

## Subtype R290 Hydro Split and Hydro all in one 08/10kW

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	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	R290 Hydro Split and Hydro all in one 08/10kW
Registration number	011-1W0824
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.9 kg
Certification Date	27.08.2024
Testing basis	HP KEYMARK certification scheme rules V14

## Model AW082HUGHA+HU102WAHYA

Model name	AW082HUGHA+HU102WAHYA
Application	Heating (medium temp)
Units	Indoor, 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	8.00 kW	8.00 kW
El input	1.50 kW	2.35 kW
COP	5.35	3.40

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	64 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	205 %	151 %
Prated	7.20 kW	6.00 kW
SCOP	5.20	3.85
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	5.01	3.65
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.43
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2866 kWh	3223 kWh

## Model AW082HUGHA+HU102WAHYB

Model name	AW082HUGHA+HU102WAHYB
Application	Heating (medium temp)
Units	Indoor, 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	8.00 kW	8.00 kW
El input	1.50 kW	2.35 kW
COP	5.35	3.40

#### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	64 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	205 %	151 %
Prated	7.20 kW	6.00 kW
SCOP	5.20	3.85
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.43
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.02 kW
Annual energy consumption Qhe	2866 kWh	3223 kWh

## Model AW082HUGHA+HU102F20AHYA

Model name	AW082HUGHA+HU102F20AHYA
Application	Heating + DHW + low temp
Units	Indoor, 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 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	138 %
COP	3.13
Heating up time	1:57 h:min
Standby power input	66.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	255 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	8.00 kW	8.00 kW
El input	1.50 kW	2.35 kW
COP	5.35	3.40

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	59 dB(A)	64 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	205 %	151 %

Prated	7.20 kW	6.00 kW
SCOP	5.20	3.85
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	5.01	3.62
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.43
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.70
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.34	1.85
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2866 kWh	3223 kWh

## Model AW102HUGHA+HU102WAHYA

Model name	AW102HUGHA+HU102WAHYA
Application	Heating (medium temp)
Units	Indoor, 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	10.00 kW	10.00 kW
El input	1.96 kW	3.13 kW
COP	5.10	3.20

#### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	66 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	150 %
Prated	7.20 kW	6.00 kW
SCOP	5.10	3.83
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	4.88	3.62
Cdh Tj = +2 °C	0.900	0.900



Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.38
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.66
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2922 kWh	3240 kWh

## Model AW102HUGHA+HU102WAHYB

Model name	AW102HUGHA+HU102WAHYB
Application	Heating (medium temp)
Units	Indoor, 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	10.00 kW	10.00 kW
El input	1.96 kW	3.13 kW
COP	5.10	3.20

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	66 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	150 %
Prated	7.20 kW	6.00 kW
SCOP	5.10	3.83
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	4.88	3.62
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.38
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.66
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2922 kWh	3240 kWh

## Model AW102HUGHA+HU102F20AHYA

Model name	AW102HUGHA+HU102F20AHYA
Application	Heating + DHW + low temp
Units	Indoor, 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 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	138 %
COP	3.13
Heating up time	1:57 h:min
Standby power input	66.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	255 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	10.00 kW	10.00 kW
El input	1.96 kW	3.13 kW
COP	5.10	3.20

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	66 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	150 %

Prated	7.20 kW	6.00 kW
SCOP	5.10	3.83
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	4.88	3.62
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.38
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.66
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2922 kWh	3240 kWh

## Model AW10NHUGHA+HU102F20AHYAE3

Model name	AW10NHUGHA+HU102F20AHYAE3
Application	Heating + DHW + low temp
Units	Indoor, 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	3x230V 50Hz
Off-peak product	n/a

## Outdoor Air/Water

### EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	138 %
COP	3.13
Heating up time	1:57 h:min
Standby power input	66.0 W
Reference hot water temperature	52.0 °C
Mixed water at 40°C	255 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	10.00 kW	10.00 kW
El input	1.96 kW	3.13 kW
COP	5.10	3.20

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	66 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	150 %

Prated	7.20 kW	6.00 kW
SCOP	5.10	3.83
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	4.88	3.62
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.38
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.66
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2922 kWh	3240 kWh

## Model AW10NHUGHA+HU10NWAHYAE3

Model name	AW10NHUGHA+HU10NWAHYAE3
Application	Heating (medium temp)
Units	Indoor, 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	3x230V 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	10.00 kW	10.00 kW
El input	1.96 kW	3.13 kW
COP	5.10	3.20

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	40 dB(A)	40 dB(A)
Sound power level outdoor	60 dB(A)	66 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	201 %	150 %
Prated	7.20 kW	6.00 kW
SCOP	5.10	3.83
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	6.34 kW	5.28 kW
COP Tj = -7°C	3.43	2.48
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.89 kW	3.24 kW
COP Tj = +2°C	4.88	3.62
Cdh Tj = +2 °C	0.900	0.900



Pdh Tj = +7°C	2.52 kW	2.10 kW
COP Tj = +7°C	6.88	5.38
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.56 kW	3.22 kW
COP Tj = 12°C	8.83	6.66
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.34 kW	5.28 kW
COP Tj = Tbiv	3.43	2.48
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.11 kW	5.95 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.30	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	80 °C	80 °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	0.09 kW	0.05 kW
Annual energy consumption Qhe	2922 kWh	3240 kWh