

Subtype Hi-Therma Split 14 16

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 Split 14 16
Registration number	011-1W0634
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.7 kg
Certification Date	01.06.2023
Testing basis	HP KEYMARK certification scheme rules V11

Model AHW-140HCDS1/AHM-140HCDSAA

Model name	AHW-140HCDS1/AHM-140HCDSAA
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	14.06 kW	13.11 kW
El input	2.95 kW	4.30 kW
COP	4.77	3.05

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	181 %	129 %
Prated	11.86 kW	11.67 kW
SCOP	4.61	3.29
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.49 kW	10.33 kW
COP Tj = -7°C	2.97	2.22
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.38 kW	6.35 kW
COP Tj = +2°C	4.40	3.04
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.20 kW	4.30 kW
COP Tj = +7°C	6.21	4.36
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.42	6.25
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.49 kW	10.33 kW
COP Tj = Tbiv	2.97	2.22
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.82 kW	11.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.91
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	0.04 kW	0.17 kW
Annual energy consumption Qhe	5322 kWh	7342 kWh

Model AHW-140HEDS1/AHM-140HEDSAA

Model name	AHW-140HEDS1/AHM-140HEDSAA
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	3x400V 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	14.06 kW	13.11 kW
El input	2.94 kW	4.30 kW
COP	4.77	3.05

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	181 %	129 %
Prated	11.86 kW	11.67 kW
SCOP	4.61	3.29
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.49 kW	10.33 kW
COP Tj = -7°C	2.96	2.23
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.38 kW	6.35 kW
COP Tj = +2°C	4.40	3.04
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.20 kW	4.30 kW
COP Tj = +7°C	6.22	4.36
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.42	6.25
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.49 kW	10.33 kW
COP Tj = Tbiv	2.96	2.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.82 kW	11.50 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.91
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	0.04 kW	0.17 kW
Annual energy consumption Qhe	5320 kWh	7332 kWh

Model AHW-160HCDS1/AHM-160HCDSAA

Model name	AHW-160HCDS1/AHM-160HCDSAA
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	16.14 kW	15.16 kW
El input	3.51 kW	5.10 kW
COP	4.59	2.97

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	128 %
Prated	13.16 kW	12.54 kW
SCOP	4.49	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.64 kW	11.09 kW
COP Tj = -7°C	2.86	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.97 kW	6.56 kW
COP Tj = +2°C	4.23	3.06
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.66 kW	4.29 kW
COP Tj = +7°C	6.21	4.33
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.45	5.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.64 kW	11.09 kW
COP Tj = Tbiv	2.86	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.75 kW	12.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.88
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	0.42 kW	0.51 kW
Annual energy consumption Qhe	6061 kWh	7898 kWh

Model AHW-160HEDS1/AHM-160HEDSAA

Model name	AHW-160HEDS1/AHM-160HEDSAA
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	3x400V 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	16.15 kW	15.16 kW
El input	3.51 kW	5.10 kW
COP	4.60	2.97

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	177 %	128 %
Prated	13.03 kW	12.54 kW
SCOP	4.49	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.53 kW	11.09 kW
COP Tj = -7°C	2.86	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.97 kW	6.56 kW
COP Tj = +2°C	4.23	3.07
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.66 kW	4.29 kW
COP Tj = +7°C	6.22	4.33
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.45	5.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.53 kW	11.09 kW
COP Tj = Tbiv	2.86	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.75 kW	12.03 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.89
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	0.29 kW	0.51 kW
Annual energy consumption Qhe	5994 kWh	7889 kWh