

Subtype Samsung EHS LNHT 12&14kW(WMH/TIH 200L)

Certificate Holder	Samsung Electronics Air Conditioner Europe B.V.
Address	Evert van de Beekstraat 310
ZIP	1118 CX
City	Schiphol
Country	NL
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	Samsung EHS LNHT 12&14kW(WMH/TIH 200L)
Registration number	011-1W0806
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	3.3 kg
Certification Date	25.06.2024
Testing basis	European KEYMARK Scheme for Heat Pumps rev.14 (as of 2024-04)

Model AE120BXYDEG/EU AE200DNXMPK/EU

Model name	AE120BXYDEG/EU AE200DNXMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	193 %	148 %

Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDEG/EU AE200DNWMPK/EU

Model name	AE120BXYDEG/EU AE200DNWMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

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
η_S	193 %	148 %

Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDEG/EU AE160DNZMPK/EU

Model name	AE120BXYDEG/EU AE160DNZMPK/EU
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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDEG/EU AE160DNYMPK/EU

Model name	AE120BXYDEG/EU AE160DNYMPK/EU
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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

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
η_s	193 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDGG/EU AE200DNXMPK/EU

Model name	AE120BXYDGG/EU AE200DNXMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	193 %	148 %

Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDGG/EU AE200DNWMPK/EU

Model name	AE120BXYDGG/EU AE200DNWMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

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
η_S	193 %	148 %

Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDGG/EU AE160DNZMPK/EU

Model name	AE120BXYDGG/EU AE160DNZMPK/EU
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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDGG/EU AE160DNYMPK/EU

Model name	AE120BXYDGG/EU AE160DNYMPK/EU
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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

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
η_s	193 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.70 kW	4.70 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE140BXYDEG/EU AE200DNXMPK/EU

Model name	AE140BXYDEG/EU AE200DNXMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	190 %	147 %

Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDEG/EU AE200DNWMPK/EU

Model name	AE140BXYDEG/EU AE200DNWMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

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
η_S	190 %	147 %

Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDEG/EU AE160DNZMPK/EU

Model name	AE140BXYDEG/EU AE160DNZMPK/EU
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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDEG/EU AE160DNYMPK/EU

Model name	AE140BXYDEG/EU AE160DNYMPK/EU
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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

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
η_s	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDGG/EU AE200DNXMPK/EU

Model name	AE140BXYDGG/EU AE200DNXMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_S	190 %	147 %

Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDGG/EU AE200DNWMPK/EU

Model name	AE140BXYDGG/EU AE200DNWMPK/EU
Application	Heating + DHW + low 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 16147 | Average Climate**

Declared load profile	L
Efficiency η_{DHW}	148 %
COP	3.40
Heating up time	1:03 h:min
Standby power input	45.0 W
Reference hot water temperature	49.0 °C
Mixed water at 40°C	220 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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

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
η_S	190 %	147 %

Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDGG/EU AE160DNZMPK/EU

Model name	AE140BXYDGG/EU AE160DNZMPK/EU
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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDGG/EU AE160DNYMPK/EU

Model name	AE140BXYDGG/EU AE160DNYMPK/EU
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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

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
η_s	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900

Pdh Tj = +7°C	4.80 kW	4.80 kW
COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE120BXYDEG/EU MIM-E03FN

Model name	AE120BXYDEG/EU MIM-E03FN
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	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	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	139 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE120BXYDGG/EU MIM-E03FN

Model name	AE120BXYDGG/EU MIM-E03FN
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.35 kW	3.53 kW
COP	5.11	3.40

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	139 %	148 %
Prated	12.60 kW	12.60 kW
SCOP	4.90	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.10	2.30
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.80 kW	6.80 kW
COP Tj = +2°C	4.70	3.70
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.70 kW	4.70 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.70 kW	4.70 kW
COP Tj = 12°C	8.60	6.30
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.10	2.30
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.30 kW	12.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.70	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5277 kWh	6862 kWh

Model AE140BXYDEG/EU MIM-E03FN

Model name	AE140BXYDEG/EU MIM-E03FN
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	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	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.00 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE140BXYDGG/EU MIM-E03FN

Model name	AE140BXYDGG/EU MIM-E03FN
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	14.00 kW	14.00 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	147 %
Prated	13.60 kW	13.60 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.03 kW
COP Tj = -7°C	2.90	2.28
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	7.32 kW	7.30 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.80 kW	4.80 kW

COP Tj = +7°C	6.60	5.00
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.80 kW	4.80 kW
COP Tj = 12°C	8.60	6.28
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.03 kW	12.00 kW
COP Tj = Tbiv	2.90	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.30 kW	13.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2.00
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 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	5796 kWh	7472 kWh

Model AE120BXYDEG/EU MIM-E03GN

Model name	AE120BXYDEG/EU MIM-E03GN
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	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	12 kW	12 kW
El input	2.353 kW	3.53 kW
COP	5.11	3.4

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	148 %
Prated	12.6 kW	12.6 kW
SCOP	4.9	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.1	2.3
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	6.8 kW	6.8 kW
COP Tj = +2°C	4.7	3.7
Cdh Tj = +2 °C	0.9	0.9

Pdh Tj = +7°C	4.7 kW	4.7 kW
COP Tj = +7°C	6.6	5
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	4.7 kW	4.7 kW
COP Tj = 12°C	8.6	6.3
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.1	2.3
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.3 kW	12.3 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.3 kW	0.3 kW
Annual energy consumption Qhe	5277 kWh	6862 kWh

Model AE120BXYDGG/EU MIM-E03GN

Model name	AE120BXYDGG/EU MIM-E03GN
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	12 kW	12 kW
El input	2.353 kW	3.53 kW
COP	5.11	3.4

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	148 %
Prated	12.6 kW	12.6 kW
SCOP	4.9	3.78
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.15 kW	11.15 kW
COP Tj = -7°C	3.1	2.3
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	6.8 kW	6.8 kW
COP Tj = +2°C	4.7	3.7
Cdh Tj = +2 °C	0.9	0.9

Pdh Tj = +7°C	4.7 kW	4.7 kW
COP Tj = +7°C	6.6	5
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	4.7 kW	4.7 kW
COP Tj = 12°C	8.6	6.3
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	11.15 kW	11.15 kW
COP Tj = Tbiv	3.1	2.3
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.3 kW	12.3 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.7	2.05
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.3 kW	0.3 kW
Annual energy consumption Qhe	5277 kWh	6862 kWh

Model AE140BXYDEG/EU MIM-E03GN

Model name	AE140BXYDEG/EU MIM-E03GN
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	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	14 kW	14 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	147 %
Prated	13.6 kW	13.6 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.03 kW
COP Tj = -7°C	2.9	2.28
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	7.32 kW	7.32 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.9	0.9

Pdh Tj = +7°C	4.8 kW	4.8 kW
COP Tj = +7°C	6.6	5
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	4.8 kW	4.8 kW
COP Tj = 12°C	8.6	6.28
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	12.03 kW	12.03 kW
COP Tj = Tbiv	2.9	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.3 kW	13.3 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.3 kW	0.3 kW
Annual energy consumption Qhe	5796 kWh	7472 kWh

Model AE140BXYDGG/EU MIM-E03GN

Model name	AE140BXYDGG/EU MIM-E03GN
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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	14 kW	14 kW
El input	2.77 kW	4.18 kW
COP	5.05	3.35

EN 12102-1 | Average Climate

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

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	147 %
Prated	13.6 kW	13.6 kW
SCOP	4.83	3.75
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.03 kW	12.03 kW
COP Tj = -7°C	2.9	2.28
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	7.32 kW	7.32 kW
COP Tj = +2°C	4.65	3.65
Cdh Tj = +2 °C	0.9	0.9

Pdh Tj = +7°C	4.8 kW	4.8 kW
COP Tj = +7°C	6.6	5
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	4.8 kW	4.8 kW
COP Tj = 12°C	8.6	6.28
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	12.03 kW	12.03 kW
COP Tj = Tbiv	2.9	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.3 kW	13.3 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	2
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.9	0.9
WTOL	70 °C	70 °C
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.3 kW	0.3 kW
Annual energy consumption Qhe	5796 kWh	7472 kWh