

Summary of	Samsung EHS TDM Plus R410A 12 kW & 16 kW (space heating/ 260L)	Reg. No.	011- 1W0378
Certificate Holder	<u>'</u>		
Name	Samsung Electronics Air Conditioner Europe B.V.		
Address	Evert van de Beekstraat 310	Zip	1118 CX
City	Schiphol	Country	Netherlands
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	TÜV Rheinland Korea Ltd.		
Subtype title	Samsung EHS TDM Plus R410A 12 kW & 16 kW (space heating/ 260L)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410a		
Mass Of Refrigerant	3.5 kg		
Certification Date	29.07.2020		
Testing basis	ng basis European KEYMARK Scheme for Heat Pumps Rev. 7		

Model: AE120MXTPEH/EU & AE260TNWTEH/EU

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	12.00 kW	10.72 kW
El input	2.72 kW	3.91 kW
СОР	4.41	2.74
Indoor water flow rate	2.08 m³/h	1.16 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	



EN 12102-1		
Low temperature Medium temperature		Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
	Low temperature	Medium temperature
η_{s}	183 %	114 %
Prated	10.00 kW	8.00 kW
SCOP	4.65	2.92
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.80 kW	7.10 kW
COP Tj = -7°C	2.72	1.94
Cdh	0.90	0.90
Pdh Tj = +2°C	5.40 kW	4.30 kW
COP Tj = +2°C	4.69	2.86
Cdh	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.80 kW
COP Tj = +7°C	5.92	3.43
Cdh	0.90	0.90





Pdh Tj = 12°C	4.40 kW	5.00 kW
COP Tj = 12°C	7.85	5.52
Cdh	0.90	0.90
Pdh Tj = Tbiv	10.00 kW	8.00 kW
COP Tj = Tbiv	2.41	1.79
Pdh Tj = TOL	10.00 kW	8.00 kW
COP Tj = TOL	2.41	1.79
WTOL	55 °C	55 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	o w
Supplementary Heater: Type of energy input	Electrical	Electrical
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4516 kWh	5799 kWh

Domestic Hot Water (DHW)





EN 16147		
Declared load profile	XL	
Efficiency ηDHW	95 %	
СОР	2.45	
Heating up time	2:10 h:min	
Standby power input	85.0 W	
Reference hot water temperature	52.0 °C	
Mixed water at 40°C	290	



Model: AE120MXTPGH/EU & AE260TNWTEH/EU

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	12.00 kW	10.72 kW
El input	2.72 kW	3.91 kW
СОР	4.41	2.74
Indoor water flow rate	2.08 m³/h	1.16 m³/h

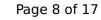
EN 14511-4		
Shutting off the heat transfer medium flow	passed	
Complete power supply failure	passed	
Defrost test	passed	
Starting and operating test	passed	



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EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	70 dB(A)	70 dB(A)

EN 14825		
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Prated	10.00 kW	8.00 kW
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Cdh	0.90	0.90
Pdh Tj = +2°C	5.40 kW	4.30 kW
COP Tj = +2°C	4.69	2.86
Cdh	0.90	0.90
Pdh Tj = +7°C	3.50 kW	2.80 kW
COP Tj = +7°C	5.92	3.43
Cdh	0.90	0.90





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WTOL	55 °C	55 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electrical	Electrical
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4516 kWh	5799 kWh

Domestic Hot Water (DHW)





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Declared load profile	XL
Efficiency ηDHW	95 %
СОР	2.45
Heating up time	2:10 h:min
Standby power input	85.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	290 I



Model: AE160MXTPEH/EU & AE260TNWTEH/EU

General Data	
Power supply 1x230V 50Hz	

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	16.00 kW	14.60 kW
El input	3.95 kW	5.32 kW
СОР	4.05	2.74
Indoor water flow rate	2.77 m³/h	1.58 m³/h

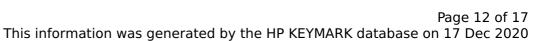
EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed



 $$\operatorname{\textit{Page}}\ 11$ of 17$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	73 dB(A)	73 dB(A)

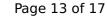
EN 14825		
	Low temperature	Medium temperature
η_{s}	182 %	119 %
Prated	11.00 kW	9.00 kW
SCOP	4.63	3.06
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	9.90 kW	7.80 kW
COP Tj = -7°C	2.65	2.01
Cdh	0.90	0.90
Pdh Tj = +2°C	6.00 kW	4.70 kW
COP Tj = +2°C	4.62	2.97
Cdh	0.90	0.90
Pdh Tj = +7°C	3.90 kW	3.50 kW
COP Tj = +7°C	6.12	3.73
Cdh	0.90	0.90





Pdh Tj = 12°C	4.40 kW	5.00 kW
COP Tj = 12°C	7.85	5.52
Cdh	0.90	0.90
Pdh Tj = Tbiv	11.20 kW	8.80 kW
COP Tj = Tbiv	2.33	1.83
Pdh Tj = TOL	11.20 kW	8.80 kW
COP Tj = TOL	2.33	1.83
WTOL	55 °C	55 °C
Poff	22 W	22 W
РТО	22 W	22 W
PSB	22 W	22 W
PCK	o w	0 W
Supplementary Heater: Type of energy input	Electrical	Electrical
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	5086 kWh	6111 kWh

Domestic Hot Water (DHW)





EN 16147	
Declared load profile	XL
Efficiency ηDHW	95 %
СОР	2.45
Heating up time	2:10 h:min
Standby power input	85.0 W
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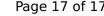
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TOL	-10 °C	-10 °C		
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COP Tj = -7°C	2.65	2.01		
Cdh	0.90	0.90		
Pdh Tj = +2°C	6.00 kW	4.70 kW		
COP Tj = +2°C	4.62	2.97		
Cdh	0.90	0.90		
Pdh Tj = +7°C	3.90 kW	3.50 kW		
COP Tj = +7°C	6.12	3.73		
Cdh	0.90	0.90		





4.40 kW	5.00 kW
7.85	5.52
0.90	0.90
11.20 kW	8.80 kW
2.33	1.83
11.20 kW	8.80 kW
2.33	1.83
55 °C	55 °C
22 W	22 W
22 W	22 W
22 W	22 W
o w	0 W
Electrical	Electrical
0.00 kW	0.00 kW
5086 kWh	6111 kWh
	7.85 0.90 11.20 kW 2.33 11.20 kW 2.33 55 °C 22 W 22 W 0 W Electrical 0.00 kW

Domestic Hot Water (DHW)





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