

## Subtype Acond Grandis-N

Certificate Holder	Acond a.s.
Address	Štěrboholská 1434/102a
ZIP	102 00
City	Hostivař, Praha
Country	CZ
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	Acond Grandis-N
Registration number	037-0102-22
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.65 kg
Certification Date	07.12.2022
Testing basis	HP Keymark scheme rules rev. no. 10
Testing laboratory	SZU Brno, CZ

## Model Acond Grandis-N

Model name	Acond Grandis-N
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	3.05 kW	3.30 kW
El input	0.55 kW	1.01 kW
COP	5.54	3.26

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	0 dB(A)	46 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	212 %	159 %
Prated	4.20 kW	4.00 kW
SCOP	5.38	4.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.72 kW	3.54 kW
COP Tj = -7°C	3.51	2.45
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	2.26 kW	2.15 kW
COP Tj = +2°C	5.25	3.98
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	1.52 kW	1.45 kW
COP Tj = +7°C	6.81	5.29
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.81 kW	1.75 kW
COP Tj = 12°C	9.14	7.16
Cdh Tj = +12 °C	0.953	0.957
Pdh Tj = Tbiv	4.20 kW	4.00 kW
COP Tj = Tbiv	3.02	2.15
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.20 kW	4.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.02	2.15
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	16 W
PTO	15 W	16 W
PSB	15 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1613 kWh	2040 kWh

## Model Acond Grandis-PN

Model name	Acond Grandis-PN
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	n/a
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	4.10 kW	4.20 kW
El input	0.76 kW	1.32 kW
COP	5.41	3.18

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	0 dB(A)	46 dB(A)

### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	197 %	137 %
Prated	6.00 kW	5.70 kW
SCOP	4.99	3.50
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.31 kW	5.04 kW
COP Tj = -7°C	2.90	1.90
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	3.23 kW	3.07 kW
COP Tj = +2°C	4.70	3.30
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	2.08 kW	1.97 kW
COP Tj = +7°C	7.30	5.29
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	1.81 kW	1.75 kW
COP Tj = 12°C	9.14	7.16
Cdh Tj = +12 °C	0.953	0.957
Pdh Tj = Tbiv	5.31 kW	5.04 kW
COP Tj = Tbiv	2.90	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.50 kW	4.45 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.90	1.80
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	15 W	16 W
PTO	15 W	16 W
PSB	15 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.50 kW	1.25 kW
Annual energy consumption Qhe	2479 kWh	3363 kWh

## Model Acond Grandis-N SP

Model name	Acond Grandis-N SP
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	3.05 kW	3.30 kW
El input	0.55 kW	1.01 kW
COP	5.54	3.26

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	0 dB(A)	46 dB(A)

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COP Tj = +7°C	6.81	5.29
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PTO	15 W	16 W
PSB	15 W	16 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1613 kWh	2040 kWh

## Model Acond Grandis-PN SP

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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

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