

## Subtype Ecodan Zubadan (TR) 6/8/10 + 170D 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 Zubadan (TR) 6/8/10 + 170D AA
Registration number	037-0121-23
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	26.04.2023
Testing basis	HP Keymark scheme rules rev. no. 9
Testing laboratory	SZU Brno, CZ

## Model PUZ-SHWM60VAA + EHST17D-\*M\*D

Model name	PUZ-SHWM60VAA + EHST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
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 $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	0.99 kW	1.63 kW
COP	5.05	2.45

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	kW	kW
Cooling capacity		
EER		

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	184 %	129 %
Prated	6 kW	6 kW
SCOP	4.67	3.3
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.31 kW	5.31 kW
COP Tj = -7°C	3.39	2.28
Cdh Tj = -7 °C	0.99	0.994
Pdh Tj = +2°C	4.8 kW	4.4 kW
COP Tj = +2°C	4.76	3.21
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	4.9 kW	4.1 kW
COP Tj = +7°C	5.9	4.2
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.7 kW
COP Tj = 12°C	6.52	5.87
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	2.74	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	2655 kWh	3761 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	kW	kW
SEER		
Pdc Tj = 35°C	kW	kW
EER Tj = 35°C		
Cdc Tj = 35 °C		

Pdc Tj = 30°C	kW	kW
EER Tj = 30°C		
Cdc Tj = 30 °C		
Pdc Tj = 25°C	kW	kW
EER Tj = 25°C		
Cdc Tj = 25 °C		
Pdc Tj = 20°C	kW	kW
EER Tj = 20°C		
Cdc Tj = 20 °C		
Poff	W	W
PTO	W	W
PSB	W	W
PCK	W	W
Annual energy consumption Qce	kWh	kWh

## Model PUZ-SHWM80VAA + EHST17D-\*M\*D

Model name	PUZ-SHWM80VAA + EHST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
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 $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	kW	kW
Cooling capacity		
EER		

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	184 %	132 %
Prated	8 kW	8 kW
SCOP	4.68	3.37
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.984	0.989
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
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	3530 kWh	4904 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	kW	kW
SEER		
Pdc Tj = 35°C	kW	kW
EER Tj = 35°C		
Cdc Tj = 35 °C		

Pdc Tj = 30°C	kW	kW
EER Tj = 30°C		
Cdc Tj = 30 °C		
Pdc Tj = 25°C	kW	kW
EER Tj = 25°C		
Cdc Tj = 25 °C		
Pdc Tj = 20°C	kW	kW
EER Tj = 20°C		
Cdc Tj = 20 °C		
Poff	W	W
PTO	W	W
PSB	W	W
PCK	W	W
Annual energy consumption Qce	kWh	kWh

## Model PUZ-SHWM80YAA + EHST17D-\*M\*D

Model name	PUZ-SHWM80YAA + EHST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
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 $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	kW	kW
Cooling capacity		
EER		

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
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Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	182 %	131 %
Prated	8 kW	8 kW
SCOP	4.63	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.99	0.993
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.976	0.984
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.974	0.978
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.952	0.952
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	3568 kWh	4941 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	kW	kW
SEER		
Pdc Tj = 35°C	kW	kW
EER Tj = 35°C		
Cdc Tj = 35 °C		

Pdc Tj = 30°C	kW	kW
EER Tj = 30°C		
Cdc Tj = 30 °C		
Pdc Tj = 25°C	kW	kW
EER Tj = 25°C		
Cdc Tj = 25 °C		
Pdc Tj = 20°C	kW	kW
EER Tj = 20°C		
Cdc Tj = 20 °C		
Poff	W	W
PTO	W	W
PSB	W	W
PCK	W	W
Annual energy consumption Qce	kWh	kWh

## Model PUZ-SHWM60VAA + ERST17D-\*M\*D

Model name	PUZ-SHWM60VAA + ERST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	0.99 kW	1.63 kW
COP	5.05	2.45

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	1.5 kW	1.14 kW
Cooling capacity	5.1	6
EER	3.4	5.25

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	188 %	131 %
Prated	6 kW	6 kW
SCOP	4.77	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.31 kW	5.31 kW
COP Tj = -7°C	3.39	2.28
Cdh Tj = -7 °C	0.99	0.994
Pdh Tj = +2°C	4.8 kW	4.4 kW
COP Tj = +2°C	4.76	3.21
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	4.9 kW	4.1 kW
COP Tj = +7°C	5.9	4.2
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.7 kW
COP Tj = 12°C	6.52	5.87
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	2.74	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	2600 kWh	3706 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	5.1 kW	6 kW
SEER	3.88	5.91
Pdc Tj = 35°C	5.1 kW	6 kW
EER Tj = 35°C	3.4	5.25

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	3.76 kW	4.42 kW
EER Tj = 30°C	3.84	5.95
Cdc Tj = 30 °C	0.985	0.98
Pdc Tj = 25°C	2.42 kW	3.3 kW
EER Tj = 25°C	4.07	6.38
Cdc Tj = 25 °C	0.975	0.971
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.57	7
Cdc Tj = 20 °C	0.973	0.97
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	789 kWh	609 kWh

## Model PUZ-SHWM80VAA + ERST17D-\*M\*D

Model name	PUZ-SHWM80VAA + ERST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.22 kW	1.63 kW
Cooling capacity	7.1	8
EER	3.2	4.9

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	133 %
Prated	8 kW	8 kW
SCOP	4.76	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.984	0.989
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
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	3475 kWh	4849 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.1 kW	8 kW
SEER	4.12	5.74
Pdc Tj = 35°C	7.1 kW	8 kW
EER Tj = 35°C	3.2	4.9

Cdc Tj = 35 °C	0.993	0.991
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.989	0.986
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.98	0.976
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.972	0.971
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	1034 kWh	836 kWh



## Model PUZ-SHWM80YAA + ERST17D-\*M\*D

Model name	PUZ-SHWM80YAA + ERST17D-*M*D
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.22 kW	1.63 kW
Cooling capacity	7.1	8
EER	3.2	4.9

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	133 %
Prated	8 kW	8 kW
SCOP	4.74	3.4
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.99	0.993
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.976	0.984
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.974	0.978
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.952	0.952
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	3487 kWh	4860 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.1 kW	8 kW
SEER	4.06	5.62
Pdc Tj = 35°C	7.1 kW	8 kW
EER Tj = 35°C	3.2	4.9

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.984	0.979
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.97	0.965
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.959	0.958
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	1051 kWh	853 kWh

## Model PUZ-SHWM60VAA + ERST17D-\*M\*BD

Model name	PUZ-SHWM60VAA + ERST17D-*M*BD
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	0.99 kW	1.63 kW
COP	5.05	2.45

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	1.5 kW	1.14 kW
Cooling capacity	5.1	6
EER	3.4	5.25

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	188 %	131 %
Prated	6 kW	6 kW
SCOP	4.77	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.31 kW	5.31 kW
COP Tj = -7°C	3.39	2.28
Cdh Tj = -7 °C	0.99	0.994
Pdh Tj = +2°C	4.8 kW	4.4 kW
COP Tj = +2°C	4.76	3.21
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	4.9 kW	4.1 kW
COP Tj = +7°C	5.9	4.2
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.7 kW
COP Tj = 12°C	6.52	5.87
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	2.74	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	2600 kWh	3706 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	5.1 kW	6 kW
SEER	3.88	5.91
Pdc Tj = 35°C	5.1 kW	6 kW
EER Tj = 35°C	3.4	5.25

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	3.76 kW	4.42 kW
EER Tj = 30°C	3.84	5.95
Cdc Tj = 30 °C	0.985	0.98
Pdc Tj = 25°C	2.42 kW	3.3 kW
EER Tj = 25°C	4.07	6.38
Cdc Tj = 25 °C	0.975	0.971
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.57	7
Cdc Tj = 20 °C	0.973	0.97
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	789 kWh	609 kWh

## Model PUZ-SHWM80VAA + ERST17D-\*M\*BD

Model name	PUZ-SHWM80VAA + ERST17D-*M*BD
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.22 kW	1.63 kW
Cooling capacity	7.1	8
EER	3.2	4.9

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	133 %
Prated	8 kW	8 kW
SCOP	4.76	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.984	0.989
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
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	3475 kWh	4849 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.1 kW	8 kW
SEER	4.12	5.74
Pdc Tj = 35°C	7.1 kW	8 kW
EER Tj = 35°C	3.2	4.9



Cdc Tj = 35 °C	0.993	0.991
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.989	0.986
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.98	0.976
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.972	0.971
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	1034 kWh	836 kWh

## Model PUZ-SHWM80YAA + ERST17D-\*M\*BD

Model name	PUZ-SHWM80YAA + ERST17D-*M*BD
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	134 %
COP	3.2
Heating up time	1:27 h:min
Standby power input	39 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.22 kW	1.63 kW
Cooling capacity	7.1	8
EER	3.2	4.9

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	133 %
Prated	8 kW	8 kW
SCOP	4.74	3.4
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.99	0.993
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.976	0.984
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.974	0.978
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.952	0.952
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	3487 kWh	4860 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.1 kW	8 kW
SEER	4.06	5.62
Pdc Tj = 35°C	7.1 kW	8 kW
EER Tj = 35°C	3.2	4.9

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.984	0.979
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.97	0.965
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.959	0.958
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	1051 kWh	853 kWh

## Model PUZ-SHWM60VAA + ERST17D-\*M\*BE

Model name	PUZ-SHWM60VAA + ERST17D-*M*BE
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

## EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	126 %
COP	3.01
Heating up time	1:45 h:min
Standby power input	36.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	0.99 kW	1.63 kW
COP	5.05	2.45

## EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	1.5 kW	1.14 kW
Cooling capacity	5.1	6
EER	3.4	5.25

## EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	188 %	131 %
Prated	6 kW	6 kW
SCOP	4.77	3.34
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.31 kW	5.31 kW
COP Tj = -7°C	3.39	2.28
Cdh Tj = -7 °C	0.99	0.994
Pdh Tj = +2°C	4.8 kW	4.4 kW
COP Tj = +2°C	4.76	3.21
Cdh Tj = +2 °C	0.985	0.989
Pdh Tj = +7°C	4.9 kW	4.1 kW
COP Tj = +7°C	5.9	4.2
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.7 kW
COP Tj = 12°C	6.52	5.87
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	6 kW	6 kW
COP Tj = Tbiv	2.74	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6 kW	6 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	2600 kWh	3706 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	5.1 kW	6 kW
SEER	3.88	5.91
Pdc Tj = 35°C	5.1 kW	6 kW
EER Tj = 35°C	3.4	5.25

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	3.76 kW	4.42 kW
EER Tj = 30°C	3.84	5.95
Cdc Tj = 30 °C	0.985	0.98
Pdc Tj = 25°C	2.42 kW	3.3 kW
EER Tj = 25°C	4.07	6.38
Cdc Tj = 25 °C	0.975	0.971
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.57	7
Cdc Tj = 20 °C	0.973	0.97
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	789 kWh	609 kWh

## Model PUZ-SHWM80VAA + ERST17D-\*M\*BE

Model name	PUZ-SHWM80VAA + ERST17D-*M*BE
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

### EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	126 %
COP	3.01
Heating up time	1:45 h:min
Standby power input	36.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.22 kW	1.63 kW
Cooling capacity	7.1	8
EER	3.2	4.9

### EN 12102-1 | Average Climate



	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	133 %
Prated	8 kW	8 kW
SCOP	4.76	3.41
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.993	0.995
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.984	0.989
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.982	0.985
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.967	0.967
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.995	0.997
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	3475 kWh	4849 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.1 kW	8 kW
SEER	4.12	5.74
Pdc Tj = 35°C	7.1 kW	8 kW
EER Tj = 35°C	3.2	4.9

Cdc Tj = 35 °C	0.993	0.991
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.989	0.986
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.98	0.976
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.972	0.971
Poff	15 W	15 W
PTO	15 W	15 W
PSB	15 W	15 W
PCK	0 W	0 W
Annual energy consumption Qce	1034 kWh	836 kWh

## Model PUZ-SHWM80YAA + ERST17D-\*M\*BE

Model name	PUZ-SHWM80YAA + ERST17D-*M*BE
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Heat Source	Outdoor Air
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
Any additional heat sources	n/a

## General data

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

## Outdoor Air/Water

### EN 16147 | Average Climate

Declared load profile	L
Efficiency $\eta_{DHW}$	126 %
COP	3.01
Heating up time	1:45 h:min
Standby power input	36.4 W
Reference hot water temperature	53 °C
Mixed water at 40°C	236 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	4 kW
El input	1.19 kW	1.6 kW
COP	5.05	2.5

### EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	2.22 kW	1.63 kW
Cooling capacity	7.1	8
EER	3.2	4.9

### EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	41 dB(A)	41 dB(A)
Sound power level outdoor	54 dB(A)	54 dB(A)

#### EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	187 %	133 %
Prated	8 kW	8 kW
SCOP	4.74	3.4
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.08 kW	7.08 kW
COP Tj = -7°C	3.22	2.31
Cdh Tj = -7 °C	0.99	0.993
Pdh Tj = +2°C	4.4 kW	4.4 kW
COP Tj = +2°C	4.75	3.21
Cdh Tj = +2 °C	0.976	0.984
Pdh Tj = +7°C	5 kW	4.4 kW
COP Tj = +7°C	5.9	4.4
Cdh Tj = +7 °C	0.974	0.978
Pdh Tj = 12°C	3 kW	2.8 kW
COP Tj = 12°C	6.52	6.09
Cdh Tj = +12 °C	0.952	0.952
Pdh Tj = Tbiv	8 kW	8 kW
COP Tj = Tbiv	2.65	1.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8 kW	8 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.65	1.83
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.993	0.995
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	3487 kWh	4860 kWh

#### EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	7.1 kW	8 kW
SEER	4.06	5.62
Pdc Tj = 35°C	7.1 kW	8 kW
EER Tj = 35°C	3.2	4.9

Cdc Tj = 35 °C	0.99	0.987
Pdc Tj = 30°C	5.23 kW	5.92 kW
EER Tj = 30°C	3.85	5.7
Cdc Tj = 30 °C	0.984	0.979
Pdc Tj = 25°C	3.36 kW	3.79 kW
EER Tj = 25°C	4.55	6
Cdc Tj = 25 °C	0.97	0.965
Pdc Tj = 20°C	2.5 kW	3.5 kW
EER Tj = 20°C	4.69	6.75
Cdc Tj = 20 °C	0.959	0.958
Poff	22 W	22 W
PTO	22 W	22 W
PSB	22 W	22 W
PCK	0 W	0 W
Annual energy consumption Qce	1051 kWh	853 kWh