This information was generated by the HP KEYMARK database on 1 Jun 2023

Summary of	Hi-Therma Split 10 12	Reg. No.	011-1W0633
Certificate Holder			
Name	Qingdao Hisense Hitachi Air-conditioning Systems Co.,Ltd.		
Address	Qianwangang Road	ZIP	266555
City	Qingdao, Shandong	Country	China
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Subtype title	Hi-Therma Split 10 12		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R32		
Mass of Refrigerant	1.8 kg		
Certification Date	01.06.2023		
Testing basis	HP KEYMARK certification scheme rules V11		

Model: AHW-100HCDS1/AHM-100HCDSAA

Configure model	
Model name	AHW-100HCDS1/AHM-100HCDSAA
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	10.05 kW	9.10 kW
El input	1.99 kW	2.92 kW
COP	5.05	3.11

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	190 %	140 %
Prated	8.52 kW	8.00 kW
SCOP	4.83	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	7.08 kW
COP Tj = -7°C	3.02	2.18
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.57 kW	4.29 kW
COP Tj = +2°C	4.83	3.44
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.88 kW	2.89 kW
COP Tj = +7°C	6.54	4.83
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	2.58 kW	2.67 kW
COP Tj = 12°C	6.06	6.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.54 kW	7.08 kW
COP Tj = Tbiv	3.02	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.21 kW	7.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	1.73
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.32 kW	0.09 kW
Annual energy consumption Qhe	3645 kWh	4619 kWh

Model: AHW-100HEDS1/AHM-100HEDSAA

Configure model	
Model name	AHW-100HEDS1/AHM-100HEDSAA
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	10.05 kW	9.10 kW
El input	1.99 kW	2.92 kW
COP	5.05	3.11

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	190 %	140 %
Prated	8.57 kW	8.02 kW
SCOP	4.83	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.58 kW	7.09 kW
COP Tj = -7°C	3.03	2.19
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.57 kW	4.29 kW
COP Tj = +2°C	4.83	3.44
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.89 kW	2.89 kW
COP Tj = +7°C	6.55	4.84
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	2.58 kW	2.67 kW
COP Tj = 12°C	6.06	6.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.58 kW	7.09 kW
COP Tj = Tbiv	3.03	2.19
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.21 kW	7.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	1.74
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.37 kW	0.11 kW
Annual energy consumption Qhe	3666 kWh	4623 kWh

Model: AHW-120HCDS1/AHM-120HCDSAA

Configure model	
Model name	AHW-120HCDS1/AHM-120HCDSAA
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.05 kW	11.22 kW
El input	2.47 kW	3.67 kW
COP	4.87	3.05

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	187 %	135 %
Prated	9.53 kW	9.11 kW
SCOP	4.76	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.43 kW	8.06 kW
COP Tj = -7°C	3.15	2.11
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.11 kW	4.78 kW
COP Tj = +2°C	4.52	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.21 kW	3.29 kW
COP Tj = +7°C	6.44	4.89
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	2.51 kW	2.64 kW
COP Tj = 12°C	7.13	6.14
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.43 kW	8.06 kW
COP Tj = Tbiv	3.15	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.07 kW	8.69 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	1.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 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	0.42 kW
Annual energy consumption Qhe	3900 kWh	5450 kWh

Model: AHW-120HEDS1/AHM-120HEDSAA

Configure model	
Model name	AHW-120HEDS1/AHM-120HEDSAA
Application	Heating (medium temp)
Units	Indoor + Outdoor
Climate Zone	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	12.05 kW	11.22 kW
El input	2.47 kW	3.67 kW
COP	4.88	3.05

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	188 %	135 %
Prated	9.50 kW	9.16 kW
SCOP	4.76	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.10 kW
COP Tj = -7°C	3.16	2.12
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.11 kW	4.78 kW
COP Tj = +2°C	4.52	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.21 kW	3.29 kW
COP Tj = +7°C	6.45	4.87
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	2.51 kW	2.64 kW
COP Tj = 12°C	7.13	6.14
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.40 kW	8.10 kW
COP Tj = Tbiv	3.16	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.07 kW	8.69 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	1.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	0.47 kW
Annual energy consumption Qhe	4121 kWh	5472 kWh