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Login

Summary of	ESTIA HWS-1105H8/HWS-1405H8-E/HWS1605H8-E	Reg. No.	011-1W0344		
Certificate Holder	Certificate Holder				
Name	Name TOSHIBA AIR CONDITIONING				
Address	Porsham Close, Belliver Industrial Estate	Porsham Close, Belliver Industrial Estate Zip PL6 7DB			
City	lymouth Country United King		United Kingdom		
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH				
Subtype title	ESTIA HWS-1105H8/HWS-1405H8-E/HWS1605H8-E				
Heat Pump Type	Outdoor Air/Water				
Refrigerant	R410A				
Mass of Refrigerant	2.7 kg				
Certification Date	26.11.2019				



Model: HWS-1105H8-E/HWS-1405XWHM3-E

Configure model		
Model name HWS-1105H8-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	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	66 dB(A)	66 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	161 %	130 %	
Prated	10.00 kW	9.00 kW	
SCOP	4.12	3.34	
Tbiv	-7 °C	-7 °C	
TOL	-7 °C	-7 °C	
Pdh Tj = -7°C	8.60 kW	7.80 kW	





COP Tj = -7°C	2.90	2.09
Pdh Tj = +2°C	6.00 kW	4.70 kW
COP Tj = +2°C	4.48	3.59
Pdh Tj = $+7^{\circ}$ C	3.40 kW	3.20 kW
$COP Tj = +7^{\circ}C$	5.44	4.29
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.34	5.50
Pdh Tj = Tbiv	8.60 kW	7.80 kW
COP Tj = Tbiv	2.90	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.09
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	4924 kWh	5486 kWh



EN 14511-2			
Low temperature Medium temperature			
Heat output	10.52 kW	10.05 kW	
El input	2.19 kW	3.49 kW	
СОР	4.80	2.88	

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-1105H8-E/HWS-1405XWHT6-E

Configure model			
Model name	Model name HWS-1105H8-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	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	66 dB(A)	66 dB(A)	

EN 14825			
	Low temperature	Medium temperature	
η_{s}	161 %	130 %	
Prated	10.00 kW	9.00 kW	
SCOP	4.12	3.34	
Tbiv	-7 °C	-7 °C	
TOL	-7 °C	-7 °C	
Pdh Tj = -7°C	8.60 kW	7.80 kW	





COP Tj = -7°C	2.90	2.09
Pdh Tj = +2°C	6.00 kW	4.70 kW
COP Tj = +2°C	4.48	3.59
Pdh Tj = $+7^{\circ}$ C	3.40 kW	3.20 kW
$COP Tj = +7^{\circ}C$	5.44	4.29
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.34	5.50
Pdh Tj = Tbiv	8.60 kW	7.80 kW
COP Tj = Tbiv	2.90	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.09
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	4924 kWh	5486 kWh



EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.52 kW	10.05 kW
El input	2.19 kW	3.49 kW
СОР	4.80	2.88

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-1105H8-E/HWS-1405XWHT9-E

Configure model		
Model name	HWS-1105H8-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	

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
η_{s}	161 %	130 %
Prated	10.00 kW	9.00 kW
SCOP	4.12	3.34
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	8.60 kW	7.80 kW





COP Tj = -7°C	2.90	2.09
Pdh Tj = +2°C	6.00 kW	4.70 kW
COP Tj = +2°C	4.48	3.59
Pdh Tj = $+7^{\circ}$ C	3.40 kW	3.20 kW
$COP Tj = +7^{\circ}C$	5.44	4.29
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.34	5.50
Pdh Tj = Tbiv	8.60 kW	7.80 kW
COP Tj = Tbiv	2.90	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.60 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	2.09
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	4924 kWh	5486 kWh
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EN 14511-2		
	Low temperature	Medium temperature
Heat output	10.52 kW	10.05 kW
El input	2.19 kW	3.49 kW
СОР	4.80	2.88

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-1405H8-E/HWS-1405XWHM3-E

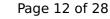
Configure model		
Model name	HWS-1405H8-E/HWS-1405XWHM3-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

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}	157 %	129 %
Prated	10.00 kW	9.00 kW
SCOP	4.02	3.31
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	8.80 kW	8.20 kW





COP Tj = -7°C	2.76	1.96
Pdh Tj = +2°C	6.00 kW	5.10 kW
COP Tj = +2°C	4.34	3.56
Pdh Tj = $+7^{\circ}$ C	3.50 kW	3.20 kW
$COP Tj = +7^{\circ}C$	5.35	4.38
Pdh Tj = 12°C	2.80 kW	2.70 kW
COP Tj = 12°C	6.35	5.56
Pdh Tj = Tbiv	8.80 kW	8.20 kW
COP Tj = Tbiv	2.76	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.96
Rated airflow rate	5590 m³/h	5590 m³/h
WTOL	55 °C	55 °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	Electricity	Electricity
Supplementary Heater: PSUP	10.00 kW	9.00 kW
Annual energy consumption Qhe	5156 kWh	5772 kWh



EN 14511-2			
	Low temperature	Medium temperature	
Heat output	13.15 kW	12.03 kW	
El input	2.96 kW	4.29 kW	
СОР	4.44	2.81	

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-1405H8-E/HWS-1405XWHT6-E

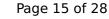
Configure model		
Model name	HWS-1405H8-E/HWS-1405XWHT6-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

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	
157 %	129 %	
10.00 kW	9.00 kW	
4.02	3.31	
-7 °C	-7 °C	
-7 °C	-7 °C	
8.80 kW	8.20 kW	
	Low temperature 157 % 10.00 kW 4.02 -7 °C -7 °C	





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COP Tj = -7°C	2.76	1.96
Pdh Tj = +2°C	6.00 kW	5.10 kW
COP Tj = +2°C	4.34	3.56
Pdh Tj = $+7^{\circ}$ C	3.50 kW	3.20 kW
$COP Tj = +7^{\circ}C$	5.35	4.38
Pdh Tj = 12°C	2.80 kW	2.70 kW
COP Tj = 12°C	6.35	5.56
Pdh Tj = Tbiv	8.80 kW	8.20 kW
COP Tj = Tbiv	2.76	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.96
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	5156 kWh	5772 kWh
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EN 14511-2			
	Low temperature	Medium temperature	
Heat output	13.15 kW	12.03 kW	
El input	2.96 kW	4.29 kW	
СОР	4.44	2.81	

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-1405H8-E/HWS-1405XWHT9-E

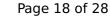
Configure model		
Model name	HWS-1405H8-E/HWS-1405XWHT9-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

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	
157 %	129 %	
10.00 kW	9.00 kW	
4.02	3.31	
-7 °C	-7 °C	
-7 °C	-7 °C	
8.80 kW	8.20 kW	
	Low temperature 157 % 10.00 kW 4.02 -7 °C -7 °C	





COP Tj = -7°C	2.76	1.96
Pdh Tj = +2°C	6.00 kW	5.10 kW
$COP Tj = +2^{\circ}C$	4.34	3.56
Pdh Tj = $+7^{\circ}$ C	3.50 kW	3.20 kW
$COP Tj = +7^{\circ}C$	5.35	4.38
Pdh Tj = 12°C	2.80 kW	2.70 kW
COP Tj = 12°C	6.35	5.56
Pdh Tj = Tbiv	8.80 kW	8.20 kW
COP Tj = Tbiv	2.76	1.96
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.80 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.96
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	5156 kWh	5772 kWh



EN 14511-2		
	Low temperature	Medium temperature
Heat output	13.15 kW	12.03 kW
El input	2.96 kW	4.29 kW
СОР	4.44	2.81

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-1605H8-E/HWS-1405XWHM3-E

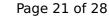
Configure model		
Model name	HWS-1605H8-E/HWS-1405XWHM3-E	
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone	n/a	
Reversibility	Yes	
Cooling mode application (optional)	n/a	

General Data		
Power supply	1x230V 50Hz	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	69 dB(A)	69 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	159 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.07	3.33
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	9.00 kW	8.70 kW





COP Tj = -7°C	2.65	2.01
Pdh Tj = +2°C	6.00 kW	5.50 kW
COP Tj = +2°C	4.26	3.54
Pdh Tj = $+7^{\circ}$ C	3.70 kW	3.30 kW
$COP Tj = +7^{\circ}C$	5.95	4.38
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.07	5.67
Pdh Tj = Tbiv	9.00 kW	8.70 kW
COP Tj = Tbiv	2.65	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.01
Rated airflow rate	5860 m³/h	5860 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	10.00 kW
Annual energy consumption Qhe	5212 kWh	6154 kWh



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EN 14511-2			
Low temperature Medium temperature			
Heat output	14.91 kW	13.40 kW	
El input	3.47 kW	4.95 kW	
СОР	4.30	2.70	

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-1605H8-E/HWS-1405XWHT6-E

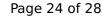
Configure model		
Model name HWS-1605H8-E/HWS-1405XWHT6-E		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone n/a		
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	69 dB(A)	69 dB(A)	

EN 14825		
	Low temperature	Medium temperature
η_{s}	159 %	130 %
Prated	10.00 kW	10.00 kW
SCOP	4.07	3.33
Tbiv	-7 °C	-7 °C
TOL	-7 °C	-7 °C
Pdh Tj = -7°C	9.00 kW	8.70 kW





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COP Tj = -7°C	2.65	2.01
Pdh Tj = +2°C	6.00 kW	5.50 kW
COP Tj = +2°C	4.26	3.54
Pdh Tj = $+7^{\circ}$ C	3.70 kW	3.30 kW
$COP Tj = +7^{\circ}C$	5.95	4.38
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.07	5.67
Pdh Tj = Tbiv	9.00 kW	8.70 kW
COP Tj = Tbiv	2.65	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.01
Rated airflow rate	5860 m³/h	5860 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	10.00 kW
Annual energy consumption Qhe	5212 kWh	6154 kWh
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EN 14511-2			
Low temperature Medium temperature			
Heat output	14.91 kW	13.40 kW	
El input	3.47 kW	4.95 kW	
СОР	4.30	2.70	

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-1605H8-E/HWS-1405XWHT9-E

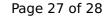
Configure model		
Model name HWS-1605H8-E/HWS-1405XWHT9-E		
Application	Heating (medium temp)	
Units	Indoor + Outdoor	
Climate Zone n/a		
Reversibility Yes		
Cooling mode application (optional) n/a		

General Data		
Power supply	1x230V 50Hz	

Average Climate

EN 12102-1			
	Low temperature	Medium temperature	
Sound power level indoor	43 dB(A)	43 dB(A)	
Sound power level outdoor	69 dB(A)	69 dB(A)	

EN 14825				
	Low temperature	Medium temperature		
η_{s}	159 %	130 %		
Prated	10.00 kW	10.00 kW		
SCOP	4.07	3.33		
Tbiv	-7 °C	-7 °C		
TOL	-7 °C	-7 °C		
Pdh Tj = -7°C	9.00 kW	8.70 kW		





COP Tj = -7°C	2.65	2.01
Pdh Tj = +2°C	6.00 kW	5.50 kW
COP Tj = +2°C	4.26	3.54
Pdh Tj = $+7^{\circ}$ C	3.70 kW	3.30 kW
$COP Tj = +7^{\circ}C$	5.95	4.38
Pdh Tj = 12°C	2.80 kW	2.80 kW
COP Tj = 12°C	6.07	5.67
Pdh Tj = Tbiv	9.00 kW	8.70 kW
COP Tj = Tbiv	2.65	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.00 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.01
Rated airflow rate	5860 m³/h	5860 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	10.00 kW
Annual energy consumption Qhe	5212 kWh	6154 kWh
	1	



EN 14511-2			
	Low temperature	Medium temperature	
Heat output	14.91 kW	13.40 kW	
El input	3.47 kW	4.95 kW	
СОР	4.30	2.70	

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