Login

Summary of	Aquarea Monobloc 12-16 kW STD (H Series)	Reg. No.	011-1W0509
Certificate Holder			
Name	Panasonic Marketing Europe GmbH		
Address	Hagenauer Strasse 43, Wiesbaden	Zip	65203
City	Wiesbaden	Country	Germany
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Aquarea Monobloc 12-16 kW STD (H Series)		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.1 kg		
Certification Date	08.12.2021		
Testing basis	HP KEYMARK certification scheme rules rev. 9		

Model: WH-MDC12H6E5

Configure model	
Model name	WH-MDC12H6E5
Application	Heating (medium temp)
Units	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	12.00 kW	12.00 kW
El input	2.53 kW	4.10 kW
COP	4.74	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

Average Climate

EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825

	Low temperature	Medium temperature
η_s	190 %	134 %
Prated	10.00 kW	8.00 kW
SCOP	4.82	3.42
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.90 kW	7.20 kW
COP Tj = -7°C	3.18	2.27
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	5.20 kW	4.30 kW
COP Tj = +2°C	4.67	3.25
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.20 kW	4.90 kW
COP Tj = +7°C	6.15	4.36
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.10 kW	5.80 kW

COP Tj = 12°C	7.88	6.12
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	10.00 kW	8.00 kW
COP Tj = Tbiv	2.68	2.05
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.00 kW	8.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.68	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4286 kWh	4840 kWh

Model: WH-MDC16H6E5

Configure model	
Model name	WH-MDC16H6E5
Application	Heating (medium temp)
Units	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	16.00 kW	14.50 kW
El input	3.74 kW	5.33 kW
COP	4.28	2.72

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	190 %	128 %
Prated	12.00 kW	13.00 kW
SCOP	4.82	3.25
Tbiv	-10 °C	-3 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.10 kW	9.00 kW
COP Tj = -7°C	2.90	2.07
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	6.40 kW	7.10 kW
COP Tj = +2°C	4.83	3.29
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	5.30 kW	4.90 kW
COP Tj = +7°C	6.11	4.85
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	6.20 kW	5.80 kW

COP Tj = 12°C	7.59	4.85
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	11.80 kW	9.50 kW
COP Tj = Tbiv	2.77	2.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.80 kW	8.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.77	1.88
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	3 W	3 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	39 W	39 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.20 kW	4.30 kW
Annual energy consumption Qhe	5146 kWh	8076 kWh