

Subtype Hi-Therma Smart Hydro 8 10 Integra

Certificate Holder	Qingdao Hisense Hitachi Air-conditioning Systems Co.,Ltd.
Address	Qianwangang Road
ZIP	266555
City	Qingdao, Shandong
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Hi-Therma Smart Hydro 8 10 Integra
Registration number	011-1W1066
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.98 kg
Certification Date	03.07.2025
Testing basis	HP KEYMARK certification scheme rules rev. 14
Testing laboratory	Intertek Testing Services Shenzhen LTD. Guangzhou Branch, CN

**Model AHW-080HCPB1/AHS-100HCWBAA-23**

Model name	AHW-080HCPB1/AHS-100HCWBAA-23
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	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.08
Heating up time	2:13 h:min
Standby power input	25.5 W
Reference hot water temperature	46.8 °C
Mixed water at 40°C	245 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	1.57 kW	2.50 kW
COP	5.10	3.20

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	55 dB(A)	54 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	197 %	146 %

Prated	7.80 kW	7.70 kW
SCOP	5.01	3.73
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.98 kW	6.82 kW
COP Tj = -7°C	3.20	2.34
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.34 kW	4.23 kW
COP Tj = +2°C	4.79	3.61
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.75 kW	2.79 kW
COP Tj = +7°C	6.70	4.89
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.47 kW	2.32 kW
COP Tj = 12°C	8.29	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	6.98 kW	6.82 kW
COP Tj = Tbiv	3.20	2.34
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.89 kW	7.69 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.88	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	9 W	9 W
PTO	10 W	10 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.01 kW
Annual energy consumption Qhe	3255 kWh	4274 kWh

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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	XL
Efficiency $\eta_{DHW}$	126 %
COP	3.08
Heating up time	2:13 h:min
Standby power input	25.5 W
Reference hot water temperature	46.8 °C
Mixed water at 40°C	245 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	2.08 kW	3.23 kW
COP	4.80	3.10

**EN 12102-1 | Average Climate**

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	56 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_S$	192 %	142 %

Prated	8.70 kW	8.70 kW
SCOP	4.89	3.61
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.72 kW	7.70 kW
COP Tj = -7°C	3.10	2.23
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.47 kW	4.62 kW
COP Tj = +2°C	4.67	3.41
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.98 kW	3.27 kW
COP Tj = +7°C	6.61	4.99
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.28 kW	2.39 kW
COP Tj = 12°C	7.95	6.53
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.72 kW	7.70 kW
COP Tj = Tbiv	3.10	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.30 kW	8.58 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.84	1.96
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	9 W	9 W
PTO	10 W	10 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	0.12 kW
Annual energy consumption Qhe	3690 kWh	4976 kWh