

## Subtype NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-08-1PH, NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-10-1PH

Certificate Holder	Ningbo AUX Electric Co., Ltd
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City	Ningbo Zhejiang
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-08-1PH, NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-10-1PH
Registration number	011-1W0904
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.45 kg
Certification Date	21.10.2024
Testing basis	HP KEYMARK certification scheme rules V14

## Model NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-08-1PH

Model name	NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-08-1PH
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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	8.40 kW	8.30 kW
El input	1.62 kW	2.60 kW
COP	5.20	3.19

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	200 %	132 %
Prated	8.10 kW	6.60 kW
SCOP	5.08	3.38
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.17 kW	5.84 kW
COP Tj = -7°C	3.35	2.16
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.36 kW	3.55 kW
COP Tj = +2°C	5.09	3.30
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.80 kW	2.28 kW
COP Tj = +7°C	6.82	4.34
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.25 kW	1.02 kW
COP Tj = 12°C	8.35	5.33
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.17 kW	5.84 kW
COP Tj = Tbiv	3.35	2.16
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.44 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.04	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.66 kW	1.70 kW
Annual energy consumption Qhe	3294 kWh	4035 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
$\eta_s$	270 %	169 %
Prated	8.10 kW	7.60 kW
SCOP	6.82	4.29
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	7.80 kW	7.30 kW
COP Tj = +2°C	3.98	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.21 kW	4.89 kW
COP Tj = +7°C	6.26	3.92
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.31 kW	2.17 kW
COP Tj = 12°C	9.23	5.55
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.21 kW	4.89 kW
COP Tj = Tbiv	6.26	3.92

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.80 kW	7.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.98	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.30 kW	0.30 kW
Annual energy consumption Qhe	1587 kWh	2368 kWh

## Model NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-10-1PH

Model name	NETSU AS-NET-IDU-100-3PH/AS-NET-ODU-10-1PH
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer, Warmer Climate
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	10.00 kW	10.00 kW
El input	2.00 kW	3.23 kW
COP	5.00	3.10

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	198 %	135 %
Prated	9.20 kW	7.70 kW
SCOP	5.07	3.44
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.14 kW	6.81 kW
COP Tj = -7°C	3.17	2.03
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.95 kW	4.15 kW
COP Tj = +2°C	5.02	3.46
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	3.18 kW	2.67 kW
COP Tj = +7°C	6.60	4.71
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.42 kW	1.18 kW
COP Tj = 12°C	8.33	7.01
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.14 kW	6.81 kW
COP Tj = Tbiv	3.17	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.40 kW	5.23 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.86	1.63
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.80 kW	2.47 kW
Annual energy consumption Qhe	3752 kWh	4618 kWh

## EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

## EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	266 %	176 %
Prated	8.60 kW	8.60 kW
SCOP	6.72	4.48
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.20 kW	8.20 kW
COP Tj = +2°C	3.84	2.59
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	5.53 kW	5.53 kW
COP Tj = +7°C	6.18	4.10
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.46 kW	2.53 kW
COP Tj = 12°C	9.04	5.82
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	5.53 kW	5.53 kW
COP Tj = Tbiv	6.18	4.10

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.20 kW	8.20 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.59
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	20 W	20 W
PTO	30 W	30 W
PSB	20 W	20 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.40 kW	0.40 kW
Annual energy consumption Qhe	1709 kWh	2567 kWh