



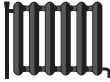
ENERG

енергия · ενεργεια



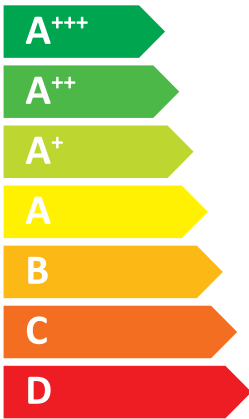
Indoor unit
Outdoor unit

E*SD-****D
PUZ-SWM120VAA



55 °C

35 °C



A++

A+++



41 dB



58 dB

■ 12
■ **12**
■ 12
kW

■ 12
■ **12**
■ 12
kW



2019

811/2013

DG79V342H06



PRODUCT FICHE

Mitsubishi Electric Erp Directive Related Product Information: erp.mitsubishielectric.eu/erp
Details and precautions on installation, maintenance and assembly can be found in the installation and/or operation manuals.
This information is based on EU regulation No 811/2013 and No 813/2013.

DG79A02MH01

Table 1: SPACE HEATER. Columns: Outdoor unit, Indoor unit, Medium-temperature application (3-25), For low-temperature application (4-25). Rows: PUZ-SWM60VAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA.

Table 2: COMBINATION HEATER. Columns: Outdoor unit, Indoor unit, Medium-temperature application (3-25), For low-temperature application (4-25). Rows: PUZ-SWM60VAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA, PUZ-SWM80VAA, PUZ-SWM80YAA, PUZ-SWM100VAA, PUZ-SWM100YAA, PUZ-SWM120VAA, PUZ-SWM120YAA, PUZ-SWM140VAA, PUZ-SWM140YAA.

English	German	French	Italian	Spanish
Nederlands	Svenska	Dansk	Portuguesa	Espanol
suomi	Cestina	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unité extérieure	unità esterna	unidad exterior
1	Utlomsenhet	Utenriets enhed	unidad exterior	Εξωτερική μονάδα
Ulkoyksykko	Utlomsenhet	Внешний блок	república zewnątrzlokalna	unidad interior
Indoor unit	Innengerät	unité intérieure	unità interna	unidad interior
2	Внутренний блок	Innenheit	interne interio	Εσωτερική μονάδα
Sisäyksykko	Innenheit	Внутренний блок	república wewnątrzlokalna	Εσωτερική μονάδα
3	Mitteltemperaturanwendung	Application à moyenne température	Application à media temperatura	Application de media temperatura
Medium-temperature application	Mitteltemperaturanwendung	Application à moyenne température	Application à media temperatura	Application de media temperatura
3	keskilämpötilan sovellus	średnio-temperaturowe zastosowanie	zastosowanie w średnich temperaturach	la aplicación de baja temperatura
Low-temperature application	Niedertemperaturanwendung	Application à basse température	la aplicación a bassa temperatura	la aplicación de baja temperatura
4	lagedemperatuurtoepassing	lampertemperaturanwendung	Application à basse température	la aplicación de baja temperatura
4	malalämpötilan sovellus	lampertemperaturanwendung	Application à basse température	la aplicación de baja temperatura
5	Deelgedeelte van de buiten-eenheid	Profil de sortie de l'unité	Profile di uscita dell'unità	Perfil de salida del exterior
5	Spreiden van de buiten-eenheid	Profil de sortie de l'unité	Profile di uscita dell'unità	Perfil de salida del exterior
5	Ilmoitus kuumavesivirtaile	Объявление горячей воды	Profil de sortie de l'unité	Δηλώσεις προφίλ φορτίου
6	Seasonal space heating energy efficiency class	la classe d'efficacité énergétique saisonnière	la classe d'efficacia energética estacional	la clase de eficiencia energética estacional de calefacción
6	de seizoensgebonden energie-efficiëntieklasse voor ruimteverwarming	la classe d'efficacité énergétique saisonnière	la classe d'efficacia energética estacional	la clase de eficiencia energética estacional de calefacción
6	Ilmailmavirtauksen kausittainen energiatehokkuusluokka	класс на сезонная отопительная энергетическая эффективность	klasa sezonowej efektywności energetycznej	η τριτογενής θερμότητα της εποχιακής θερμότητας χώρου
Water heating energy efficiency class	die Klasse für die Warmwasserbereitungs-Energieeffizienz	класс на сезонная отопительная энергетическая эффективность	klasa sezonowej efektywności energetycznej	η τριτογενής θερμότητα της εποχιακής θερμότητας χώρου
7	de energie-efficiëntieklasse voor waterverwarming	класс на сезонная отопительная энергетическая эффективность	klasa sezonowej efektywności energetycznej	η τριτογενής θερμότητα της εποχιακής θερμότητας χώρου
7	vedelämmityksen energiatehokkuusluokka	класс на сезонная отопительная энергетическая эффективность	klasa sezonowej efektywności energetycznej	η τριτογενής θερμότητα της εποχιακής θερμότητας χώρου
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 dans les conditions climatiques moyennes	la potencia térmica nominal (en condiciones climáticas medias)	la potencia calorífica nominal (en condiciones climáticas medias)
8	Ilmalämmitysohje (keskimääräisissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (keskimääräisissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (keskimääräisissä ilmastoo-olosuhteissa)	η ονομαστική θερμική ισχύς (στο κλιματικό κλιματικό)
For space heating, annual energy consumption under average climate conditions	für die Raumheizung, den jährlichen Energieverbrauch bei durchschnittlichen Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas medias)	para calefación espacial, 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)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas medias)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas medias)
10	vedelämmitykseen vuotuinen sähkökulu (keskimääräisissä ilmastoo-olosuhteissa)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas medias)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas medias)
Seasonal space heating energy efficiency class	die Jahreszeiteffizienz der Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas medias)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas medias)
11	de seizoensgebonden energie-efficiëntie voor ruimteverwarming (onder gemiddelde klimaatomstandigheden)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
11	Ilmailmavirtauksen kausittainen energiatehokkuus (keskimääräisissä ilmastoo-olosuhteissa)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
Water heating energy efficiency under average climate conditions	die Warmwasserbereitungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
12	de energie-efficiëntie voor waterverwarming (onder gemiddelde klimaatomstandigheden)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
12	vedelämmitykseen energiatehokkuus (keskimääräisissä ilmastoo-olosuhteissa)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
Sound power level L _{WA, indoor}	der Schalleistungspegel L _{WA, in Gebäuden}	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 geluidsemissie-niveau 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	äänitehoastevoimakkuus 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	Werkten uitvoerend in de dalen	fonctionner du au heures creuses	funzionare solo durante le ore notturne	funcionar solamente durante las horas de baja demanda
14	toimittava alustavien lämpötilojen aikana	fonctionner du au heures creuses	funzionare solo durante le ore notturne	funcionar solamente durante las horas de baja demanda
14	Werkten uitvoerend in de dalen	fonctionner du au heures creuses	funzionare solo durante le ore notturne	funcionar solamente durante las horas de baja demanda
14	toimittava alustavien lämpötilojen aikana	fonctionner du au heures creuses	funzionare solo durante le ore notturne	funcionar solamente durante las horas de baja demanda
15	Rated heat output under colder climate conditions	travaux réalisés dans les conditions climatiques plus froides	travaux réalisés dans les conditions climatiques plus froides	travaux realizados en condiciones climáticas más frías
15	de nominale warmteafgifte onder kouder klimaatomstandigheden	travaux réalisés dans les conditions climatiques plus froides	travaux réalisés dans les conditions climatiques plus froides	travaux realizados en condiciones climáticas más frías
15	Ilmalämmitysohje (kylmissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	η ονομαστική θερμική ισχύς (στο κλιματικό κλιματικό)
Rated heat output under warmer climate conditions	die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	η ονομαστική θερμική ισχύς (στο κλιματικό κλιματικό)
16	de nominale warmteafgifte onder warmere klimaatomstandigheden	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	η ονομαστική θερμική ισχύς (στο κλιματικό κλιματικό)
16	Ilmalämmitysohje (lämpimissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	nominaalinen teollisuusvoimakkuus (kylmissä ilmastoo-olosuhteissa)	η ονομαστική θερμική ισχύς (στο κλιματικό κλιματικό)
For space heating, annual energy consumption under colder climate conditions	für die Raumheizung, den jährliche Energieverbrauch bei kälteren Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más frías)
17	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más frías)
17	vedelämmitykseen vuotuinen energiankäyttö (kylmissä ilmastoo-olosuhteissa)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más frías)
For space heating, annual energy consumption under warmer climate conditions	für die Raumheizung, der jährliche Energieverbrauch bei wärmeren Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
18	voor ruimteverwarming, het jaarlijkse elektriciteitsverbruik onder wärmere klimaatomstandigheden	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
18	Ilmalämmitykseen vuotuinen energiankäyttö (lämpimissä ilmastoo-olosuhteissa)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
For water heating, annual energy consumption under colder climate conditions	für die Warmwasserbereitungs-Energieeffizienz bei kälteren Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, 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 plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más frías)
19	vedelämmitykseen vuotuinen sähkökulu (kylmissä ilmastoo-olosuhteissa)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más frías)
For water heating, annual energy consumption under warmer climate conditions	für die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
20	voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder wärmere klimaatomstandigheden	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
20	vedelämmitykseen vuotuinen sähkökulu (lämpimissä ilmastoo-olosuhteissa)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
Seasonal space heating energy efficiency under colder climate conditions	die Jahreszeiteffizienz der Raumheizungs-Energieeffizienz bei kälteren Klimaverhältnissen	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus froides)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más frías)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más frías)
21	Seasonal space heating energy efficiency under warmer climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques plus chaudes)	para el calentamiento de agua, el consumo anual de electricidad (en condiciones climáticas más caldas)	para calefación espacial, el consumo anual de electricidad (en condiciones climáticas más caldas)
21	de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder koudere klimaatomstandigheden	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
21	Ilmalämmitykseen kausittainen energiatehokkuus (kylmissä ilmastoo-olosuhteissa)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
Seasonal space heating energy efficiency under warmer climate conditions	die Jahreszeiteffizienz der Raumheizungs-Energieeffizienz bei wärmeren Klimaverhältnissen	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
22	de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder wärmere klimaatomstandigheden	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
22	Ilmalämmitykseen kausittainen energiatehokkuus (lämpimissä ilmastoo-olosuhteissa)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
Water heating energy efficiency under colder climate conditions	die Warmwasserbereitungs-Energieeffizienz bei kälteren Klimaverhältnissen	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
23	de energie-efficiëntie voor waterverwarming onder kouder klimaatomstandigheden	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
23	vedelämmitykseen energiatehokkuus (kylmissä ilmastoo-olosuhteissa)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
Water heating energy efficiency under warmer climate conditions	die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
24	de energie-efficiëntie voor waterverwarming onder wärmere klimaatomstandigheden	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
24	vedelämmitykseen energiatehokkuus (lämpimissä ilmastoo-olosuhteissa)	класс на сезонная отопительная энергетическая эффективность при отоплении (при средних климатичн. условиях)	la classe d'efficacité énergétique saisonnière	la clase de eficiencia energética estacional
Sound power level L _{WA, outdoor}	der Schalleistungspegel L _{WA, im Freien}	le niveau de puissance acoustique L _{WA, à l'extérieur}	il livello di potenza sonora L _{WA, all'esterno}	el nivel de potencia acústica L _{WA, en exteriores}
25	het geluidsemissie-niveau L _{WA, buiten}	le niveau de puissance acoustique L _{WA, à l'extérieur}	il livello di potenza sonora L _{WA, all'esterno}	el nivel de potencia acústica L _{WA, en exteriores}
25	äänitehoastevoimakkuus L _{WA, ulkona}	le niveau de puissance acoustique L _{WA, à l'extérieur}	il livello di potenza sonora L _{WA, all'esterno}	el nivel de potencia acústica L _{WA, en exteriores}

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

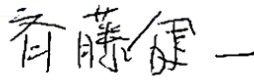
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHSD-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
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	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7450	kWh				

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

Contact details
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY
 Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

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

 Kenichi SAITO
 Manager, Quality Assurance Department
 TURKEY

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 (**) 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:	EHSD-****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:		no
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	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Annual energy consumption	Q _{HE}	5566	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

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

Contact details	
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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHSD-****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:		no
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	Supplementary heater			
Bivalent temperature	Tbiv	-13	° C	Rated heat output (*)	Psup	4.3	kW
Reference design conditions for space heating	Tdesignh	-22	° C	Type of energy input	Electrical		
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10673	kWh				

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

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHSD-****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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C	Other items			
Power consumption in modes other than active mode				Rated air flow rate, outdoors			
Off mode	P _{OFF}	0.015	kW			2640	m ³ /h
Thermostat-off mode	P _{TO}	0.015	kW	Capacity control	variable		
Standby mode	P _{SB}	0.015	kW	Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Crankcase heater mode	P _{CK}	0.000	kW	Annual energy consumption	Q _{HE}	8290	kWh

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		-		η_{wh}		-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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- (**) 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:	EHSD-****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:		no
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	COPd	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	4115	kWh				

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

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(**) 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:	EHSD-****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:		no
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	COPd	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2882	kWh				

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

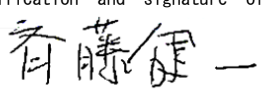
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERSD-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
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	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7395	kWh				

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERSD-****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:		no
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	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors	-	2640	m ³ /h
Capacity control	variable						
Sound power level, indoors/outdoors	L _{WA}	41 / 58		dBA			
Annual energy consumption	Q _{HE}	5511		kWh			

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

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TURKEY

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- (**) 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:	ERSD-****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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.9	kW	Rated heat output (*)	Psup	4.3	kW
Bivalent temperature	Tbiv	-13	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10640	kWh				

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERSD-****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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C	Other items			
Power consumption in modes other than active mode				Rated air flow rate, outdoors			
Off mode	P _{OFF}	0.015	kW			2640	m ³ /h
Thermostat-off mode	P _{TO}	0.015	kW	Capacity control	variable		
Standby mode	P _{SB}	0.015	kW	Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Crankcase heater mode	P _{CK}	0.000	kW	Annual energy consumption	Q _{HE}	8257	kWh

Other items				Rated air flow rate, outdoors			
Capacity control	variable					2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 58					
Annual energy consumption	Q _{HE}	8257					

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

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(**) 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:	ERSD-****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:		no
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	COPd	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	4049	kWh				

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

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(**) 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:	ERSD-****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:		no
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	COPd	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2816	kWh				

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

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(**) 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

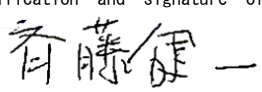
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
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	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7450	kWh				

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

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 (***) 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:	EHSD-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:		no
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	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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			
Capacity control		variable	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Annual energy consumption	Q _{HE}	5566	kWh
Rated air flow rate, outdoors			
-			
2640			
m ³ /h			

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

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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:	EHSD-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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.9	kW	Rated heat output (*)	Psup	4.3	kW
Bivalent temperature	Tbiv	-13	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10673	kWh				

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

Contact details

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

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

Kenichi SAITO

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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:	EHSD-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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	8290	kWh				

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

Contact details

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- (**) 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:	EHSD-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:		no
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	COPd	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	4115	kWh				

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

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(**) 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:	EHSD-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:		no
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	COPd	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2882	kWh				

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

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 (*) 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

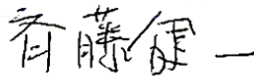
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERSD-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		no
Parameters for		medium-temperature application.
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	COPd	3.33	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	6.20	-
Tj = + 7 ° C	Pdh	5.0	kW	Tj = bivalent temperature	COPd	1.87	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.55	-
Tj = +12 ° C	Pdh	3.8	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	7395	kWh				

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

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

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 Kenichi SAITO
 Manager, Quality Assurance Department
 TURKEY

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 (**) 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:	ERSD-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:		no
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	COPd	4.50	-
Tj = + 2 ° C	Pdh	6.5	kW	Tj = + 7 ° C	COPd	6.00	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = +12 ° C	COPd	7.00	-
Tj = + 7 ° C	Pdh	5.2	kW	Tj = bivalent temperature	COPd	2.75	-
Degradation co-efficient (**)	Cdh	0.98	-	Tj = operation limit temperature (***)	COPd	2.40	-
Tj = +12 ° C	Pdh	4.0	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.97	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	10.7	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	10.7	kW	Rated heat output (*)	Psup	1.4	kW
Bivalent temperature	Tbiv	-7	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-10	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	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:				Water heating energy efficiency			
Declared load profile	-			η_{wh}	-	%	
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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- (***) 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:	ERSD-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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	8.9	kW	Rated heat output (*)	Psup	4.3	kW
Bivalent temperature	Tbiv	-13	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	10640	kWh				

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

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(*) 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:	ERSD-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:		no
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	Supplementary heater			
Tj = - 15 ° C (if TOL < - 20 ° C)	Pdh	9.9	kW	Rated heat output (*)	Psup	4.1	kW
Bivalent temperature	Tbiv	-16	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	-22	° C	Other items			
Power consumption in modes other than active mode				Rated air flow rate, outdoors			
Off mode	P _{OFF}	0.015	kW			2640	m ³ /h
Thermostat-off mode	P _{TO}	0.015	kW	Capacity control	variable		
Standby mode	P _{SB}	0.015	kW	Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA
Crankcase heater mode	P _{CK}	0.000	kW	Annual energy consumption	Q _{HE}	8257	kWh

Other items				Rated air flow rate, outdoors			
Capacity control	variable					2640	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	41 / 58					
Annual energy consumption	Q _{HE}	8257					

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

Contact details
 MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY Manisa OSB 4.Kisim Kecilikoyosb Mah. Ahmet Nazif Zorlu Bulvarı No:19 Yunusemre - Manisa, Turkey

The identification and signature of the person empowered to bind the supplier;
 Kenichi SAITO
 Manager, Quality Assurance Department
 TURKEY

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERSD-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:		no
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	COPd	1.95	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	3.30	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	5.40	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	1.95	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	1.95	-
Tj = +12 ° C	Pdh	5.2	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	4049	kWh				

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERSD-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:		no
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	COPd	3.10	-
Tj = + 2 ° C	Pdh	12.1	kW	Tj = + 7 ° C	COPd	5.10	-
Degradation co-efficient (**)	Cdh	1.00	-	Tj = +12 ° C	COPd	7.10	-
Tj = + 7 ° C	Pdh	7.7	kW	Tj = bivalent temperature	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-	Tj = operation limit temperature (***)	COPd	3.10	-
Tj = +12 ° C	Pdh	4.4	kW	Operation limit temperature	TOL	-25	° C
Degradation co-efficient (**)	Cdh	0.98	-	Heating water operating limit temperature	WTOL	60	° C
Tj = bivalent temperature	Pdh	12.1	kW	Supplementary heater			
Tj = operation limit temperature (***)	Pdh	12.1	kW	Rated heat output (*)	Psup	0.0	kW
Bivalent temperature	Tbiv	2	° C	Type of energy input	Electrical		
Reference design conditions for space heating	Tdesignh	2	° C				
Power consumption in modes other than active mode							
Off mode	P _{OFF}	0.015	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				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	41 / 58	dBA				
Annual energy consumption	Q _{HE}	2816	kWh				

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

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