Subtype Ecodan Power Inverter 10/12-300D AA

Certificate Holder	Mitsubishi Electric Air Conditioning Systems Europe LTD
Address	Nettlehill Road, Houston Industrial Estate
ZIP	EH54 5EQ
City	Livingston
Country	GB
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	Ecodan Power Inverter 10/12-300D AA
Registration number	037-0025-20
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.6 kg
Certification Date	06.10.2020
Testing basis	HP Keymark scheme rules rev. no. 6
Testing laboratory	SZU Brno, CZ

Model PUD-SWM100VAA(-BS) + E*ST30D-M*D	
Model name	PUD-SWM100VAA(-BS) + E*ST30D-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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 kW	8 kW
El input	1.6 kW	3.08 kW
COP	5	2.6

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	178 %	131 %
Prated	10 kW	10 kW

SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.1	2
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	5.7 kW	5.7 kW
COP Tj = +2°C	4.46	3.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.4 kW	5.2 kW
COP Tj = +7°C	5.68	4.77
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.5 kW	3.6 kW
COP Tj = 12°C	7.76	6.92
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.1	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.57 kW	8.57 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	1.93
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.43 kW	1.43 kW
Annual energy consumption Qhe	4564 kWh	6173 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	221 %	131 %
Prated	10 kW	10 kW
SCOP	5.59	3.88
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10.1 kW
COP Tj = +2°C	3.3	1.93
Cdh Tj = +2 °C	1	1

Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	5.16	3.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.4 kW	4.2 kW
COP Tj = 12°C	6.88	5.19
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	10 kW	10.1 kW
COP Tj = Tbiv	3.3	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.9 kW	6.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.6	1.6
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Model PUD-SWM100VAA(-BS) + E*ST30D-*M*D

Model name	PUD-SWM100VAA(-BS) + E*ST30D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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 kW	8 kW
El input	1.6 kW	3.08 kW
COP	5	2.6

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	178 %	131 %
Prated	10 kW	10 kW

SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.1	2
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	5.7 kW	5.7 kW
COP Tj = +2°C	4.46	3.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.4 kW	5.2 kW
COP Tj = +7°C	5.68	4.77
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.5 kW	3.6 kW
COP Tj = 12°C	7.76	6.92
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.1	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.57 kW	8.57 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	1.93
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.43 kW	1.43 kW
Annual energy consumption Qhe	4564 kWh	6173 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	221 %	131 %
Prated	10 kW	10 kW
SCOP	5.59	3.88
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10.1 kW
COP Tj = +2°C	3.3	1.93
Cdh Tj = +2 °C	1	1

Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	5.16	3.32
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.4 kW	4.2 kW
COP Tj = 12°C	6.88	5.19
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	10 kW	10.1 kW
COP Tj = Tbiv	3.3	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.9 kW	6.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.6	1.6
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Model PUD-SWM100YAA(-BS) + E*ST30D-M*D

Model name	PUD-SWM100YAA(-BS) + E*ST30D-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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 kW	8 kW
El input	1.6 kW	3.08 kW
COP	5	2.6

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	177 %	130 %
Prated	10 kW	10 kW

SCOP	4.49	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.1	2
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.7 kW	5.7 kW
COP Tj = +2°C	4.46	3.16
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.4 kW	5.2 kW
COP Tj = +7°C	5.68	4.77
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.5 kW	3.6 kW
COP Tj = 12°C	7.76	6.92
Cdh Tj = +12 °C	0.96	0.96
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.1	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.57 kW	8.57 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	1.93
WTOL	60 °C	60 °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	1.43 kW	1.43 kW
Annual energy consumption Qhe	4602 kWh	6210 kWh

EN 12102-1 | Warmer Climate		
	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Warmer Climate		
	Low temperature	Medium temperature
ηs	218 %	130 %
Prated	10 kW	10 kW
SCOP	5.53	3.85
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10.1 kW
COP Tj = +2°C	3.3	1.93
Cdh Tj = +2 °C	0.99	1

Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	5.16	3.32
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.4 kW	4.2 kW
COP Tj = 12°C	6.88	5.19
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	10 kW	10.1 kW
COP Tj = Tbiv	3.3	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.9 kW	6.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.6	1.6
WTOL	60 °C	60 °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 kW	0 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Model PUD-SWM100YAA(-BS) + E*ST30D-*M*D

Model name	PUD-SWM100YAA(-BS) + E*ST30D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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 kW	8 kW
El input	1.6 kW	3.08 kW
COP	5	2.6

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	177 %	130 %
Prated	10 kW	10 kW

SCOP	4.49	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	8.8 kW	8.8 kW
COP Tj = -7°C	3.1	2
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	5.7 kW	5.7 kW
COP Tj = +2°C	4.46	3.16
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.4 kW	5.2 kW
COP Tj = +7°C	5.68	4.77
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.5 kW	3.6 kW
COP Tj = 12°C	7.76	6.92
Cdh Tj = +12 °C	0.96	0.96
Pdh Tj = Tbiv	8.8 kW	8.8 kW
COP Tj = Tbiv	3.1	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.57 kW	8.57 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.85	1.93
WTOL	60 °C	60 °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	1.43 kW	1.43 kW
Annual energy consumption Qhe	4602 kWh	6210 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	218 %	130 %
Prated	10 kW	10 kW
SCOP	5.53	3.85
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	10 kW	10.1 kW
COP Tj = +2°C	3.3	1.93
Cdh Tj = +2 °C	0.99	1

Pdh Tj = +7°C	6.4 kW	6.4 kW
COP Tj = +7°C	5.16	3.32
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.4 kW	4.2 kW
COP Tj = 12°C	6.88	5.19
Cdh Tj = +12 °C	0.97	0.97
Pdh Tj = Tbiv	10 kW	10.1 kW
COP Tj = Tbiv	3.3	1.93
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.9 kW	6.9 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.6	1.6
WTOL	60 °C	60 °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 kW	0 kW
Annual energy consumption Qhe	2334 kWh	3390 kWh

Model PUD-SWM120VAA(-BS) + E*ST30D-M*D

Model name	PUD-SWM120VAA(-BS) + E*ST30D-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	10 kW	10 kW
El input	2.13 kW	3.77 kW
COP	4.7	2.65

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	177 %	129 %
Prated	12 kW	12 kW

SCOP	4.5	3.3
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.6 kW	10.6 kW
COP Tj = -7°C	2.85	1.94
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.5 kW	6.5 kW
COP Tj = +2°C	4.45	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.6 kW	5.3 kW
COP Tj = +7°C	5.83	4.73
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.4 kW	4.3 kW
COP Tj = 12°C	7.86	6.94
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	10.6 kW	10.6 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.2 kW	10.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.88
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.8 kW	1.8 kW
Annual energy consumption Qhe	5512 kWh	7519 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	217 %	129 %
Prated	12 kW	12 kW
SCOP	5.49	3.83
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	12 kW	12 kW
COP Tj = +2°C	3.24	1.85
Cdh Tj = +2 °C	1	1

Pdh Tj = +7°C	7.7 kW	7.7 kW
COP Tj = +7°C	4.9	3.17
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.4 kW	5.2 kW
COP Tj = 12°C	6.88	5.31
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12 kW	12 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.57	1.57
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh

Model PUD-SWM120VAA(-BS) + E*ST30D-*M*D

Model name	PUD-SWM120VAA(-BS) + E*ST30D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	10 kW	10 kW
El input	2.13 kW	3.77 kW
COP	4.7	2.65

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	177 %	129 %
Prated	12 kW	12 kW

SCOP	4.5	3.3
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.6 kW	10.6 kW
COP Tj = -7°C	2.85	1.94
Cdh Tj = -7 °C	1	1
Pdh Tj = +2°C	6.5 kW	6.5 kW
COP Tj = +2°C	4.45	3.1
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.6 kW	5.3 kW
COP Tj = +7°C	5.83	4.73
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	4.4 kW	4.3 kW
COP Tj = 12°C	7.86	6.94
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	10.6 kW	10.6 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.2 kW	10.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.88
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.8 kW	1.8 kW
Annual energy consumption Qhe	5512 kWh	7519 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	217 %	129 %
Prated	12 kW	12 kW
SCOP	5.49	3.83
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	12 kW	12 kW
COP Tj = +2°C	3.24	1.85
Cdh Tj = +2 °C	1	1

Pdh Tj = +7°C	7.7 kW	7.7 kW
COP Tj = +7°C	4.9	3.17
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.4 kW	5.2 kW
COP Tj = 12°C	6.88	5.31
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	12 kW	12 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.57	1.57
WTOL	60 °C	60 °C
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh

Model PUD-SWM120YAA(-BS) + E*ST30D-M*D

Model name	PUD-SWM120YAA(-BS) + E*ST30D-M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
COP	2.93
Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	417 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	10 kW	10 kW
El input	2.13 kW	3.77 kW
COP	4.7	2.65

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	176 %	128 %
Prated	12 kW	12 kW

SCOP	4.47	3.28
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	10.6 kW	10.6 kW
COP Tj = -7°C	2.85	1.94
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	6.5 kW	6.5 kW
COP Tj = +2°C	4.45	3.1
Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.6 kW	5.3 kW
COP Tj = +7°C	5.83	4.73
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.4 kW	4.3 kW
COP Tj = 12°C	7.86	6.94
Cdh Tj = +12 °C	0.96	0.96
Pdh Tj = Tbiv	10.6 kW	10.6 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.2 kW	10.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.88
WTOL	60 °C	60 °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	1.8 kW	1.8 kW
Annual energy consumption Qhe	5548 kWh	7555 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	215 %	128 %
Prated	12 kW	12 kW
SCOP	5.44	3.81
Tbiv	2 °C	2 °C
TOL	-25 °C	-25 °C
Pdh Tj = +2°C	12 kW	12 kW
COP Tj = +2°C	3.24	1.85
Cdh Tj = +2 °C	0.99	1

Pdh Tj = +7°C	7.7 kW	7.7 kW
COP Tj = +7°C	4.9	3.17
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	4.4 kW	5.2 kW
COP Tj = 12°C	6.88	5.31
Cdh Tj = +12 °C	0.97	0.98
Pdh Tj = Tbiv	12 kW	12 kW
COP Tj = Tbiv	3.24	1.85
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.57	1.57
WTOL	60 °C	60 °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 kW	0 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh

Model PUD-SWM120YAA(-BS) + E*ST30D-*M*D

Model name	PUD-SWM120YAA(-BS) + E*ST30D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
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	XL
Efficiency ηDHW	121 %
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Heating up time	02:25 h:min
Standby power input	39 W
Reference hot water temperature	52.5 °C
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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 kW	10 kW
El input	2.13 kW	3.77 kW
COP	4.7	2.65

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EN 14825 | Average Climate

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Cdh Tj = +2 °C	0.98	0.99
Pdh Tj = +7°C	5.6 kW	5.3 kW
COP Tj = +7°C	5.83	4.73
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	4.4 kW	4.3 kW
COP Tj = 12°C	7.86	6.94
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Pdh Tj = Tbiv	10.6 kW	10.6 kW
COP Tj = Tbiv	2.85	1.94
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	10.2 kW	10.2 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	1.88
WTOL	60 °C	60 °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	1.8 kW	1.8 kW
Annual energy consumption Qhe	5548 kWh	7555 kWh

EN 12102-1 | Warmer Climate		
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EN 14825 | Warmer Climate		
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Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.57	1.57
WTOL	60 °C	60 °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 kW	0 kW
Annual energy consumption Qhe	2864 kWh	4128 kWh