

Subtype Monobloc Air-to-Water Heat Pump System- R32- U112

Certificate Holder	Qingdao Haier Air Conditioner Electric Co., Ltd.
Address	Haier Development Zone Industrial Park, Economic Development Zone, Qingdao City,
ZIP	
City	Shandong Province
Country	CN
Certification Body	BRE Global Limited
Subtype title	Monobloc Air-to-Water Heat Pump System- R32- U112
Registration number	041-K073-03
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.4 kg
Certification Date	06.11.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 12

Model AU112FYCRA(HW)

Model name	AU112FYCRA(HW)
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	67 dB(A)	70 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	174 %	127 %
Prated	10.93 kW	10.10 kW
SCOP	4.43	3.26
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	9.67 kW	8.93 kW
COP Tj = -7°C	3.13	2.09
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.10 kW	5.48 kW
COP Tj = +2°C	4.26	3.18
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.66 kW	3.71 kW
COP Tj = +7°C	5.59	4.20
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.28 kW	4.24 kW
COP Tj = 12°C	8.11	6.44
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	9.67 kW	8.93 kW
COP Tj = Tbiv	3.13	2.09

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.46 kW	7.89 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.38
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	55 °C	55 °C
Poff	5 W	5 W
PTO	20 W	20 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.47 kW	2.21 kW
Annual energy consumption Qhe	5101 kWh	6401 kWh