Subtype Aquarea Monobloc 9 kW STD (J Series)	
Certificate Holder	Panasonic Marketing Europe GmbH
Address	Hagenauer Strasse 43, Wiesbaden
ZIP	65203
City	Wiesbaden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Aquarea Monobloc 9 kW STD (J Series)
Registration number	011-1W0400
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.3 kg
Certification Date	06.08.2020
Testing basis	HP KEYMARK certification scheme rules V8

Model WH-MDC09J3E5	
Model name	WH-MDC09J3E5
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

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

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
COP	4.48	2.78

EN 14511-2 | Cooling	+7°C/+12°C	+18°C/+23°C
El input	3.32 kW	
Cooling capacity	9.00	
EER	2.71	

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	193 %	130 %
Prated	7.00 kW	8.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	7.00 kW

COP Tj = -7°C	2.80	2.02
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.80 kW	4.30 kW
COP Tj = +2°C	5.03	3.24
Cdh Tj = +2 °C	0.940	0.970
Pdh Tj = +7°C	3.00 kW	2.70 kW
COP Tj = +7°C	6.56	4.30
Cdh Tj = +7 °C	0.900	0.930
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.79
Cdh Tj = +12 °C	0.890	0.910
Pdh Tj = Tbiv	7.00 kW	7.10 kW
COP Tj = Tbiv	2.60	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	7.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.94
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	2949 kWh	4971 kWh

EN 12102-1 | Colder Climate		
	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Colder Climate		
	Low temperature	Medium temperature
ηs	164 %	116 %
Prated	7.00 kW	6.00 kW
SCOP	4.18	2.98
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.20 kW	3.60 kW
COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.96	0.97
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.90	0.92
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01

Cdh Tj = +7 °C	0.90	0.92
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.89	0.91
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.82	1.08
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.00 kW	3.00 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
Pdh Tj = -15°C (if TOL	5.70	4.90
COP Tj = -15°C (if TOL	2.44	1.72
Cdh Tj = -15 °C	0.98	0.98

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	227 %	160 %
Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.50 kW	3.80 kW
COP Tj = +7°C	5.37	3.51
Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.90	0.92
Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.00 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.80	2.14
WTOL	55 °C	55 °C
Poff	2 W	2 W
PTO	44 W	44 W
PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.00 kW	3.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	
SEER	5.19	
Pdc Tj = 35°C	7.00 kW	
EER Tj = 35°C	3.06	
Pdc Tj = 30°C	5.16 kW	
EER Tj = 30°C	4.15	
Cdc Tj = 30 °C	0.9	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	6.11	
Cdc Tj = 25 °C	0.9	
Pdc Tj = 20°C	1.47 kW	
EER Tj = 20°C	7.64	
Cdc Tj = 20 °C	0.9	
Poff	8 W	
PTO	0 W	
PSB	10 W	
PCK	0 W	
Annual energy consumption Qce	472 kWh	

Model WH-MDC09J3E5 + DGC200	
Model name	WH-MDC09J3E5 + DGC200
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water	

EN 16147 | Average Climate	
Declared load profile	L
Efficiency ηDHW	113 %
COP	2.68
Heating up time	1:06 h:min
Standby power input	40.0 W
Reference hot water temperature	52.6 °C
Mixed water at 40°C	268 l

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

EN 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	9.00 kW	8.95 kW
El input	2.01 kW	3.22 kW
COP	4.48	2.78

EN 14511-2 | Cooling		
	+7°C/+12°C	+18°C/+23°C
El input	3.32 kW	
Cooling capacity	9.00	
EER	2.71	

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
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EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	193 %	130 %
Prated	7.00 kW	8.00 kW
SCOP	4.90	3.32
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.30 kW	7.00 kW
COP Tj = -7°C	2.80	2.02
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	3.80 kW	4.30 kW
COP Tj = +2°C	5.03	3.24
Cdh Tj = +2 °C	0.940	0.970
Pdh Tj = +7°C	3.00 kW	2.70 kW
COP Tj = +7°C	6.56	4.30
Cdh Tj = +7 °C	0.900	0.930
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.47	6.79
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Pdh Tj = Tbiv	7.00 kW	7.10 kW
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.90 kW
Annual energy consumption Qhe	2949 kWh	4971 kWh

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Pdh Tj = -7°C	4.20 kW	3.60 kW

COP Tj = -7°C	3.41	2.41
Cdh Tj = -7 °C	0.96	0.97
Pdh Tj = +2°C	2.50 kW	2.20 kW
COP Tj = +2°C	5.39	3.75
Cdh Tj = +2 °C	0.90	0.92
Pdh Tj = +7°C	3.00 kW	2.80 kW
COP Tj = +7°C	6.69	5.01
Cdh Tj = +7 °C	0.90	0.92
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	8.24	6.67
Cdh Tj = +12 °C	0.89	0.91
Pdh Tj = Tbiv	5.70 kW	4.90 kW
COP Tj = Tbiv	2.44	1.72
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.70 kW	3.70 kW
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PCK	10 W	10 W
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Supplementary Heater: PSUP	3.00 kW	3.00 kW
Annual energy consumption Qhe	4132 kWh	4967 kWh
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EN 14825 | Warmer Climate

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Prated	7.00 kW	6.00 kW
SCOP	5.75	4.07
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.10 kW	6.10 kW
COP Tj = +2°C	2.80	2.14
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	4.50 kW	3.80 kW
COP Tj = +7°C	5.37	3.51

Cdh Tj = +7 °C	0.95	0.96
Pdh Tj = 12°C	3.40 kW	3.30 kW
COP Tj = 12°C	7.77	5.80
Cdh Tj = +12 °C	0.90	0.92
Pdh Tj = Tbiv	7.00 kW	6.00 kW
COP Tj = Tbiv	2.80	2.14
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.00 kW	6.00 kW
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PSB	10 W	10 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.00 kW	3.00 kW
Annual energy consumption Qhe	1627 kWh	1971 kWh

EN 14825 | Cooling		
	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.00 kW	
SEER	5.19	
Pdc Tj = 35°C	7.00 kW	
EER Tj = 35°C	3.06	
Pdc Tj = 30°C	5.16 kW	
EER Tj = 30°C	4.15	
Cdc Tj = 30 °C	0.9	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	6.11	
Cdc Tj = 25 °C	0.9	
Pdc Tj = 20°C	1.47 kW	
EER Tj = 20°C	7.64	
Cdc Tj = 20 °C	0.9	
Poff	8 W	
PTO	0 W	
PSB	10 W	
PCK	0 W	
Annual energy consumption Qce	472 kWh	