

## Subtype HAWS\*\*\*B2E7A?12kW/14kW/16kW?

Certificate Holder	Guangdong Haiwu Technology Co., Ltd
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City	Guangdong
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	HAWS***B2E7A?12kW/14kW/16kW?
Registration number	011-1W0645
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.2 kg
Certification Date	26.06.2023
Testing basis	European KEYMARK Scheme for Heat Pumps Rev. 12 (as of 2023-04)

## Model HAWS012B2E7A

Model name	HAWS012B2E7A
Application	Heating (medium temp)
Units	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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	57 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	182 %	137 %
Prated	11.90 kW	13.00 kW
SCOP	4.63	3.55
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.56 kW	11.49 kW
COP Tj = -7°C	2.89	2.20
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	6.20 kW	7.23 kW
COP Tj = +2°C	4.48	3.28
Cdh Tj = +2 °C	0.993	0.995
Pdh Tj = +7°C	5.13 kW	4.84 kW
COP Tj = +7°C	6.67	4.67
Cdh Tj = +7 °C	0.987	0.990
Pdh Tj = 12°C	6.09 kW	6.05 kW
COP Tj = 12°C	10.08	7.38
Cdh Tj = +12 °C	0.983	0.988
Pdh Tj = Tbiv	10.56 kW	11.49 kW
COP Tj = Tbiv	2.89	2.20

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.19 kW	11.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	1.87
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	20 W	20 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.71 kW	1.80 kW
Annual energy consumption Qhe	5346 kWh	7656 kWh

## Model HAWS014B2E7A

Model name	HAWS014B2E7A
Application	Heating (medium temp)
Units	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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	57 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	188 %	134 %
Prated	12.30 kW	13.40 kW
SCOP	4.83	3.48
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.91 kW	11.89 kW
COP Tj = -7°C	2.81	2.13
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	6.72 kW	7.23 kW
COP Tj = +2°C	4.50	3.18
Cdh Tj = +2 °C	0.993	0.996
Pdh Tj = +7°C	5.08 kW	4.83 kW
COP Tj = +7°C	6.70	4.70
Cdh Tj = +7 °C	0.987	0.990
Pdh Tj = 12°C	6.05 kW	6.03 kW
COP Tj = 12°C	10.15	7.41
Cdh Tj = +12 °C	0.983	0.988
Pdh Tj = Tbiv	10.91 kW	11.89 kW
COP Tj = Tbiv	2.81	2.13

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.22 kW	11.49 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.60	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	20 W	20 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.08 kW	1.91 kW
Annual energy consumption Qhe	5344 kWh	8108 kWh

## Model HAWS016B2E7A

Model name	HAWS016B2E7A
Application	Heating (medium temp)
Units	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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	56 dB(A)	57 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	188 %	131 %
Prated	12.50 kW	13.80 kW
SCOP	4.83	3.40
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.10 kW	12.19 kW
COP Tj = -7°C	2.84	2.07
Cdh Tj = -7 °C	0.997	0.998
Pdh Tj = +2°C	7.11 kW	7.46 kW
COP Tj = +2°C	4.53	3.16
Cdh Tj = +2 °C	0.994	0.996
Pdh Tj = +7°C	4.96 kW	4.66 kW
COP Tj = +7°C	6.59	4.61
Cdh Tj = +7 °C	0.987	0.990
Pdh Tj = 12°C	6.09 kW	6.08 kW
COP Tj = 12°C	9.98	7.50
Cdh Tj = +12 °C	0.984	0.988
Pdh Tj = Tbiv	11.10 kW	12.19 kW
COP Tj = Tbiv	2.84	2.07

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.68 kW	11.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.69	1.78
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.997	0.998
WTOL	65 °C	65 °C
Poff	10 W	10 W
PTO	20 W	20 W
PSB	10 W	10 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.82 kW	2.42 kW
Annual energy consumption Qhe	5430 kWh	8479 kWh