

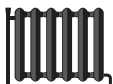


ENERG
енергия · ενέργεια



Indoor unit
Outdoor unit

E*ST20D-****D
PUZ-SWM120VAA



A+++

A++

A+

A

B

C

D

A++



A+

A

B

C

D

E

F

A+



41 dB



58 dB



- 12 kW
- 12 kW
- 12 kW

2019

811/2013

DG79V341H06

SPACE HEATER		For medium-temperature application															For low-temperature application														
1	2	3	6	8	11	9	13	15	16	21	22	17	18	25	4	6	8	11	9	13	15	16	21	22	17	18	25				
Outdoor unit	Indoor unit	Medium-temperature application															Low-temperature application														
		Seasonal space heating energy efficiency class					Rated heat output under warmer climate conditions					Seasonal space heating energy efficiency under warmer climate conditions					Rated heat output under colder climate conditions					Seasonal space heating energy efficiency under colder climate conditions					Rated heat output under average climate conditions				
		kW	%	kWh	dB	kW	kW	%	%	kWh	kWh	dB	kW	%	kWh	dB	kW	kW	%	%	kWh	kWh	dB	kW	%	kWh	dB				
PUZ-SWM60VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	6 6	126 128	3834 3779	41 41	6 6	6 6	111 112	150 155	5181 5147	2093 2027	54 54	✓ ✓	A+++ A+++	6 6	181 184	2701 2646	41 41	6 6	6 6	135 136	208 218	4284 4251	1519 1453	54 54				
PUZ-SWM80VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	8 8	129 130	5016 4961	41 41	8 8	8 8	111 112	162 167	6890 6857	2584 2517	54 54	✓ ✓	A+++ A+++	8 8	181 184	3599 3543	41 41	8 8	8 8	141 142	219 227	5460 5427	1928 1862	54 54				
PUZ-SWM80YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	8 8	128 130	5053 4972	41 41	8 8	8 8	111 112	160 166	6923 6875	2629 2532	54 54	✓ ✓	A+++ A+++	8 8	179 183	3636 3555	41 41	8 8	8 8	141 142	214 225	5493 5444	1973 1876	54 54				
PUZ-SWM100VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	10 10	132 134	6106 6051	41 41	10 10	10 10	109 109	156 159	8813 8780	3362 3296	58 58	✓ ✓	A+++ A+++	10 10	178 180	4564 4509	41 41	10 10	10 10	147 147	223 229	6575 6555	2369 2302	58 58				
PUZ-SWM100YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	10 10	132 133	6141 6061	41 41	10 10	10 10	109 109	154 159	8840 8791	3405 3308	58 58	✓ ✓	A+++ A+++	10 10	177 180	4600 4519	41 41	10 10	10 10	146 147	219 228	6601 6565	2411 2314	58 58				
PUZ-SWM120VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	12 12	131 132	7450 7395	41 41	12 12	12 12	109 109	154 157	10673 10640	4115 4049	58 58	✓ ✓	A+++ A+++	12 12	177 178	5566 5511	41 41	12 12	12 12	141 141	221 227	8290 8257	2882 2816	58 58				
PUZ-SWM120YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	12 12	131 132	7485 7404	41 41	12 12	12 12	109 109	153 156	10698 10649	4157 4060	58 58	✓ ✓	A+++ A+++	12 12	176 178	5600 5520	41 41	12 12	12 12	140 141	218 226	8316 8267	2922 2825	58 58				
PUZ-SWM140VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	14 14	134 135	8438 8383	41 41	14 14	14 14	104 105	150 152	12843 12810	4893 4826	58 58	✓ ✓	A+++ A+++	14 14	175 177	6483 6428	41 41	14 14	14 14	132 132	219 224	10250 10217	3367 3301	58 58				
PUZ-SWM140YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	14 14	134 135	8473 8392	41 41	14 14	14 14	104 105	149 152	12867 12819	4934 4837	58 58	✓ ✓	A+++ A+++	14 14	175 177	6517 6437	41 41	14 14	14 14	131 132	217 223	10275 10226	3407 3310	58 58				
PUZ-SHWM60VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	6 6	129 131	3761 3706	41 41	6 6	6 6	115 116	159 165	4993 4960	1980 1914	54 54	✓ ✓	A+++ A+++	6 6	184 188	2655 2600	41 41	6 6	6 6	138 139	220 231	4202 4168	1437 1371	54 54				
PUZ-SHWM80VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	8 8	132 131	4904 4849	41 41	8 8	8 8	115 115	167 167	6705 6672	2521 2454	54 54	✓ ✓	A+++ A+++	8 8	184 187	3530 3475	41 41	8 8	8 8	146 147	225 233	5299 5266	1874 1808	54 54				
PUZ-SHWM80YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	8 8	131 133	4941 4860	41 41	8 8	8 8	114 115	164 170	6737 6689	2566 2469	54 54	✓ ✓	A+++ A+++	8 8	182 187	3568 3487	41 41	8 8	8 8	145 146	220 232	5332 5284	1920 1823	54 54				
PUZ-SHWM100VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	10 10	136 138	5936 5881	41 41	10 10	10 10	116 117	164 167	8272 8239	3204 3138	58 58	✓ ✓	A+++ A+++	10 10	183 185	4444 4399	41 41	10 10	10 10	149 150	236 244	6480 6447	2233 2167	58 58				
PUZ-SHWM100YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	10 10	135 137	5972 5891	41 41	10 10	10 10	116 117	162 167	8298 8250	3246 3149	58 58	✓ ✓	A+++ A+++	10 10	181 185	4480 4399	41 41	10 10	10 10	149 150	232 242	6508 6459	2276 2179	58 58				
PUZ-SHWM120VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	12 12	136 138	7169 7114	41 41	12 12	12 12	117 118	161 163	9902 9869	3952 3886	58 58	✓ ✓	A+++ A+++	12 12	179 181	5481 5426	41 41	12 12	12 12	149 150	232 238	7843 7810	2753 2687	58 58				
PUZ-SHWM120YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	12 12	136 137	7204 7123	41 41	12 12	12 12	117 118	159 163	9927 9878	3995 3898	58 58	✓ ✓	A+++ A+++	12 12	178 181	5516 5435	41 41	12 12	12 12	149 150	228 237	7868 7819	2793 2696	58 58				
PUZ-SHWM140VAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	14 14	141 142	8021 7965	41 41	14 14	14 14	115 116	156 158	11650 11617	4715 4649	58 58	✓ ✓	A+++ A+++	14 14	183 184	6227 6172	41 41	14 14	14 14	153 154	225 230	8841 8807	3279 3212	58 58				
PUZ-SHWM140YAA	EHSD-**** ERSD-****	✓ ✓	A++ A++	14 14	141 142	8055 7974	41 41	14 14	14 14	115 116	154 158	11674 11625	4757 4659	58 58	✓ ✓	A+++ A+++	14 14	182 184	6262 6181	41 41	14 14	14 14	153 154	222 229	8865 8816	3319 3212	58 58				

English	Deutsch	Français	Italiano	Español
Nederlands	Svenska	Dansk	Português	Ελληνικά
suomi	Česina	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unit extérieure	unità esterna	unidad exterior
1	Binnenluft	Überström's ephed	unidad exterior	Εξωτερική μονάδα
Ulkokuiskko	Venkovni jednotka	Вышнее ядро	jednostka zewnętrzna	·
Indoor unit	innegerät	unité intérieure	unità interna	unidad interior
2	Binnenunit	Innegerät ephed	unidad interior	Εσωτερική μονάδα
Sisäyksisko	Vnitřní jednotka	Внутреннее ядро	jednostka wewnętrzna	·
3	Medium-temperature application	Application à moyenne température	la aplicación a media temperatura	la aplicación de media temperatura
Medium-temperature-cooling	Medium-temperature-application	middle-temperature-cooling	a aplicación a media temperatura	la aplicación de media temperatura
3	Kesäilmäpölyn sovellus	средно-температурного применение	zasosowanie w średniej temperaturze	·
4	Low-temperature application	Application à basse température	la aplicación a bassa temperatura	la aplicación de baja temperatura
4	Legen-temperature-cooling	Legen-temperature-cooling	a aplicación a baja temperatura	la aplicación de baja temperatura
4	maailmanilmakäyttö sovellus	использование в помещениях	zasosowanie w niskich temperaturach	·
Declared load profile	Andergebene Lastprofil	Profil de soulagere déclaré	Profilo di carico dichiarato	Perfil de carga declarado
5	Overgeven capaciteitsprofiel	Объём товарной мощности	Deklarowany profil mocy	Δηλωμένο προφίλ ισχύος
5	Immitettu kuormitusprofiili	Декларованный профиль нагрузки	la classe d'efficienza energetica stagionale del riscaldamento d'ambiente	la clase de eficiencia energética estacional de calefacción
6	Seasoonal spaahe heating energy efficiency class	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux	A classe de eficiencia energética do aquecimento ambiente sazonal	la clase de eficiencia energética estacional de calefacción
6	de seizoensoverloeden energie-efficiëntieklasse voor ruimteverwarming	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux	A classe de eficiencia energética do aquecimento ambiente sazonal	la clase de eficiencia energética estacional de calefacción
6	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux	A classe de eficiencia energética do aquecimento ambiente sazonal	la clase de eficiencia energética estacional de calefacción
7	Wäer heating energy efficiency class	la classe d'efficacité énergétique, pour le chauffage de l'eau	A classe d'eficiencia energética do aquecimento de água	la clase de eficiencia energética del calentamiento de agua
7	de energie-efficiëntieklasse voor ruimteverwarming	la classe d'efficacité énergétique, pour le chauffage de l'eau	A classe d'eficiencia energética do aquecimento de água	la clase de eficiencia energética del calentamiento de agua
7	vedelämmityskäytön energiatuottoa klassifikaatio	la puissance thermique nominale dans les conditions climatiques moyennes	la potencia térmica nominal en condiciones climáticas medias	la potencia calorífica nominal en condiciones climáticas medias
8	Rated heat output under average climate conditions	la puissance thermique nominale dans les conditions climatiques moyennes	la potencia térmica nominal en condiciones climáticas medias	la potencia calorífica nominal en condiciones climáticas medias
8	de nominale warmteafgifte onder gemiddelde klimaatomstandigheden	la puissance thermique nominale (pour des conditions climatiques moyennes)	A potencia calorífica nominal en condiciones climáticas medias	la potencia calorífica nominal en condiciones climáticas medias
8	Ilmalämmityksen kateilman energiatuottoa klassifikaatio (keskimääräisessä ilmastio-olosuhteissa)	la puissance thermique nominale (pour des conditions climatiques moyennes)	A potencia calorífica nominal en condiciones climáticas medias	la potencia calorífica nominal en condiciones climáticas medias
9	For space heating, annual energy consumption under average climate conditions	pour le chauffage des locaux, la consommation annuelle d'énergie (dans les conditions climatiques moyennes)	per il riscaldamento d'ambiente, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
9	voor ruimteverwarming, het jaarlijkse energieverbruik onder gemiddelde klimaatomstandigheden	pour le chauffage des locaux, la consommation annuelle d'énergie (dans les conditions climatiques moyennes)	per il riscaldamento d'ambiente, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
9	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio (keskimääräisessä ilmastio-olosuhteissa)	pour le chauffage des locaux, la consommation annuelle d'énergie (dans les conditions climatiques moyennes)	per il riscaldamento d'ambiente, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
10	For water heating, annual electricity consumption under average climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	per il riscaldamento dell'acqua, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción de agua, el consumo anual de electricidad en condiciones climáticas medias
10	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder gemiddelde klimaatomstandigheden	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	per il riscaldamento dell'acqua, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción de agua, el consumo anual de electricidad en condiciones climáticas medias
10	vedelämmityskäytön vuorokauden sähkökulutus (keskimääräisessä ilmastio-olosuhteissa)	za podgravanje na voda, godišnjeg potrošnje (pri srednji klimatični uslovi)	para o aquecimento de água, o consumo anual de electricidade (em condições climáticas médias)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas medias)
11	Seasoonal spaahe heating energy efficiency under average climate conditions	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal (em condições climáticas médias)	la eficiencia energética del calentamiento de agua en condiciones climáticas medias
11	de seizoensoverloeden energie-efficiëntie voor ruimteverwarming onder gemiddelde klimaatomstandigheden	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal (em condições climáticas médias)	la eficiencia energética del calentamiento de agua en condiciones climáticas medias
11	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio (keskimääräisessä ilmastio-olosuhteissa)	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal (em condições climáticas médias)	la eficiencia energética del calentamiento de agua en condiciones climáticas medias
12	Wäer heating energy efficiency under average climate conditions	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal (em condições climáticas médias)	la eficiencia energética del calentamiento de agua en condiciones climáticas medias
12	de energie-efficiëntie voor ruimteverwarming onder gemiddelde klimaatomstandigheden	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal (em condições climáticas médias)	la eficiencia energética del calentamiento de agua en condiciones climáticas medias
12	vedelämmityskäytön energiatuottoa klassifikaatio (keskimääräisessä ilmastio-olosuhteissa)	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal (em condições climáticas médias)	la eficiencia energética del calentamiento de agua en condiciones climáticas medias
13	Sound power level L _{WA} indoor	le niveau de puissance acoustique L _{WA} à l'intérieur	il livello di potenza sonora L _{WA} all'interno	el nivel de potencia acústica L _{WA} en interiores
13	het geluidsoverbrengingsniveau L _{WA} binnen	le niveau de puissance acoustique L _{WA} à l'intérieur	il livello di potenza sonora L _{WA} all'interno	el nivel de potencia acústica L _{WA} en interiores
13	ääniteho L _{WA} sisällä	le niveau de puissance acoustique L _{WA} à l'intérieur	il livello di potenza sonora L _{WA} all'interno	el nivel de potencia acústica L _{WA} en interiores
14	Work only during off-peak hours	fonctionne qu'en heures creuses	funziona soltanto durante le ore notturne	funciona solamente durante las horas de baja demanda
14	werken uitsluitend in de daluren	fonctionne qu'en heures creuses	funziona soltanto durante le ore notturne	funciona solamente durante las horas de baja demanda
14	toiminta ainoastaan kuituuhetken ulkopuolella	fonctionne qu'en heures creuses	funziona soltanto durante le ore notturne	funciona solamente durante las horas de baja demanda
15	Rated heat output under colder climate conditions	la puissance thermique, dans des conditions climatiques plus froides	la potencia térmica, en condiciones climáticas más frías	la potencia calorífica nominal en condiciones climáticas más frías
15	de nominale warmteafgifte, onder koudere klimaatomstandigheden	la puissance thermique, dans des conditions climatiques plus froides	la potencia térmica, en condiciones climáticas más frías	la potencia calorífica nominal en condiciones climáticas más frías
15	Ilmalämmityksen kateilman energiatuottoa klassifikaatio (kylmemmissä ilmastio-olosuhteissa)	la puissance thermique, dans des conditions climatiques plus froides	la potencia térmica, en condiciones climáticas más frías	la potencia calorífica nominal en condiciones climáticas más frías
16	Rated heat output under warmer climate conditions	la puissance thermique, dans des conditions climatiques plus chaudes	la potencia térmica, en condiciones climáticas más calidas	la potencia calorífica nominal en condiciones climáticas más calidas
16	de nominale warmteafgifte, onder warmere klimaatomstandigheden	la puissance thermique, dans des conditions climatiques plus chaudes	la potencia térmica, en condiciones climáticas más calidas	la potencia calorífica nominal en condiciones climáticas más calidas
16	Ilmalämmityksen kateilman energiatuottoa klassifikaatio (lämpimässä ilmastio-olosuhteissa)	la puissance thermique, dans des conditions climatiques plus chaudes	la potencia térmica, en condiciones climáticas más calidas	la potencia calorífica nominal en condiciones climáticas más calidas
17	For space heating, annual energy consumption under colder climate conditions	za otopljenje, godišnjeg potrošnje (pri srednji klimatični uslovi)	para o aquecimento de água, o consumo anual de electricidade (em condições climáticas médias)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
17	voor ruimteverwarming, het jaarlijkse energieverbruik onder koudere klimaatomstandigheden	za otopljenje, godišnjeg potrošnje (pri srednji klimatični uslovi)	para o aquecimento de água, o consumo anual de electricidade (em condições climáticas médias)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
17	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio (kylmemmissä ilmastio-olosuhteissa)	za otopljenje, godišnjeg potrošnje (pri srednji klimatični uslovi)	para o aquecimento de água, o consumo anual de electricidade (em condições climáticas médias)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
18	For space heating, annual energy consumption under warmer climate conditions	pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques	per il riscaldamento d'ambiente, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
18	voor ruimteverwarming, het jaarlijkse energieverbruik onder warmere klimaatomstandigheden	pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques	per il riscaldamento d'ambiente, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
18	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio (lämpimässä ilmastio-olosuhteissa)	pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques	per il riscaldamento d'ambiente, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción espacial, el consumo anual de energía en condiciones climáticas medias
19	For water heating, annual energy consumption under colder climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques	per il riscaldamento dell'acqua, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción de agua, el consumo anual de electricidad en condiciones climáticas más frías
19	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques	per il riscaldamento dell'acqua, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción de agua, el consumo anual de electricidad en condiciones climáticas más frías
19	vedelämmityskäytön vuorokauden sähkökulutus (kylmemmissä ilmastio-olosuhteissa)	za podgravanje na voda, godišnjeg potrošnje (pri srednji klimatični uslovi)	para o aquecimento de água, o consumo anual de electricidade (em condições climáticas médias)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)
20	For water heating, annual energy consumption under warmer climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques	per il riscaldamento dell'acqua, il consumo annuo di energia (in condizioni climatiche medie)	para calefacción de agua, el consumo anual de electricidad en condiciones climáticas más calidas
20	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques	per il riscaldamento dell'acqua, il consumo annuo di energia (in condiciones climatiche medie)	para calefacción de agua, el consumo anual de electricidad en condiciones climáticas más calidas
20	vedelämmityskäytön vuorokauden sähkökulutus (lämpimässä ilmastio-olosuhteissa)	za podgravanje na voda, godišnjeg potrošnje (pri srednji klimatični uslovi)	para o aquecimento de água, o consumo anual de electricidade (em condições climáticas médias)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más calidas)
21	Seasoonal spaahe heating energy efficiency under colder climate conditions	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
21	de seizoensoverloeden energie-efficiëntie voor ruimteverwarming onder koudere klimaatomstandigheden	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
21	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio (kylmissä ilmastio-olosuhteissa)	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
22	Seasoonal spaahe heating energy efficiency under warmer climate conditions	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
22	de seizoensoverloeden energie-efficiëntie voor ruimteverwarming onder warmere klimaatomstandigheden	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
22	Ilalaimittuusesta vuorokauden energiatuottoa klassifikaatio (lämpimässä ilmastio-olosuhteissa)	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
23	Wäer heating energy efficiency under colder climate conditions	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
23	de energie-efficiëntie voor ruimteverwarming onder koudere klimaatomstandigheden	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
23	vedelämmityskäytön energiatuottoa klassifikaatio (kylmissä ilmastio-olosuhteissa)	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
24	Wäer heating energy efficiency under warmer climate conditions	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
24	de energie-efficiëntie voor ruimteverwarming onder warmere klimaatomstandigheden	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas
24	vedelämmityskäytön energiatuottoa klassifikaatio (lämpimässä ilmastio-olosuhteissa)	la puissance thermique nominale, dans les conditions climatiques moyennes	A eficiencia energética do aquecimento ambiente sazonal em condições climáticas medias	la eficiencia energética estacional de calefacción en condiciones climáticas más calidas

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	131	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	1.87	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 2 ° C	COPd	3.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 ° C	Pdh	5.0	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 ° C	Pdh	3.8	kW	Tj = +12 ° C	COPd	6.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.87	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.55	-
Bivalent temperature	Tbiv	-7	° C	Operation limit temperature	TOL	-25	° C
Reference design conditions for space heating	Tdesignh	-10	° C	Heating water operating limit temperature	WTOL	60	° C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7450	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Qelec	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey

The identification and signature of the person empowered to bind the supplier:

Kenichi SAITO
Manager, Quality Assurance Department
TURKEY



• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	177	%			
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj						
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	2.75	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 2 ° C	COPd	4.50	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = + 7 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	6.00	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = +12 ° C	Pdh	4.0	kW	Tj = +12 ° C	COPd	7.00	-			
Degradation co-efficient (**)	Cdh	0.97	-							
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	2.75	-			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	2.40	-			
Bivalent temperature	Tbiv	-7	° C	Operation limit temperature	TOL	-25	° C			
Reference design conditions for space heating	Tdesignh	-10	° C	Heating water operating limit temperature	WTOL	60	° C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	1.4	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	5566	kWh	-		2640	m ³ /h			

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier;	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	109	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.3	kW	T _j = - 7 °C	COP _d	2.50	-
Degradation co-efficient (**)	C _{dh}	1.00	-	T _j = + 2 °C	COP _d	3.40	-
T _j = + 2 °C	P _{dh}	4.4	kW	T _j = + 7 °C	COP _d	4.60	-
Degradation co-efficient (**)	C _{dh}	0.99	-	T _j = +12 °C	COP _d	6.80	-
T _j = + 7 °C	P _{dh}	3.8	kW	T _j = bivalent temperature	COP _d	1.45	-
Degradation co-efficient (**)	C _{dh}	0.98	-	T _j = operation limit temperature (***)	COP _d	1.30	-
T _j = +12 °C	P _{dh}	4.4	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.40	-
Degradation co-efficient (**)	C _{dh}	0.98	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{dh}	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{dh}	7.8	kW				
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	8.9	kW				
Bivalent temperature	T _{biv}	-13	°C				
Reference design conditions for space heating	T _{designh}	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	4.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10673	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	141	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.3	kW	Tj = - 7 °C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.00	-
Tj = + 2 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.50	-
Tj = + 7 °C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.50	-
Tj = +12 °C	Pdh	5.5	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	10.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	8.0	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	9.9	kW				
Bivalent temperature	Tbiv	-16	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	4.1	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8290	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Qelec	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	154	%			
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj						
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-			
Degradation co-efficient (**)	Cdh	-	-							
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 2 ° C	COPd	1.95	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 ° C	Pdh	7.7	kW	Tj = + 7 ° C	COPd	3.30	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 ° C	Pdh	5.2	kW	Tj = +12 ° C	COPd	5.40	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	1.95	-			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Tj = operation limit temperature (***)	COPd	1.95	-			
Bivalent temperature	Tbiv	2	° C	Operation limit temperature	TOL	-25	° C			
Reference design conditions for space heating	Tdesignh	2	° C	Heating water operating limit temperature	WTOL	60	° C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	4115	kWh	-						
				2640						
				m ³ /h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Qelec	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kccilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	221	%			
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj						
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-			
Degradation co-efficient (**)	Cdh	-	-							
Tj = + 2 °C	Pdh	12.1	kW	Tj = + 2 °C	COPd	3.10	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	5.10	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.10	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	3.10	-			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Tj = operation limit temperature (***)	COPd	3.10	-			
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C			
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	2882	kWh	-						
				2640						
				m³/h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kccilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	132	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	1.87	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 2 ° C	COPd	3.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 ° C	Pdh	5.0	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 ° C	Pdh	3.8	kW	Tj = +12 ° C	COPd	6.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.87	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.55	-
Bivalent temperature	Tbiv	-7	° C	Operation limit temperature	TOL	-25	° C
Reference design conditions for space heating	Tdesignh	-10	° C	Heating water operating limit temperature	WTOL	60	° C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.4	kW
Thermostat-off mode	P _{T0}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				

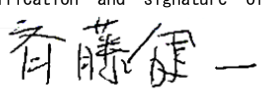
Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7395	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY				Manisa OSB 4.Kisim Kicilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey			
The identification and signature of the person empowered to bind the supplier:				Kenichi SAITO			
				Manager, Quality Assurance Department			
				TURKEY			

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	178	%
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj			
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	2.75	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 2 ° C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 ° C	Pdh	4.0	kW	Tj = +12 ° C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	2.75	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	2.40	-
Bivalent temperature	Tbiv	-7	° C	Operation limit temperature	TOL	-25	° C
Reference design conditions for space heating	Tdesignh	-10	° C	Heating water operating limit temperature	WTOL	60	° C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	5511	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier;	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	109	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.3	kW	T _j = - 7 °C	COP _d	2.50	-
Degradation co-efficient (**)	C _{dh}	1.00	-	T _j = + 2 °C	COP _d	3.40	-
T _j = + 2 °C	P _{dh}	4.4	kW	T _j = + 7 °C	COP _d	4.60	-
Degradation co-efficient (**)	C _{dh}	0.99	-	T _j = +12 °C	COP _d	6.80	-
T _j = + 7 °C	P _{dh}	3.8	kW	T _j = bivalent temperature	COP _d	1.45	-
Degradation co-efficient (**)	C _{dh}	0.98	-	T _j = operation limit temperature (***)	COP _d	1.30	-
T _j = +12 °C	P _{dh}	4.4	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.40	-
Degradation co-efficient (**)	C _{dh}	0.98	-	Operation limit temperature	TOL	-25	°C
T _j = bivalent temperature	P _{dh}	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
T _j = operation limit temperature (***)	P _{dh}	7.8	kW				
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	8.9	kW				
Bivalent temperature	T _{biv}	-13	°C				
Reference design conditions for space heating	T _{designh}	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	4.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10640	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Q _{elec}	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating P_{designh}, and the rated heat output of a supplementary heater P_{sup} is equal to the supplementary capacity for heating sup(T_j).

(**) If C_{dh} is not determined by measurement then the default degradation coefficient is C_{dh} = 0.9.

(***) If the declared TOL is lower than the T_{designh} of the considered climate then the outdoor dry bulb temperature T_j is equal to T_{designh}.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	141	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.3	kW	Tj = - 7 °C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.00	-
Tj = + 2 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.50	-
Tj = + 7 °C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.50	-
Tj = +12 °C	Pdh	5.5	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	10.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	8.0	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	9.9	kW				
Bivalent temperature	Tbiv	-16	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	4.1	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				

Other items

Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8257	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Qelec	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY				Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey			
The identification and signature of the person empowered to bind the supplier:				Kenichi SAITO			
The signature is signed in the average climate / medium-temperature section.				Manager, Quality Assurance Department			
				TURKEY			

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	157	%			
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj						
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-			
Degradation co-efficient (**)	Cdh	-	-							
Tj = + 2 °C	Pdh	12.1	kW	Tj = + 2 °C	COPd	1.95	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	3.30	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	5.2	kW	Tj = +12 °C	COPd	5.40	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	1.95	-			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Tj = operation limit temperature (***)	COPd	1.95	-			
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C			
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	0.0	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	4049	kWh	-						
				2640						
				m ³ /h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Qelec	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kccilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST20D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	227	%			
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj						
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-			
Degradation co-efficient (**)	Cdh	-	-							
Tj = + 2 °C	Pdh	12.1	kW	Tj = + 2 °C	COPd	3.10	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	5.10	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.10	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	3.10	-			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Tj = operation limit temperature (***)	COPd	3.10	-			
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C			
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	2816	kWh	-	2640	m ³ /h				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Qelec	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	131	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	10.7	kW	Tj = - 7 °C	COPd	1.87	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.5	kW	Tj = + 2 °C	COPd	3.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	3.8	kW	Tj = +12 °C	COPd	6.20	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.87	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.55	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-25	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.4	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7450	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Qelec	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey

The identification and signature of the person empowered to bind the supplier:

Kenichi SAITO
Manager, Quality Assurance Department
TURKEY

Kenichi SAITO

* Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

* Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	177	%	
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj				
Tj = - 7 ° C	Pdh	10.7	kW	Tj = - 7 ° C	COPd	2.75	-	
Degradation co-efficient (**)	Cdh	1.00	-					
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 2 ° C	COPd	4.50	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 ° C	Pdh	5.2	kW	Tj = + 7 ° C	COPd	6.00	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 ° C	Pdh	4.0	kW	Tj = +12 ° C	COPd	7.00	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	2.75	-	
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	2.40	-	
Bivalent temperature	Tbiv	-7	° C	Operation limit temperature	TOL	-25	° C	
Reference design conditions for space heating	Tdesignh	-10	° C	Heating water operating limit temperature	WTOL	60	° C	
Power consumption in modes other than active mode				Supplementary heater				
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	1.4	kW	
Thermostat-off mode	P _{TO}	0.015	kW					
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA					
Annual energy consumption	Q _{HE}	5566	kWh					

For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	η_{wh}	134	%
Daily electricity consumption	Q _{elec}	4.080	kWh				
Annual electricity consumption	AEC	898	kWh				

Contact details							
MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY				Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey			
The identification and signature of the person empowered to bind the supplier;				Kenichi SAITO			
The signature is signed in the average climate / medium-temperature section.				Manager, Quality Assurance Department			
				TURKEY			

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	109	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.3	kW	Tj = - 7 °C	COPd	2.50	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = + 2 °C	COPd	3.40	-
Tj = + 2 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	6.80	-
Tj = + 7 °C	Pdh	3.8	kW	Tj = bivalent temperature	COPd	1.45	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.30	-
Tj = +12 °C	Pdh	4.4	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	1.40	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	9.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	7.8	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	8.9	kW				
Bivalent temperature	Tbiv	-13	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	4.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10673	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Qelec	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	141	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.3	kW	Tj = - 7 °C	COPd	3.50	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = + 2 °C	COPd	4.00	-
Tj = + 2 °C	Pdh	4.5	kW	Tj = + 7 °C	COPd	5.20	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 °C	COPd	7.50	-
Tj = + 7 °C	Pdh	3.9	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	1.50	-
Tj = +12 °C	Pdh	5.5	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	2.00	-
Degradation co-efficient (**)	Cdh	0.98	-	Operation limit temperature	TOL	-25	°C
Tj = bivalent temperature	Pdh	10.2	kW	Heating water operating limit temperature	WTOL	60	°C
Tj = operation limit temperature (***)	Pdh	8.0	kW				
Tj = - 15 °C (if TOL < - 20 °C)	Pdh	9.9	kW				
Bivalent temperature	Tbiv	-16	°C				
Reference design conditions for space heating	Tdesignh	-22	°C				
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	Psup	4.1	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2640	m³/h
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8290	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	109	%
Daily electricity consumption	Qelec	4.750	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	154	%			
Declared capacity for heating for part load at indoor temperature 20 ° C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 ° C and outdoor temperature Tj						
Tj = - 7 ° C	Pdh	-	kW	Tj = - 7 ° C	COPd	-	-			
Degradation co-efficient (**)	Cdh	-	-							
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 2 ° C	COPd	1.95	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 ° C	Pdh	7.7	kW	Tj = + 7 ° C	COPd	3.30	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 ° C	Pdh	5.2	kW	Tj = +12 ° C	COPd	5.40	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	1.95	-			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Tj = operation limit temperature (***)	COPd	1.95	-			
Bivalent temperature	Tbiv	2	° C	Operation limit temperature	TOL	-25	° C			
Reference design conditions for space heating	Tdesignh	2	° C	Heating water operating limit temperature	WTOL	60	° C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	4115	kWh	-						
				2640						
				m ³ /h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Qelec	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST20D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	12.1	kW	Seasonal space heating energy efficiency	η_s	221	%			
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj						
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-			
Degradation co-efficient (**)	Cdh	-	-							
Tj = + 2 °C	Pdh	12.1	kW	Tj = + 2 °C	COPd	3.10	-			
Degradation co-efficient (**)	Cdh	1.00	-							
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	5.10	-			
Degradation co-efficient (**)	Cdh	0.99	-							
Tj = +12 °C	Pdh	4.4	kW	Tj = +12 °C	COPd	7.10	-			
Degradation co-efficient (**)	Cdh	0.98	-							
Tj = bivalent temperature	Pdh	12.1	kW	Tj = bivalent temperature	COPd	3.10	-			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Tj = operation limit temperature (***)	COPd	3.10	-			
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-25	°C			
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes other than active mode				Supplementary heater						
Off mode	P _{OFF}	0.015	kW	Rated heat output (*)	P _{sup}	0.0	kW			
Thermostat-off mode	P _{TO}	0.015	kW							
Standby mode	P _{SB}	0.015	kW							
Crankcase heater mode	P _{CK}	0.000	kW							
Other items				Type of energy input						
Capacity control	variable			Electrical						
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA	Rated air flow rate, outdoors						
Annual energy consumption	Q _{HE}	2882	kWh	-						
				2640						
				m³/h						

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	139	%
Daily electricity consumption	Q _{elec}	3.820	kWh				
Annual electricity consumption	AEC	841	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY	Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvari No:19 Yunusemre - Manisa, Turkey
The identification and signature of the person empowered to bind the supplier:	Kenichi SAITO
The signature is signed in the average climate / medium-temperature section.	Manager, Quality Assurance Department
	TURKEY

• Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

• Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

(***) If the declared TOL is lower than the T designh of the considered climate then the outdoor dry bulb temperature Tj is equal to T designh.