

**Subtype Ecodan Power Inverter 6/8-200D 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 6/8-200D AA
Registration number	037-0019-20
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.3 kg
Certification Date	30.11.2020
Testing basis	HP Keymark scheme rules rev. no. 6
Testing laboratory	SZU Brno, CZ

**Model PUD-SWM60VAA(-BS) + E\*SD-\*M\*D**

Model name	PUD-SWM60VAA(-BS) + E*SD-*M*D
Application	Heating (medium 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 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	5 kW	5 kW
EI input	1.05 kW	1.89 kW
COP	4.76	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	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	6 kW	6 kW
SCOP	4.46	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	5.3 kW	5.3 kW
COP Tj = -7°C	3.21	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.43	3.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW

COP Tj = +7°C	5.67	4.77
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	7.8	6.74
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	5.3 kW	5.3 kW
COP Tj = Tbiv	3.21	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	5.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	1.98
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	0.92 kW	0.93 kW
Annual energy consumption Qhe	2780 kWh	3722 kWh

**Model PUD-SWM60VAA(-BS) + E\*SD-M\*D**

Model name	PUD-SWM60VAA(-BS) + E*SD-M*D
Application	Heating (medium 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 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	5 kW	5 kW
EI input	1.05 kW	1.89 kW
COP	4.76	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	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	6 kW	6 kW
SCOP	4.46	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	5.3 kW	5.3 kW
COP Tj = -7°C	3.21	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.43	3.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW

COP Tj = +7°C	5.67	4.77
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	7.8	6.74
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	5.3 kW	5.3 kW
COP Tj = Tbiv	3.21	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	5.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	1.98
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	0.92 kW	0.93 kW
Annual energy consumption Qhe	2780 kWh	3722 kWh

**Model PUD-SWM60VAA(-BS) + E\*ST20D-\*M\*D**

Model name	PUD-SWM60VAA(-BS) + E*ST20D-*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	L
Efficiency $\eta_{DHW}$	148 %
COP	3.49
Heating up time	01:47 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	5 kW	5 kW
El input	1.05 kW	1.89 kW
COP	4.76	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	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	6 kW	6 kW

SCOP	4.46	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	5.3 kW	5.3 kW
COP Tj = -7°C	3.21	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.43	3.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	5.67	4.77
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	7.8	6.74
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	5.3 kW	5.3 kW
COP Tj = Tbiv	3.21	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	5.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	1.98
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	0.92 kW	0.93 kW
Annual energy consumption Qhe	2780 kWh	3722 kWh

**Model PUD-SWM60VAA(-BS) + E\*ST20D-M\*D**

Model name	PUD-SWM60VAA(-BS) + E*ST20D-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	L
Efficiency $\eta_{DHW}$	148 %
COP	3.49
Heating up time	01:47 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	5 kW	5 kW
El input	1.05 kW	1.89 kW
COP	4.76	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	55 dB(A)	55 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	175 %	130 %
Prated	6 kW	6 kW

SCOP	4.46	3.33
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	5.3 kW	5.3 kW
COP Tj = -7°C	3.21	2.09
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.43	3.17
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	5.67	4.77
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	7.8	6.74
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	5.3 kW	5.3 kW
COP Tj = Tbiv	3.21	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	5.07 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.92	1.98
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	0.92 kW	0.93 kW
Annual energy consumption Qhe	2780 kWh	3722 kWh

**Model PUD-SWM80VAA(-BS) + E\*SD-\*M\*D**

Model name	PUD-SWM80VAA(-BS) + E*SD-*M*D
Application	Heating (medium 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 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	6 kW	6 kW
EI input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	178 %	131 %
Prated	8 kW	8 kW
SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.45	3.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW

COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3646 kWh	4929 kWh

**Model PUD-SWM80VAA(-BS) + E\*SD-M\*D**

Model name	PUD-SWM80VAA(-BS) + E*SD-M*D
Application	Heating (medium 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 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	6 kW	6 kW
EI input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	178 %	131 %
Prated	8 kW	8 kW
SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.45	3.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW

COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3646 kWh	4929 kWh

**Model PUD-SWM80VAA(-BS) + E\*ST20D-\*M\*D**

Model name	PUD-SWM80VAA(-BS) + E*ST20D-*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	L
Efficiency $\eta_{DHW}$	148 %
COP	3.49
Heating up time	01:47 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	6 kW	6 kW
El input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	178 %	131 %
Prated	8 kW	8 kW

SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.45	3.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3646 kWh	4929 kWh

**Model PUD-SWM80VAA(-BS) + E\*ST20D-M\*D**

Model name	PUD-SWM80VAA(-BS) + E*ST20D-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	L
Efficiency $\eta_{DHW}$	148 %
COP	3.49
Heating up time	01:47 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	6 kW	6 kW
El input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	178 %	131 %
Prated	8 kW	8 kW

SCOP	4.53	3.35
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	1
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.45	3.16
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.98	0.99
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.96	0.97
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3646 kWh	4929 kWh

**Model PUD-SWM80YAA(-BS) + E\*SD-\*M\*D**

Model name	PUD-SWM80YAA(-BS) + E*SD-*M*D
Application	Heating (medium 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 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	6 kW	6 kW
EI input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	130 %
Prated	8 kW	8 kW
SCOP	4.48	3.32
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.44	3.15
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.1 kW	5.3 kW

COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3689 kWh	4976 kWh

**Model PUD-SWM80YAA(-BS) + E\*SD-M\*D**

Model name	PUD-SWM80YAA(-BS) + E*SD-M*D
Application	Heating (medium 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 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	6 kW	6 kW
EI input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	130 %
Prated	8 kW	8 kW
SCOP	4.48	3.32
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.44	3.15
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.1 kW	5.3 kW

COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3689 kWh	4976 kWh

**Model PUD-SWM80YAA(-BS) + E\*ST20D-\*M\*D**

Model name	PUD-SWM80YAA(-BS) + E*ST20D-*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	L
Efficiency $\eta_{DHW}$	148 %
COP	3.49
Heating up time	01:47 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	6 kW	6 kW
El input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	130 %
Prated	8 kW	8 kW

SCOP	4.48	3.32
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.44	3.15
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3689 kWh	4976 kWh

**Model PUD-SWM80YAA(-BS) + E\*ST20D-M\*D**

Model name	PUD-SWM80YAA(-BS) + E*ST20D-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	L
Efficiency $\eta_{DHW}$	148 %
COP	3.49
Heating up time	01:47 h:min
Standby power input	36 W
Reference hot water temperature	52.5 °C
Mixed water at 40°C	278 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	6 kW	6 kW
El input	1.26 kW	2.26 kW
COP	4.76	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	56 dB(A)	56 dB(A)

**EN 14825 | Average Climate**

	Low temperature	Medium temperature
$\eta_s$	176 %	130 %
Prated	8 kW	8 kW

SCOP	4.48	3.32
Tbiv	-7 °C	-7 °C
TOL	-25 °C	-25 °C
Pdh Tj = -7°C	7.1 kW	7.1 kW
COP Tj = -7°C	3	2.03
Cdh Tj = -7 °C	0.99	0.99
Pdh Tj = +2°C	4.7 kW	4.3 kW
COP Tj = +2°C	4.44	3.15
Cdh Tj = +2 °C	0.98	0.98
Pdh Tj = +7°C	5.1 kW	5.3 kW
COP Tj = +7°C	6	4.86
Cdh Tj = +7 °C	0.97	0.98
Pdh Tj = 12°C	3.2 kW	3.1 kW
COP Tj = 12°C	8	6.89
Cdh Tj = +12 °C	0.94	0.95
Pdh Tj = Tbiv	7.1 kW	7.1 kW
COP Tj = Tbiv	3	2.03
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.72 kW	6.7 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	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	1.28 kW	1.3 kW
Annual energy consumption Qhe	3689 kWh	4976 kWh