Subtype Hi -Therma Integra 4 6kW	
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 Integra 4 6kW
Registration number	011-1W0579
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	0.98 kg
Certification Date	10.02.2023
Testing basis	HP KEYMARK certification scheme rules rev. 11

Model AHW-044HCDS1/AHS-044HCDSAA-23

Model name	AHW-044HCDS1/AHS-044HCDSAA-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 ηDHW	135 %
COP	3.32
Heating up time	1:58 h:min
Standby power input	26.0 W
Reference hot water temperature	46.0 °C
Mixed water at 40°C	235 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	4.45 kW	4.45 kW
El input	0.84 kW	1.46 kW
COP	5.21	3.05

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	201 %	130 %

Prated	4.53 kW	3.84 kW
SCOP	5.10	3.33
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.01 kW	3.40 kW
COP Tj = -7°C	3.35	1.98
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.43 kW	2.12 kW
COP Tj = +2°C	5.00	3.37
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	1.71 kW	1.41 kW
COP Tj = +7°C	6.52	4.14
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.22 kW	2.10 kW
COP Tj = 12°C	11.22	8.16
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	4.01 kW	3.40 kW
COP Tj = Tbiv	3.35	1.98
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.38 kW	3.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	8 W	8 W
PTO	9 W	9 W
PSB	9 W	9 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.15 kW	0.15 kW
Annual energy consumption Qhe	1835 kWh	2381 kWh

Model AHW-060HCDS1/AHS-060HCDSAA-23

Model name	AHW-060HCDS1/AHS-060HCDSAA-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 ηDHW	136 %
COP	3.32
Heating up time	1:58 h:min
Standby power input	26.0 W
Reference hot water temperature	46.0 °C
Mixed water at 40°C	235 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	5.99 kW	6.11 kW
El input	1.13 kW	1.96 kW
COP	5.26	3.11

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	198 %	133 %

Prated	6.40 kW	5.31 kW
SCOP	5.03	3.41
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.66 kW	4.70 kW
COP Tj = -7°C	3.21	2.01
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.35 kW	3.05 kW
COP Tj = +2°C	4.88	3.37
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.05 kW	1.99 kW
COP Tj = +7°C	6.72	4.56
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.22 kW	2.05 kW
COP Tj = 12°C	11.22	7.43
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.66 kW	4.70 kW
COP Tj = Tbiv	3.21	2.01
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.29 kW	4.56 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	11 W	11 W
PTO	10 W	10 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.10 kW	0.80 kW
Annual energy consumption Qhe	2629 kWh	3221 kWh