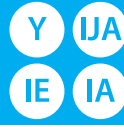




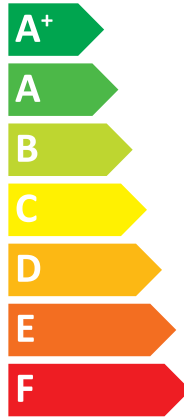
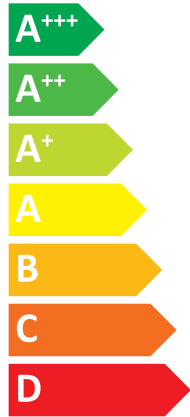
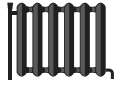
# ENERG

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Indoor unit  
Outdoor unit

E\*ST30D-\*\*\*\*D  
PUZ-SWM120VAA



Two sound power level icons:

- Indoor unit: 41 dB
- Outdoor unit: 58 dB



Legend for power consumption:

- Dark blue square: 12 kW
- Medium blue square: 12 kW
- Light blue square: 12 kW

2019

811/2013

DG79V341H24



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 include Outdoor unit, Indoor unit, and performance metrics for medium-temperature and low-temperature applications. Rows list various models like PUZ-SWM60VAA, PUZ-SWM80VAA, etc.

Table 2: COMBINATION HEATER. Columns include Outdoor unit, Indoor unit, and performance metrics for medium-temperature and low-temperature applications. Rows list various models like PUZ-SWM60VAA, PUZ-SWM80VAA, etc.

English	German	French	Italian	Spanish
Nederlands	Svenska	Dansk	Portugals	Espanol
suomi	Cestina	Български	Polski	Ελληνικά
Outdoor unit	Außengerät	unité extérieure	unità esterna	unidad exterior
1	Utlomsenhet	Utenlands enhed	unidad exterior	Εξωτερική μονάδα
Ulkoyksykko	Vonkomsenhet	Внешний тепло	jednostka zewnętrzna	Εξωτερική μονάδα
2	Indoor unit	unité intérieure	unità interna	unidad interior
Sisäyksykko	Innenset	Внутренний тепло	interna interior	Εσωτερική μονάδα
3	Medium-temperature application	Mitteltemperaturanwendung	Je application de media temperatura	In application de media temperatura
keskilämpötilan sovellus	mittelmitteltemperaturlämpling	middletemperature application	a aplicação a media temperatura	η εφαρμογή σε μέση θερμοκρασία
4	Low-temperature application	Niedertemperaturanwendung	Je application a basse temperature	In application a basse temperatura
alagtemperatuurilinen sovellus	Niedertemperaturanwendung	Application a basse temperature	a aplicação a baixa temperatura	η εφαρμογή σε χαμηλή θερμοκρασία
5	Overheated load profile	Aufgeheiztes Lastprofil	Profil de surchauffe décalée	Perfil de carga descalado
Syrjäveden savasteilustrus	Dekoratívny záhrievový profil	Профиль перегрева	Perfil de carga adelantado	Δημιψέφο προφίλ φορτίου
6	Seasonal space heating energy efficiency class	la classe de efficacité énergétique saisonnière	la classe de efficacité énergétique saisonnière	In classe de efficacité energética estacional de calefacción
de seizoenruimteverwarming energie-efficiëntieklasse	de seizoenruimteverwarming energie-efficiëntieklasse	la classe de efficacité énergétique saisonnière	la classe de efficacité énergétique saisonnière	η τάξη ενεργειακής αποδοτικότητας της εποχιακής θέρμανσης χώρου
7	Water heating energy efficiency class	la classe de efficacité énergétique	la classe de efficacité énergétique	η τάξη ενεργειακής αποδοτικότητας της θέρμανσης με νερό
de energie-efficiëntieklasse voor waterverwarming	de energie-efficiëntieklasse voor waterverwarming	la classe de efficacité énergétique	la classe de efficacité énergétique	η τάξη ενεργειακής αποδοτικότητας της θέρμανσης με νερό
8	Rated heat output under average climate conditions	la puissance thermique nominale dans les conditions climatiques moyennes	la puissance thermique nominale dans les conditions climatiques moyennes	η rated power output under average climate conditions
de nominale warmteafgifte (onder gemiddelde klimaatomstandigheden)	de nominale warmteafgifte (onder gemiddelde klimaatomstandigheden)	la puissance thermique nominale dans les conditions climatiques moyennes	la puissance thermique nominale dans les conditions climatiques moyennes	η rated power output under average climate conditions
9	For space heating, annual energy consumption under average climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	η ετήσια ενεργειακή κατανάλωση για θέρμανση χώρου (υπό μέση κλιματική κατάσταση)
for space heating, annual electricity consumption under average climate conditions	for space heating, annual electricity consumption under average climate conditions	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	η ετήσια ενεργειακή κατανάλωση ηλεκτρικού ρεύματος για θέρμανση χώρου (υπό μέση κλιματική κατάσταση)
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)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	η ετήσια ενεργειακή κατανάλωση ηλεκτρικού ρεύματος για θέρμανση με νερό (υπό μέση κλιματική κατάσταση)
for water heating, annual electricity consumption under average climate conditions	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)	pour le chauffage de l'eau, la consommation annuelle d'électricité (dans les conditions climatiques moyennes)	η ετήσια ενεργειακή κατανάλωση ηλεκτρικού ρεύματος για θέρμανση με νερό (υπό μέση κλιματική κατάσταση)
11	de seizoenruimteverwarming energie-efficiëntieklasse voor ruimteverwarming (onder gemiddelde klimaatomstandigheden)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques moyennes)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques moyennes)	η ετήσια ενεργειακή αποδοτικότητα της εποχιακής θέρμανσης (υπό μέση κλιματική κατάσταση)
12	de energie-efficiëntie voor waterverwarming (onder gemiddelde klimaatomstandigheden)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques moyennes)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques moyennes)	η ετήσια ενεργειακή αποδοτικότητα της θέρμανσης με νερό (υπό μέση κλιματική κατάσταση)
13	Sound power level L <sub>WA</sub> indoor	le niveau de puissance acoustique L <sub>WA</sub> à l'intérieur	Il livello di potenza sonora L <sub>WA</sub> all'interno	el nivel de potencia acústica L <sub>WA</sub> en interiores
het geluidsvermogeniveau L <sub>WA</sub> binnen	het geluidsvermogeniveau L <sub>WA</sub> binnen	le niveau de puissance acoustique L <sub>WA</sub> à l'intérieur	Il livello di potenza sonora L <sub>WA</sub> all'interno	el nivel de potencia acústica L <sub>WA</sub> en interiores
14	Work only during off-peak hours	fonctionner uniquement pendant les heures creuses	funzionare solo durante le ore notturne	funcionar solamente durante las horas de baja demanda
Werken uitsluitend in de daluren	Werken uitsluitend in de daluren	fonctionner uniquement pendant les heures creuses	funzionare solo durante le ore notturne	funcionar solamente durante las horas de baja demanda
15	Rated heat output under colder climate conditions	la puissance thermique nominale dans les conditions climatiques plus froides	la puissance thermique nominale dans les conditions climatiques plus froides	η rated power output under colder climate conditions
de nominale warmteafgifte onder kouder klimaatomstandigheden	de nominale warmteafgifte onder kouder klimaatomstandigheden	la puissance thermique nominale dans les conditions climatiques plus froides	la puissance thermique nominale dans les conditions climatiques plus froides	η rated power output under colder climate conditions
16	Rated heat output under warmer climate conditions	la puissance thermique nominale dans les conditions climatiques plus chaudes	la puissance thermique nominale dans les conditions climatiques plus chaudes	η rated power output under warmer climate conditions
de nominale warmteafgifte onder warmer klimaatomstandigheden	de nominale warmteafgifte onder warmer klimaatomstandigheden	la puissance thermique nominale dans les conditions climatiques plus chaudes	la puissance thermique nominale dans les conditions climatiques plus chaudes	η rated power output under warmer climate conditions
17	For space heating, annual energy consumption under colder climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή κατανάλωση για θέρμανση χώρου (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
for space heating, annual energy consumption under colder climate conditions	for space heating, annual energy consumption under colder climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή κατανάλωση για θέρμανση χώρου (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
18	For space heating, annual energy consumption under warmer climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή κατανάλωση για θέρμανση χώρου (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
for space heating, annual energy consumption under warmer climate conditions	for space heating, annual energy consumption under warmer climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή κατανάλωση για θέρμανση χώρου (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
19	For water heating, annual energy consumption under colder climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή κατανάλωση για θέρμανση με νερό (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
for water heating, annual energy consumption under colder climate conditions	for water heating, annual energy consumption under colder climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή κατανάλωση για θέρμανση με νερό (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
20	For water heating, annual energy consumption under warmer climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή κατανάλωση για θέρμανση με νερό (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
for water heating, annual energy consumption under warmer climate conditions	for water heating, annual energy consumption under warmer climate conditions	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	pour le chauffage de l'eau, la consommation annuelle d'énergie (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή κατανάλωση για θέρμανση με νερό (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
21	de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder koudere klimaatomstandigheden)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus froides)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή αποδοτικότητα της εποχιακής θέρμανσης (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder koudere klimaatomstandigheden)	de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder koudere klimaatomstandigheden)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus froides)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή αποδοτικότητα της εποχιακής θέρμανσης (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
22	de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder warmere klimaatomstandigheden)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή αποδοτικότητα της εποχιακής θέρμανσης (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder warmere klimaatomstandigheden)	de seizoenruimteverwarming energie-efficiëntie voor ruimteverwarming (onder warmere klimaatomstandigheden)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	la classe de efficacité énergétique saisonnière pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή αποδοτικότητα της εποχιακής θέρμανσης (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
23	de energie-efficiëntie voor waterverwarming (onder koudere klimaatomstandigheden)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus froides)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή αποδοτικότητα της θέρμανσης με νερό (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
de energie-efficiëntie voor waterverwarming (onder koudere klimaatomstandigheden)	de energie-efficiëntie voor waterverwarming (onder koudere klimaatomstandigheden)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus froides)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus froides)	η ετήσια ενεργειακή αποδοτικότητα της θέρμανσης με νερό (υπό κλιματική κατάσταση με χαμηλότερη θερμοκρασία)
24	de energie-efficiëntie voor waterverwarming (onder warmere klimaatomstandigheden)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή αποδοτικότητα της θέρμανσης με νερό (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
de energie-efficiëntie voor waterverwarming (onder warmere klimaatomstandigheden)	de energie-efficiëntie voor waterverwarming (onder warmere klimaatomstandigheden)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	la classe de efficacité énergétique pour le chauffage de l'eau (dans les conditions climatiques plus chaudes)	η ετήσια ενεργειακή αποδοτικότητα της θέρμανσης με νερό (υπό κλιματική κατάσταση με υψηλότερη θερμοκρασία)
25	Sound power level L <sub>WA</sub> outdoor	le niveau de puissance acoustique L <sub>WA</sub> à l'extérieur	Il livello di potenza sonora L <sub>WA</sub> all'esterno	el nivel de potencia acústica L <sub>WA</sub> en exteriores
het geluidsvermogeniveau L <sub>WA</sub> buiten	het geluidsvermogeniveau L <sub>WA</sub> buiten	le niveau de puissance acoustique L <sub>WA</sub> à l'extérieur	Il livello di potenza sonora L <sub>WA</sub> all'esterno	el nivel de potencia acústica L <sub>WA</sub> en exteriores
Ακουσικό επίπεδο L <sub>WA</sub> εξωτερικά	Ακουσικό επίπεδο L <sub>WA</sub> εξωτερικά	le niveau de puissance acoustique L <sub>WA</sub> à l'extérieur	Il livello di potenza sonora L <sub>WA</sub> all'esterno	el nivel de potencia acústica L <sub>WA</sub> en exteriores

**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

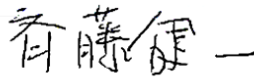
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST30D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable					2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7450	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	133	%	
Daily electricity consumption	Q <sub>elec</sub>	6.380	kWh				
Annual electricity consumption	AEC	1404	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

- 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:	EHST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

**Other items**

Capacity control	variable		Rated air flow rate, outdoors	-	2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA			
Annual energy consumption	Q <sub>HE</sub>	5566	kWh			

**For heat pump combination heater:**

Declared load profile	XL		Water heating energy efficiency	$\eta_{wh}$	133	%
Daily electricity consumption	Q <sub>elec</sub>	6.380	kWh			
Annual electricity consumption	AEC	1404	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

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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:	EHST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	10673	kWh				

For heat pump combination heater:							
Declared load profile	XL			Water heating energy efficiency	$\eta_{wh}$	111	%
Daily electricity consumption	Q <sub>elec</sub>	7.500	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:	EHST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8290	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	111	%	
Daily electricity consumption	Q <sub>elec</sub>	7.500	kWh				
Annual electricity consumption	AEC	0	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:	EHST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	4115	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	155	%	
Daily electricity consumption	Q <sub>elec</sub>	5.600	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:	EHST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	2882	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	155	%	
Daily electricity consumption	Q <sub>elec</sub>	5.600	kWh				
Annual electricity consumption	AEC	0	kWh				

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**PRODUCT INFORMATION / TECHNICAL DOCUMENTATION**

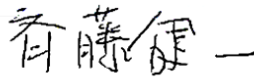
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST30D-****D
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7395	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	133	%	
Daily electricity consumption	Q <sub>elec</sub>	6.380	kWh				
Annual electricity consumption	AEC	1404	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:	ERST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	5511	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	133	%	
Daily electricity consumption	Q <sub>elec</sub>	6.380	kWh				
Annual electricity consumption	AEC	1404	kWh				

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Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	ERST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	10640	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	111	%	
Daily electricity consumption	Q <sub>elec</sub>	7.500	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

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:	ERST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8257	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	111	%	
Daily electricity consumption	Q <sub>elec</sub>	7.500	kWh				
Annual electricity consumption	AEC	0	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:	ERST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

**Other items**

Capacity control	variable		Rated air flow rate, outdoors	-	2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA			
Annual energy consumption	Q <sub>HE</sub>	4049	kWh			

**For heat pump combination heater:**

Declared load profile	XL		Water heating energy efficiency	$\eta_{wh}$	155	%
Daily electricity consumption	Q <sub>elec</sub>	5.600	kWh			
Annual electricity consumption	AEC		kWh			

**Contact details**

MITSUBISHI ELECTRIC AIR CONDITIONING SYSTEMS MANUFACTURING TURKEY JOINT STOCK COMPANY

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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:	ERST30D-****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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

**Other items**

Capacity control	variable		Rated air flow rate, outdoors	-	2640	m <sup>3</sup> /h
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA			
Annual energy consumption	Q <sub>HE</sub>	2816	kWh			

**For heat pump combination heater:**

Declared load profile	XL		Water heating energy efficiency	$\eta_{wh}$	155	%
Daily electricity consumption	Q <sub>elec</sub>	5.600	kWh			
Annual electricity consumption	AEC	0	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**

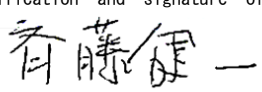
Model(s):	Outdoor unit:	PUZ-SWM120VAA
	Indoor unit:	EHST30D-MED
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	7450	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	133	%	
Daily electricity consumption	Q <sub>elec</sub>	6.380	kWh				
Annual electricity consumption	AEC	1404	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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  - Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.
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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:	EHST30D-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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA
Annual energy consumption	Q <sub>HE</sub>	5566	kWh
Rated air flow rate, outdoors			
-			
2640			
m <sup>3</sup> /h			

For heat pump combination heater:			
Declared load profile	XL		
Daily electricity consumption	Q <sub>elec</sub>	6.380	kWh
Annual electricity consumption	AEC	1404	kWh
Water heating energy efficiency			
$\eta_{wh}$			
133			
%			

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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:	EHST30D-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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	10673	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	111	%	
Daily electricity consumption	Q <sub>elec</sub>	7.500	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:	EHST30D-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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	8290	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	111	%	
Daily electricity consumption	Q <sub>elec</sub>	7.500	kWh				
Annual electricity consumption	AEC	0	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:	EHST30D-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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	4115	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	155	%	
Daily electricity consumption	Q <sub>elec</sub>	5.600	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:	EHST30D-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	$\eta_s$	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 <sub>OFF</sub>	0.015	kW				
Thermostat-off mode	P <sub>TO</sub>	0.015	kW				
Standby mode	P <sub>SB</sub>	0.015	kW				
Crankcase heater mode	P <sub>CK</sub>	0.000	kW				

Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2640	m <sup>3</sup> /h	
Sound power level, indoors/outdoors	L <sub>WA</sub>	/ 58	dBA				
Annual energy consumption	Q <sub>HE</sub>	2882	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	XL			$\eta_{wh}$	155	%	
Daily electricity consumption	Q <sub>elec</sub>	5.600	kWh				
Annual electricity consumption	AEC	0	kWh				

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