Subtype Monobloc Air-to-Water Heat Pump System- R32- W052+ W072

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- W052+ W072
Registration number	041-K073-07
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.3 kg
Certification Date	06.11.2023
Testing basis	Heat Pump Keymark Scheme Rules Rev 12
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model AW052MUCHA	
Model name	AW052MUCHA
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	5.02 kW	5.24 kW
El input	1.00 kW	0.80 kW
COP	5.03	6.55

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	185 %	142 %
Prated	5.01 kW	5.23 kW
SCOP	4.70	3.63
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	4.43 kW	4.63 kW
COP Tj = -7°C	3.35	1.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.74 kW	2.90 kW
COP Tj = +2°C	4.62	3.63
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.79 kW	3.84 kW

COP Tj = +7°C	6.01	5.62
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.29 kW	4.36 kW
COP Tj = 12°C	7.94	9.00
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.43 kW	4.63 kW
COP Tj = Tbiv	3.35	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.83 kW	4.08 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.97	1.68
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.18 kW	1.15 kW
Annual energy consumption Qhe	2199 kWh	2981 kWh

Model AW072MUCHA	
Model name	AW072MUCHA
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 14511-2 | Heating		
	Low temperature	Medium temperature
Heat output	7.40 kW	6.98 kW
El input	1.38 kW	2.36 kW
COP	5.38	2.96

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	62 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	189 %	141 %
Prated	7.09 kW	7.02 kW
SCOP	4.81	3.60
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.27 kW	6.21 kW
COP Tj = -7°C	3.86	2.63
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.04 kW	3.88 kW
COP Tj = +2°C	4.56	3.31
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.79 kW	3.55 kW

COP Tj = +7°C	6.11	5.02
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.23 kW	3.84 kW
COP Tj = 12°C	7.80	8.09
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.27 kW	6.21 kW
COP Tj = Tbiv	3.86	2.63
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.80 kW	4.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	1.64
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	18 W	18 W
PTO	18 W	18 W
PSB	18 W	18 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.29 kW	2.94 kW
Annual energy consumption Qhe	3044 kWh	4023 kWh