

## Subtype NIMBUS/ARIANEXT/AEROTOP/ENERGION 80 S - Plus

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/ARIANEXT/AEROTOP/ENERGION 80 S - Plus
Registration number	ICIM-PDC-000120
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	05.07.2022
Testing basis	Heat Pump KEYMARK rev9

## Model NIMBUS PLUS 80 S NET R32

Model name	NIMBUS PLUS 80 S NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 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 <sub>designh</sub>	8.37 kW	7.62 kW
η <sub>s</sub>	195 %	140 %
P <sub>rated</sub>	8.37 kW	7.62 kW
SCOP	4.95	3.57
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.40 kW	6.74 kW
COP T <sub>j</sub> = -7°C	3.10	2.29
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.994	0.995
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.54 kW	4.22 kW
COP T <sub>j</sub> = +2°C	4.80	3.51
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.986	0.989
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.94 kW	2.74 kW
COP T <sub>j</sub> = +7°C	6.61	4.36
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.969	0.978
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.16 kW	3.28 kW
COP T <sub>j</sub> = 12°C	8.15	6.50
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.965	0.973

Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
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	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3490 kWh	4405 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
$\eta_s$	154 %	120 %
Prated	11.78 kW	11.53 kW
SCOP	3.93	3.08
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	0.984	0.987
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.968	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.966	0.973
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.70

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	7398 kWh	9226 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
$\eta_s$	242 %	151 %
Prated	4.93 kW	4.48 kW
SCOP	6.14	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2 °C	4.93 kW	4.48 kW
COP Tj = +2 °C	4.05	2.53
Cdh Tj = +2 °C	0.989	0.992
Pdh Tj = +7 °C	3.10 kW	2.81 kW
COP Tj = +7 °C	5.70	3.08
Cdh Tj = +7 °C	0.975	0.985
Pdh Tj = 12 °C	3.28 kW	3.16 kW
COP Tj = 12 °C	7.86	5.45
Cdh Tj = +12 °C	0.967	0.977
Pdh Tj = Tbiv	4.93 kW	4.48 kW
COP Tj = Tbiv	4.05	2.53
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	1073 kWh	1557 kWh

## Model NIMBUS PLUS 80 S-T NET R32

Model name	NIMBUS PLUS 80 S-T NET R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 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 <sub>designh</sub>	8.37 kW	7.62 kW
η <sub>s</sub>	195 %	140 %
P <sub>rated</sub>	8.37 kW	7.62 kW
SCOP	4.95	3.57
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.40 kW	6.74 kW
COP T <sub>j</sub> = -7°C	3.10	2.29
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.994	0.995
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.54 kW	4.22 kW
COP T <sub>j</sub> = +2°C	4.80	3.51
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.986	0.989
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.94 kW	2.74 kW
COP T <sub>j</sub> = +7°C	6.61	4.36
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.969	0.978
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.16 kW	3.28 kW
COP T <sub>j</sub> = 12°C	8.15	6.50
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.965	0.973

Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
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	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3490 kWh	4405 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
$\eta_s$	154 %	120 %
Prated	11.78 kW	11.53 kW
SCOP	3.93	3.08
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	0.984	0.987
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.968	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.966	0.973
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.70

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	7398 kWh	9226 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
$\eta_s$	242 %	151 %
Prated	4.93 kW	4.48 kW
SCOP	6.14	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.93 kW	4.48 kW
COP Tj = +2°C	4.05	2.53
Cdh Tj = +2 °C	0.989	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW
COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.975	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.967	0.977
Pdh Tj = Tbiv	4.93 kW	4.48 kW
COP Tj = Tbiv	4.05	2.53
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	1073 kWh	1557 kWh

## Model ARIANEXT PLUS 80 S LINK R32

Model name	ARIANEXT PLUS 80 S LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 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 <sub>designh</sub>	8.37 kW	7.62 kW
η <sub>s</sub>	195 %	140 %
P <sub>rated</sub>	8.37 kW	7.62 kW
SCOP	4.95	3.57
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.40 kW	6.74 kW
COP T <sub>j</sub> = -7°C	3.10	2.29
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.994	0.995
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.54 kW	4.22 kW
COP T <sub>j</sub> = +2°C	4.80	3.51
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.986	0.989
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.94 kW	2.74 kW
COP T <sub>j</sub> = +7°C	6.61	4.36
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.969	0.978
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.16 kW	3.28 kW
COP T <sub>j</sub> = 12°C	8.15	6.50
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.965	0.973

Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
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	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3490 kWh	4405 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
$\eta_s$	154 %	120 %
Prated	11.78 kW	11.53 kW
SCOP	3.93	3.08
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	0.984	0.987
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.968	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.966	0.973
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.70

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	7398 kWh	9226 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
$\eta_s$	242 %	151 %
Prated	4.93 kW	4.48 kW
SCOP	6.14	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2 °C	4.93 kW	4.48 kW
COP Tj = +2 °C	4.05	2.53
Cdh Tj = +2 °C	0.989	0.992
Pdh Tj = +7 °C	3.10 kW	2.81 kW
COP Tj = +7 °C	5.70	3.08
Cdh Tj = +7 °C	0.975	0.985
Pdh Tj = 12 °C	3.28 kW	3.16 kW
COP Tj = 12 °C	7.86	5.45
Cdh Tj = +12 °C	0.967	0.977
Pdh Tj = Tbiv	4.93 kW	4.48 kW
COP Tj = Tbiv	4.05	2.53
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	1073 kWh	1557 kWh

## Model ARIANEXT PLUS 80 S-T LINK R32

Model name	ARIANEXT PLUS 80 S-T LINK R32
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 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 <sub>designh</sub>	8.37 kW	7.62 kW
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COP T <sub>j</sub> = +7°C	6.61	4.36
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.969	0.978
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.16 kW	3.28 kW
COP T <sub>j</sub> = 12°C	8.15	6.50
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.965	0.973

Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
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	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3490 kWh	4405 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
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ηs	154 %	120 %
Prated	11.78 kW	11.53 kW
SCOP	3.93	3.08
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	0.984	0.987
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.968	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.966	0.973
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.70

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	7398 kWh	9226 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
$\eta_s$	242 %	151 %
Prated	4.93 kW	4.48 kW
SCOP	6.14	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2 °C	4.93 kW	4.48 kW
COP Tj = +2 °C	4.05	2.53
Cdh Tj = +2 °C	0.989	0.992
Pdh Tj = +7 °C	3.10 kW	2.81 kW
COP Tj = +7 °C	5.70	3.08
Cdh Tj = +7 °C	0.975	0.985
Pdh Tj = 12 °C	3.28 kW	3.16 kW
COP Tj = 12 °C	7.86	5.45
Cdh Tj = +12 °C	0.967	0.977
Pdh Tj = Tbiv	4.93 kW	4.48 kW
COP Tj = Tbiv	4.05	2.53
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Q <sub>he</sub>	1073 kWh	1557 kWh

## Model AEROTOP SPLIT 08.2 M-RX

Model name	AEROTOP SPLIT 08.2 M-RX
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 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 <sub>designh</sub>	8.37 kW	7.62 kW
η <sub>s</sub>	195 %	140 %
P <sub>rated</sub>	8.37 kW	7.62 kW
SCOP	4.95	3.57
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.40 kW	6.74 kW
COP T <sub>j</sub> = -7°C	3.10	2.29
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.994	0.995
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.54 kW	4.22 kW
COP T <sub>j</sub> = +2°C	4.80	3.51
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.986	0.989
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.94 kW	2.74 kW
COP T <sub>j</sub> = +7°C	6.61	4.36
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.969	0.978
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.16 kW	3.28 kW
COP T <sub>j</sub> = 12°C	8.15	6.50
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.965	0.973

Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
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	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3490 kWh	4405 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
$\eta_s$	154 %	120 %
Prated	11.78 kW	11.53 kW
SCOP	3.93	3.08
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	0.984	0.987
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.968	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.966	0.973
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.70

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	7398 kWh	9226 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
$\eta_s$	242 %	151 %
Prated	4.93 kW	4.48 kW
SCOP	6.14	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2 °C	4.93 kW	4.48 kW
COP Tj = +2 °C	4.05	2.53
Cdh Tj = +2 °C	0.989	0.992
Pdh Tj = +7 °C	3.10 kW	2.81 kW
COP Tj = +7 °C	5.70	3.08
Cdh Tj = +7 °C	0.975	0.985
Pdh Tj = 12 °C	3.28 kW	3.16 kW
COP Tj = 12 °C	7.86	5.45
Cdh Tj = +12 °C	0.967	0.977
Pdh Tj = Tbiv	4.93 kW	4.48 kW
COP Tj = Tbiv	4.05	2.53
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1073 kWh	1557 kWh

## Model AEROTOP SPLIT 08.2 M-R

Model name	AEROTOP SPLIT 08.2 M-R
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C
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 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 <sub>designh</sub>	8.37 kW	7.62 kW
η <sub>s</sub>	195 %	140 %
P <sub>rated</sub>	8.37 kW	7.62 kW
SCOP	4.95	3.57
T <sub>biv</sub>	-7 °C	-7 °C
TOL	-20 °C	-20 °C
P <sub>dh</sub> T <sub>j</sub> = -7°C	7.40 kW	6.74 kW
COP T <sub>j</sub> = -7°C	3.10	2.29
C <sub>dh</sub> T <sub>j</sub> = -7 °C	0.994	0.995
P <sub>dh</sub> T <sub>j</sub> = +2°C	4.54 kW	4.22 kW
COP T <sub>j</sub> = +2°C	4.80	3.51
C <sub>dh</sub> T <sub>j</sub> = +2 °C	0.986	0.989
P <sub>dh</sub> T <sub>j</sub> = +7°C	2.94 kW	2.74 kW
COP T <sub>j</sub> = +7°C	6.61	4.36
C <sub>dh</sub> T <sub>j</sub> = +7 °C	0.969	0.978
P <sub>dh</sub> T <sub>j</sub> = 12°C	3.16 kW	3.28 kW
COP T <sub>j</sub> = 12°C	8.15	6.50
C <sub>dh</sub> T <sub>j</sub> = +12 °C	0.965	0.973

Pdh Tj = Tbiv	7.40 kW	6.74 kW
COP Tj = Tbiv	3.10	2.29
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	0.994	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	2.86 kW	2.72 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	3490 kWh	4405 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
$\eta_s$	154 %	120 %
Prated	11.78 kW	11.53 kW
SCOP	3.93	3.08
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	0.984	0.987
Pdh Tj = +7°C	3.06 kW	2.84 kW
COP Tj = +7°C	7.24	5.15
Cdh Tj = +7 °C	0.968	0.975
Pdh Tj = 12°C	3.18 kW	3.24 kW
COP Tj = 12°C	8.02	6.47
Cdh Tj = +12 °C	0.966	0.973
Pdh Tj = Tbiv	7.13 kW	6.98 kW
COP Tj = Tbiv	3.47	2.70

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	7398 kWh	9226 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
$\eta_s$	242 %	151 %
Prated	4.93 kW	4.48 kW
SCOP	6.14	3.84
Tbiv	2 °C	2 °C
TOL	-20 °C	-20 °C
Pdh Tj = +2°C	4.93 kW	4.48 kW
COP Tj = +2°C	4.05	2.53
Cdh Tj = +2 °C	0.989	0.992
Pdh Tj = +7°C	3.10 kW	2.81 kW
COP Tj = +7°C	5.70	3.08
Cdh Tj = +7 °C	0.975	0.985
Pdh Tj = 12°C	3.28 kW	3.16 kW
COP Tj = 12°C	7.86	5.45
Cdh Tj = +12 °C	0.967	0.977
Pdh Tj = Tbiv	4.93 kW	4.48 kW
COP Tj = Tbiv	4.05	2.53
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	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Backup Heater	4.00 kW	4.00 kW
Annual energy consumption Qhe	1073 kWh	1557 kWh