

Subtype DAIKIN ALTHERMA 4 H ECH2O 12-14 kW 500L (3ph)

Certificate Holder	DAIKIN Europe N.V.
Address	Zandvoordestraat 300
ZIP	B-8400
City	Oostende
Country	BE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	DAIKIN ALTHERMA 4 H ECH2O 12-14 kW 500L (3ph)
Registration number	011-1W0940
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.25 kg
Certification Date	05.12.2024
Testing basis	HP KEYMARK certification scheme rules rev. 14

Model EPSK12AW1 / EPSX(B)14P50A

Model name	EPSK12AW1 / EPSX(B)14P50A
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 η_{DHW}	128.8 %
COP	3.22
Heating up time	3:04 h:min
Standby power input	43.4 W
Reference hot water temperature	44.3 °C
Mixed water at 40°C	236.1 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	10.2 kW	10.91 kW
El input	1.86 kW	3.03 kW
COP	5.5	3.6

EN 14511-2 | Cooling

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	2.64 kW	
EER	9.37	
	3.55	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	203 %	159 %
P _{rated}	10.00 kW	10.50 kW
SCOP	5.14	4.04
T _{biv}	-10 °C	-10 °C
T _{OL}	-10 °C	-10 °C
P _{dh T_j} = -7°C	8.90 kW	9.40 kW
COP T _j = -7°C	3.69	2.63
C _{dh T_j} = -7 °C	1.000	
P _{dh T_j} = +2°C	6.30 kW	5.50 kW
COP T _j = +2°C	4.85	3.92
C _{dh T_j} = +2 °C	1.000	1.000
P _{dh T_j} = +7°C	8.00 kW	3.90 kW
COP T _j = +7°C	6.63	5.18
C _{dh T_j} = +7 °C	1.000	1.000
P _{dh T_j} = 12°C	8.60 kW	7.70 kW
COP T _j = 12°C	8.48	6.52
C _{dh T_j} = +12 °C	1.000	1.000
P _{dh T_j} = T _{biv}	9.80 kW	10.60 kW
COP T _j = T _{biv}	3.25	2.28
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	9.80 kW	10.60 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	3.25	2.28
C _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}		
WT _{OL}	35 °C	55 °C
P _{off}	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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 _{he}	4020 kWh	5368 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
P _{designc}	9 kW	
SEER	5.08	
P _{dc T_j} = 35°C	9.37 kW	
EER T _j = 35°C	3.55	

Pdc Tj = 30°C	6.51 kW
EER Tj = 30°C	5.08
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	4.52 kW
EER Tj = 25°C	5.63
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	7.21 kW
EER Tj = 20°C	5.87
Cdc Tj = 20 °C	0.99
Poff	22 W
PTO	22 W
PSB	22 W
PCK	0 W
Annual energy consumption Qce	1064 kWh

Model EPSK14AW1 / EPSX(B)14P50A

Model name	EPSK14AW1 / EPSX(B)14P50A
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 η_{DHW}	128.8 %
COP	3.22
Heating up time	3:04 h:min
Standby power input	43.4 W
Reference hot water temperature	44.3 °C
Mixed water at 40°C	236.1 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	10.2 kW	10.91 kW
El input	1.86 kW	3.03 kW
COP	5.5	3.6

EN 14511-2 | Cooling

El input	+7°C/+12°C	+18°C/+23°C
Cooling capacity	3.45 kW	
EER	11.3	
	3.28	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	49 dB(A)	49 dB(A)
Sound power level outdoor	52 dB(A)	52 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	195 %	150 %
Prated	12.00 kW	14.00 kW
SCOP	4.96	3.84
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.90 kW	12.40 kW
COP Tj = -7°C	3.45	2.52
Cdh Tj = -7 °C	1.000	
Pdh Tj = +2°C	6.70 kW	8.00 kW
COP Tj = +2°C	4.58	3.52
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	8.00 kW	5.10 kW
COP Tj = +7°C	6.67	5.38
Cdh Tj = +7 °C	1.000	1.000
Pdh Tj = 12°C	8.60 kW	7.70 kW
COP Tj = 12°C	8.42	6.50
Cdh Tj = +12 °C	1.000	1.000
Pdh Tj = Tbiv	12.50 kW	14.30 kW
COP Tj = Tbiv	3.18	2.29
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.50 kW	14.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.18	2.29
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	35 °C	55 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	4999 kWh	7537 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	11 kW	
SEER	5.12	
Pdc Tj = 35°C	11.3 kW	
EER Tj = 35°C	3.28	

Pdc Tj = 30°C	8.01 kW
EER Tj = 30°C	4.6
Cdc Tj = 30 °C	0.99
Pdc Tj = 25°C	5.21 kW
EER Tj = 25°C	6.13
Cdc Tj = 25 °C	0.99
Pdc Tj = 20°C	7.21 kW
EER Tj = 20°C	5.87
Cdc Tj = 20 °C	0.99
Poff	22 W
PTO	22 W
PSB	22 W
PCK	0 W
Annual energy consumption Qce	1289 kWh