

Subtype NIMBUS 80 S - FLEX-H

Certificate Holder	Ariston Thermo Group
Address	Viale Aristide Merloni 45
ZIP	I-60044
City	Fabriano (AN)
Country	IT
Certification Body	ICIM S.p.A.
Subtype title	NIMBUS 80 S - FLEX-H
Registration number	ICIM-PDC-000242
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	12.02.2024
Testing basis	V12

Model NIMBUS FLEX-H 80 S NET R32

Model name	NIMBUS FLEX-H 80 S NET R32
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	141 %
COP	3.30
Heating up time	01:15 h:min
Standby power input	36.0 W
Reference hot water temperature	53 °C
Mixed water at 40°C	256 l

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	8.00 kW	5.80 kW
El input	1.67 kW	1.97 kW
COP	4.80	2.95

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.26 kW	1.49 kW
Cooling capacity	7.00	7.00
EER	3.10	4.70

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)

Sound power level outdoor	56 dB(A)	56 dB(A)
EN 14825 Average Climate		
	Low temperature	Medium temperature
P _{designh}	8.37 kW	7.62 kW
η _s	195 %	140 %
Prated	8.37 kW	7.62 kW
SCOP	4.95	3.57
T _{biv}	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P _{dh} T _j = -7°C	7.40 kW	6.74 kW
COP T _j = -7°C	3.10	2.29
C _{dh} T _j = -7 °C	0.994	0.995
P _{dh} T _j = +2°C	4.54 kW	4.22 kW
COP T _j = +2°C	4.80	3.51
C _{dh} T _j = +2 °C	0.985	0.988
P _{dh} T _j = +7°C	2.94 kW	2.74 kW
COP T _j = +7°C	6.61	4.36
C _{dh} T _j = +7 °C	0.969	0.978
P _{dh} T _j = 12°C	3.16 kW	3.28 kW
COP T _j = 12°C	8.15	6.50
C _{dh} T _j = +12 °C	0.964	0.972
P _{dh} T _j = T _{biv}	7.40 kW	6.74 kW
COP T _j = T _{biv}	3.10	2.29
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	5.51 kW	4.90 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.22	1.51
C _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	0.994	0.995
WTOL	60 °C	60 °C
P _{off}	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Q _{he}	3491 kWh	4409 kWh
EN 12102-1 Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)
EN 14825 Colder Climate		

	Low temperature	Medium temperature
Pdesignh	11.78 kW	11.53 kW
η_s	154 %	121 %
Prated	11.78 kW	11.53 kW
SCOP	3.92	3.11
Tbiv	-7 °C	-7 °C
TOL	-20 °C	-20 °C
Pdh Tj = -7°C	7.13 kW	6.98 kW
COP Tj = -7°C	3.47	2.73
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.51 kW	4.20 kW
COP Tj = +2°C	5.32	4.07
Cdh Tj = +2 °C	0.983	0.986
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.967	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.965	0.972
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.73
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	11.16 kW	10.93 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	7400 kWh	9141 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	37 dB(A)	37 dB(A)
Sound power level outdoor	56 dB(A)	56 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
Pdesignh	4.93 kW	4.48 kW
η_s	247 %	152 %

Prated	4.91 kW	4.30 kW
SCOP	6.25	3.87
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.91 kW	4.30 kW
COP Tj = +2°C	4.05	2.50
Cdh Tj = +2 °C	0.988	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW
COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.974	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.966	0.976
Pdh Tj = Tbiv	4.91 kW	4.30 kW
COP Tj = Tbiv	4.05	2.50
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.51 kW	4.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.22	1.51
WTOL	60 °C	60 °C
Poff	14 W	14 W
PTO	14 W	14 W
PSB	14 W	14 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1049 kWh	1483 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7 kW	
SEER	4.64	
Pdc Tj = 35°C	7 kW	
EER Tj = 35°C	3.1	
Pdc Tj = 30°C	5.17 kW	
EER Tj = 30°C	4.13	
Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	

PSB	14 W
PCK	0 W
Annual energy consumption Qce	1381 kWh

Model NIMBUS FLEX-H 80 S-T NET R32

Model name	NIMBUS FLEX-H 80 S-T NET R32
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	L
Efficiency η_{DHW}	141 %
COP	3.30
Heating up time	01:15 h:min
Standby power input	36.0 W
Reference hot water temperature	53 °C
Mixed water at 40°C	256 l

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Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
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Cdc Tj = 30 °C	0.99	
Pdc Tj = 25°C	3.32 kW	
EER Tj = 25°C	4.89	
Cdc Tj = 25 °C	0.98	
Pdc Tj = 20°C	3.19 kW	
EER Tj = 20°C	6.85	
Cdc Tj = 20 °C	0.97	
Poff	14 W	
PTO	14 W	

PSB	14 W
PCK	0 W
Annual energy consumption Qce	1381 kWh