heater: PSUP	12.00 kW	9.00 kW
Annual energy consumption Qhe	5523 kWh	5374 kWh

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COP	4.88	3.14
Indoor water flow rate	1.93 m <sup>3</sup> /h	1.10 m <sup>3</sup> /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-P1105HR-E/HWS-P1105XWHT9-E

## General Data

Power supply	1x230V 50Hz
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## Average Climate

### 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

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