

## Subtype Aquarea Monobloc 16 kW T-CAP (J Series) + TD30

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 16 kW T-CAP (J Series) + TD30
Registration number	011-1W0564
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	22.12.2022
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 10 (as of 2022-06)

**Model WH-MXC16J9E8**

Model name	WH-MXC16J9E8
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 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 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level outdoor	66 dB(A)	66 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	129 %
Prated	13.00 kW	16.00 kW
SCOP	4.46	3.31
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.50 kW	14.20 kW
COP Tj = -7°C	2.70	1.86
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	7.00 kW	8.60 kW
COP Tj = +2°C	4.43	3.30
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	8.00 kW	7.90 kW
COP Tj = +7°C	5.68	4.31
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	9.30 kW	9.20 kW
COP Tj = 12°C	7.28	5.55
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	13.00 kW	16.00 kW
COP Tj = Tbiv	2.70	1.67

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.00 kW	16.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	1.67
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	14 W	14 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	6018 kWh	9984 kWh

**EN 12102-1 | Colder Climate**

	Low temperature	Medium temperature
Sound power level outdoor	66 dB(A)	66 dB(A)

**EN 14825 | Colder Climate**

	Low temperature	Medium temperature
$\eta_s$	150 %	125 %
Prated	19.00 kW	18.00 kW
SCOP	3.83	3.20
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	11.50 kW	10.90 kW
COP Tj = -7°C	2.69	2.57
Cdh Tj = -7 °C	1.000	1.000
Pdh Tj = +2°C	7.10 kW	6.80 kW
COP Tj = +2°C	5.04	3.97
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	8.00 kW	7.90 kW
COP Tj = +7°C	6.35	5.04
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	9.10 kW	9.00 kW
COP Tj = 12°C	7.59	6.31
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	15.50 kW	14.70 kW
COP Tj = Tbiv	2.42	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	15.30 kW	13.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.91	1.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900

WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	14 W	14 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.70 kW	4.60 kW
Annual energy consumption Qhe	12233 kWh	13870 kWh
Pdh Tj = -15°C (if TOL	15.50	14.70
COP Tj = -15°C (if TOL	2.42	1.83
Cdh Tj = -15 °C	0.900	0.900

#### EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	66 dB(A)	66 dB(A)

#### EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	232 %	160 %
Prated	16.00 kW	16.00 kW
SCOP	5.88	4.09
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	16.00 kW	16.00 kW
COP Tj = +2°C	2.96	2.03
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	10.30 kW	10.30 kW
COP Tj = +7°C	5.32	3.56
Cdh Tj = +7 °C	0.990	1.000
Pdh Tj = 12°C	9.10 kW	8.90 kW
COP Tj = 12°C	7.25	5.21
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	16.00 kW	16.00 kW
COP Tj = Tbiv	2.96	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.00 kW	16.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.96	2.03
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	12 W	12 W
PTO	14 W	14 W
PSB	12 W	12 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q <sub>he</sub>	3634 kWh	5230 kWh

**Model WH-MXC16J9E8 + PAW-TD30C1E5-HI**

Model name	WH-MXC16J9E8 + PAW-TD30C1E5-HI
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

**General data**

Power supply	3x400V 50Hz
Off-peak product	n/a

**Outdoor Air/Water**
**EN 16147 | Average Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	116 %
COP	2.77
Heating up time	1:00 h:min
Standby power input	50.0 W
Reference hot water temperature	52.1 °C
Mixed water at 40°C	386 l

**EN 16147 | Colder Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	81 %
COP	1.88
Heating up time	1:09 h:min
Standby power input	120.0 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	388 l

**EN 16147 | Warmer Climate**

Declared load profile	XL
Efficiency $\eta_{DHW}$	134 %
COP	3.23
Heating up time	1:17 h:min
Standby power input	40.0 W
Reference hot water temperature	52.7 °C
Mixed water at 40°C	390 l