

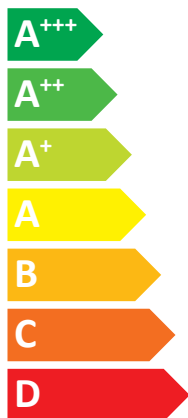


ENERG

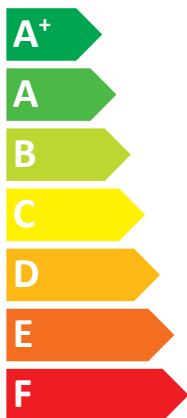
енергия · ενεργεια



Indoor unit E*ST20C-**C(W)
Outdoor unit PUHZ-SHW112YAA(-BS)



A++



A



40 dB



60 dB



- 11 kW
- 13 kW**
- 11 kW

COMBINATION HEATER		For medium-temperature application																									For low-temperature application																								
1	2	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25						
Outdoor unit	Indoor unit	Medium-temperature application																									Low-temperature application																								
		Medium-temperature application Dedicated heat profile Seasonal space heating energy efficiency class Water heating energy efficiency class Related heat output under average climate conditions kW For space heating, internal energy consumption under average climate conditions kWh For water heating, internal electricity consumption under average climate conditions kWh Seasonal space heating energy efficiency under average climate conditions % Water heating energy efficiency under average climate conditions % Sound power level Lw, indoor Work only during off-peak hours Related heat output under colder climate conditions Related heat output under warmer climate conditions For space heating, internal energy consumption under average climate conditions kWh For water heating, internal electricity consumption under average climate conditions kWh Seasonal space heating energy efficiency under average climate conditions % Water heating energy efficiency under average climate conditions % Sound power level Lw, outdoor	Low-temperature application Dedicated heat profile Seasonal space heating energy efficiency class Water heating energy efficiency class Related heat output under average climate conditions kW For space heating, internal energy consumption under average climate conditions kWh For water heating, internal electricity consumption under average climate conditions kWh Seasonal space heating energy efficiency under average climate conditions % Water heating energy efficiency under average climate conditions % Sound power level Lw, indoor																																																
PUHZ-SW75VAA-(BS)	EHST20D-****C2	✓	L	A++	A+	7	4435	751	129	145	40	-	6	7	5378	2408	890	682	107	155	123	161	58	✓	L	A++	A+	7	3607	751	162	145	40	-	6	7	4472	1731	890	682	129	219	123	161	58						
	ERS20D-****C2	✓	L	A++	A	7	4352	1040	132	104	40	-	6	7	5274	2352	880	682	109	158	123	161	58	✓	L	A++	A+	7	3525	751	166	145	40	-	6	7	4382	1678	890	682	132	226	123	161	58						
	EHST20C-***C(W)	✓	L	A++	A	7	4435	1040	132	104	40	-	6	7	5274	2352	1288	947	109	158	83	114	58	✓	L	A++	A	7	3525	1040	166	104	40	-	6	7	4382	1678	1288	947	132	226	83	114	58						
	EHST20D-***C(W)	✓	L	A++	A	7	4352	1040	129	104	40	-	6	7	5378	2408	1288	947	107	155	83	114	58	✓	L	A++	A	7	3607	1040	162	104	40	-	6	7	4472	1731	1288	947	129	219	83	114	58						
	ERHST20D-***C(W)	✓	L	A++	A	7	4352	1040	132	104	40	-	6	7	5274	2352	1288	947	109	158	83	114	58	✓	L	A++	A	7	3525	1040	166	104	40	-	6	7	4382	1678	1288	947	132	226	83	114	58						
	EHST17D-****D	✓	L	A++	A+	7	4352	799	129	136	41	-	6	7	5378	2408	1030	771	107	155	105	141	58	✓	L	A++	A+	7	3607	799	162	136	41	-	6	7	4472	1731	1030	771	129	219	105	141	58						
	EHST17D-****D	✓	L	A++	A+	7	4352	799	132	136	41	-	6	7	5274	2352	1030	771	109	158	105	141	58	✓	L	A++	A+	7	3525	799	166	136	41	-	6	7	4382	1678	1030	771	132	226	105	141	58						
	EHST20D-****D	✓	L	A++	A+	7	4352	751	129	145	41	-	6	7	5378	2408	877	678	107	155	123	161	58	✓	L	A++	A+	7	3607	751	162	145	41	-	6	7	4472	1731	877	678	129	219	123	161	58						
	ERS20D-****D	✓	L	A++	A+	7	4352	751	132	145	41	-	6	7	5274	2352	877	678	109	158	123	161	58	✓	L	A++	A+	7	3525	751	166	145	41	-	6	7	4382	1678	877	678	132	226	123	161	58						
	EHS20D-****D	✓	XL	A++	A	7	4435	1448	129	120	41	-	6	7	5378	2408	1855	1368	107	155	93	127	58	✓	XL	A++	A	7	3607	1448	162	120	41	-	6	7	4472	1731	1855	1368	129	219	93	127	58						
ERHST20D-****D	✓	XL	A++	A	7	4435	1448	132	120	41	-	6	7	5274	2352	1855	1368	109	158	93	127	58	✓	XL	A++	A	7	3525	1448	166	120	41	-	6	7	4382	1678	1855	1368	132	226	93	127	58							
PUHZ-SW75VAA-(BS)	EHST20D-****C2	✓	L	A++	A+	7	4435	751	128	145	40	-	6	7	5432	2437	880	682	106	153	123	161	58	✓	L	A++	A+	7	3654	751	160	145	40	-	6	7	4520	1763	880	682	128	215	123	161	58						
	ERS20D-****C2	✓	L	A++	A	7	4361	751	132	145	40	-	6	7	5294	2360	880	682	109	158	123	161	58	✓	L	A++	A+	7	3542	751	165	145	40	-	6	7	4385	1684	880	682	132	225	123	161	58						
	EHST20C-***C(W)	✓	L	A++	A	7	4470	1040	128	104	40	-	6	7	5432	2437	1288	947	106	153	83	114	58	✓	L	A++	A	7	3654	1040	160	104	40	-	6	7	4520	1763	1288	947	128	215	83	114	58						
	EHST20D-***C(W)	✓	L	A++	A	7	4361	1040	132	104	40	-	6	7	5294	2360	1288	947	109	158	83	114	58	✓	L	A++	A	7	3542	1040	165	104	40	-	6	7	4385	1684	1288	947	132	225	83	114	58						
	EHST20D-***C(W)	✓	L	A++	A	7	4470	1040	128	104	40	-	6	7	5432	2437	1288	947	106	153	83	114	58	✓	L	A++	A	7	3654	1040	160	104	40	-	6	7	4520	1763	1288	947	128	215	83	114	58						
	EHST20D-***C(W)	✓	L	A++	A	7	4361	1040	132	104	40	-	6	7	5294	2360	1288	947	109	158	83	114	58	✓	L	A++	A	7	3542	1040	165	104	40	-	6	7	4385	1684	1288	947	132	225	83	114	58						
	EHST17D-****D	✓	L	A++	A+	7	4470	799	128	136	41	-	6	7	5432	2437	1030	771	106	153	105	141	58	✓	L	A++	A+	7	3654	799	160	136	41	-	6	7	4520	1763	1030	771	128	215	105	141	58						
	EHST17D-****D	✓	L	A++	A+	7	4361	799	132	136	41	-	6	7	5294	2360	1030	771	108	158	105	141	58	✓	L	A++	A+	7	3542	799	165	136	41	-	6	7	4385	1684	1030	771	132	225	105	141	58						
	ERS20D-****D	✓	L	A++	A+	7	4361	751	132	145	41	-	6	7	5294	2360	877	678	109	158	123	161	58	✓	L	A++	A+	7	3542	751	165	145	41	-	6	7	4385	1684	877	678	132	225	123	161	58						
	EHS20D-****D	✓	XL	A++	A	7	4470	1448	128	120	41	-	6	7	5432	2437	1855	1368	106	153	93	127	58	✓	XL	A++	A	7	3654	1448	160	120	41	-	6	7	4520	1763	1855	1368	128	215	93	127	58						
ERHST20D-****D	✓	XL	A++	A	7	4361	1448	132	120	41	-	6	7	5294	2360	1855	1368	109	158	93	127	58	✓	XL	A++	A	7	3542	1448	165	120	41	-	6	7	4385	1684	1855	1368	132	225	93	127	58							
PUHZ-SW75VAA-SC	EHST20D-****C2	✓	L	A++	A+	7	4435	751	129	145	40	-	6	7	5378	2408	890	682	107	155	123	161	58	✓	L	A++	A+	7	3607	751	162	145	40	-	6	7	4472	1731	890	682	129	219	123	161	58						
	ERS20D-****C2	✓	L	A++	A	7	4352	751	132	145	40	-	6	7	5274	2352	880	682	109	158	123	161	58	✓	L	A++	A+	7	3525	751	166	145	40	-	6	7	4382	1678	890	682	132	226	123	161	58						
	EHST20C-***C(W)	✓	L	A++	A	7	4435	1040	132	104	40	-	6	7	5378	2408	1288	947	107	155	83	114	58	✓	L	A++	A	7	3607	1040	162	104	40	-	6	7	4472	1731	1288	947	129	219	83	114	58						
	EHST20D-***C(W)	✓	L	A++	A	7	4352	1040	132	104	40	-	6	7	5274	2352	1288	947	109	158	83	114	58	✓	L	A++	A	7	3525	1040	166	104	40	-	6	7	4382	1678	1288	947	132	226	83	114	58						
	EHST20C-***C(W)	✓	L	A++	A	7	4435	1040	129	104	40	-	6	7	5378	2408	1288	947	107	155	83	114	58	✓	L	A++	A	7	3607	1040	162	104	40	-	6	7	4472	1731	1288	947	129	219	83	114	58						
	EHST20D-***C(W)	✓	L	A++	A	7	4352	1040	132	104	40	-	6	7	5274	2352	1288	947	109	158	83	114	58	✓	L	A++	A	7	3525	1040	166	104	40	-	6	7	4382	1678	1288	947	132	226	83	114	58						
	EHST17D-****D	✓	L	A++	A+	7	4435	799	129	136	41	-	6	7	5378	2408	1030	771	107	155	105	141	58	✓	L	A++	A+	7	3607	799	162	136	41	-	6	7	4472	1731	1030	771	129	219	105	141	58						
	EHST17D-****D	✓	L	A++	A+	7	4352	799	132	136	41	-	6	7	5274	2352	1030	771	109	158	105	141	58	✓	L	A++	A+	7	3525	799	166	136	41	-	6	7	4382	1678	1030	771	132	226	105	141	58						
	EHS20D-****D	✓	L	A++	A+	7	4435	751	129	145	41	-	6	7	5378	2408	877	678	107	155	123	161	58	✓	L	A++	A+	7	3607	751	162	145	41	-	6	7	4472	1731	877	678	129	219	123	161	58						
	EHST30D-****D	✓	XL	A++	A	7	4435	1448	129	120	41	-	6	7	5378	2408	1855	1368	107	155	93	127	58	✓	XL	A++	A	7	3607	1448	162	120	41	-	6	7	4472	1731	1855	1368	129	219	93	127	58						
ERHST30D-****D	✓	XL	A++	A	7	4352	1448	132	120	41	-	6	7	5274	2352	1855	1368	109	158	93	127	58	✓	XL	A++	A	7	3525	1448	166	120	41	-	6	7	4382	1678	1855	1368	132	226	93	127	58							
PUHZ-SW75VAA-SC	EHST20D-****C2	✓	L	A++	A+	7	4470	751	128	145	40	-	6	7	5432	2437	880	682	106	153	123	161	58	✓	L	A++	A+	7	3654	751	160	145	40	-	6	7	4520	1763	880	682	128	215	123	161	58						
	ERS20D-****C2	✓	L	A++	A	7	4361	751	132	145	40	-	6	7	5294	2360	880	682	109	158	123	161	58	✓																											

	English Nederlands suomi	Deutsch Svenska Čeština	Français Dansk Български	Italiano Português Polski	Español Ελληνικά -
1	Outdoor unit buitenunit Ulkoyksikkö	Außengerät Utomhusenhet Venkovní jednotka	unité extérieure Udendørs enhed Външно тяло	unità esterna unidade exterior jednostka zewnētrzna	unidad exterior Εξωτερική μονάδα -
	Indoor unit binnenunit Sisäyksikkö	Innengerät Inomhusenhet Vnitřní jednotka	unité intérieure Indendørs enhed Вътрешно тяло	unità interna unidade interior jednostka wewnētrzna	unidad interior Εσωτερική μονάδα -
3	Medium-temperature application middentemperatuur-toepassing keskilämpötilan sovellus	Mitteltemperaturanwendung mediumentemperatuurapplikation střednětepelní aplikace	l'application à moyenne température middeltemperatuurvanvendsen среднотемпературното приложение	le applicazioni a media temperatura a aplicação a média temperatura zastosowania w średnich temperaturach	la aplicación de media temperatura η εφαρμογή σε μέση θερμοκρασία -
	Low-temperature application lagetemperatuur-toepassing matalanlämpötilan sovellus	Niedertemperaturanwendung lågtemperatuurapplikation nízkoteplotní aplikace	l'application à basse température lavtemperatuurvanvendsen нискотемпературни приложения	le applicazioni a bassa temperatura a aplicação a baixa temperatura zastosowania w niskich temperaturach	la aplicación de baja temperatura η εφαρμογή σε χαμηλή θερμοκρασία -
5	Declared load profile Opgegeven capaciteitsprofiel Ilmoitettu kuormitusprofiili	Angegebenes Lastprofil Deklarerad belastningsprofil Deklarovaný zátěžový profil	Profil de soutirage déclaré Angivet forbrugsprofil Объев товаров профил	Profilo di carico dichiarato Perfil de carga declarado Deklarowany profil obciążeń	Perfil de carga declarado Δηλωμένο προφίλ φορτίου -
6	Seasonal space heating energy efficiency class de seizoensgebonden energie-efficiëntieklasse voor ruimteverwarming tilalämmityksen kausittainen energiatehokkuusluokka	die Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz säsongrelaterade energieeffektivitetsklass vid rumsuppvärmning třída sezonní energetické účinnosti vytápění	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux klassen for årsvirkningsgrad ved rumopvarmning классът на сезонната отоплителна енергийна ефективност	la classe di efficienza energetica stagionale del riscaldamento d'ambiente A classe de eficiência energética do aquecimento ambiente sazonal klasa sezonowej efektywności energetycznej ogrzewania pomieszczeń	la clase de eficiencia energética estacional de calefacción η τάξη ενεργειακής απόδοσης της εποχιακής θέρμανσης χώρου -
	Water heating energy efficiency class de energie-efficiëntieklasse voor waterverwarming vedenlämmityksen energiatehokkuusluokka	die Klasse für die Warmwasserbereitungs-Energieeffizienz energieeffektivitetsklass vid vattenuppvärmning třída energetické účinnosti ohřevu vody	la classe d'efficacité énergétique, pour le chauffage de l'eau klassen for årsvirkningsgrad ved vandopvarmning классът на енергийната ефективност при подгряване на вода	la classe di efficienza energetica del riscaldamento dell'acqua A classe de eficiência energética do aquecimento de água klasa efektywności energetycznej podgrzewania wody	la clase de eficiencia energética del caldeo de agua η τάξη ενεργειακής απόδοσης θέρμανσης νερού -
8	Rated heat output under average climate conditions de nominale warmteafgifte(onder gemiddelde klimaatomstandigheden) nimellislämpöteho(keskimääräisissä ilmastoloosuhteissa)	die Wärmenennleistung bei durchschnittlichen Klimaverhältnissen Den nominella avgivna värmeeffekten(under genomsnittliga klimatförhållanden) jmenovitě tepelný výkon(za průměrných klimatických podmínek)	la puissance thermique nominale dans les conditions climatiques moyennes den nominelle nytteeffekt(under gennemsnitlige klimaforhold) номиналната топлинна мощност(при средни климатични условия)	la potenza termica nominale(in condizioni climatiche medie) A potência calorífica nominal(em condições climáticas médias) znamionowa moc cieplna(w warunkach klimatu umiarkowanego)	la potencia calorífica nominal(en condiciones climáticas medias) η ονομαστική θερμική ισχύς(υπό μέσες κλιματικές συνθήκες) -
	For space heating, annual energy consumption under average climate conditions voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden) tilalämmityksestä vuotuinen energiankulutus(keskimääräisissä ilmastoloosuhteissa)	für die Raumheizung, den jährlichen Energieverbrauch bei durchschnittlichen Klimaverhältnissen För rumsuppvärmning, årlig energiförbrukning(vid genomsnittliga klimatförhållanden) pro vytápění – roční spotřeba energie za průměrných klimatických podmínek	pour le chauffage des locaux, la consommation annuelle d'énergie(dans les conditions climatiques moyennes) for rumopvarmning det årlige energiforbrug(under gennemsnitlige klimaforhold) за отопление, годишното потребление на енергия(при средни климатични условия)	per il riscaldamento d'ambiente, il consumo annuo di energia(in condizioni climatiche medie) Para o aquecimento ambiente, o consumo anual de energia(em condições climáticas médias) w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii(w warunkach klimatu umiarkowanego)	para calentar espacios, el consumo anual de energía(en condiciones climáticas medias) για τη θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας(υπό μέσες κλιματικές συνθήκες) -
10	For water heating, annual electricity consumption under average climate conditions voor waterverwarming, het jaarlijkse elektriciteitsverbruik(onder gemiddelde klimaatomstandigheden) vedenlämmityksestä vuotuinen sähkönkulutus(keskimääräisissä ilmastoloosuhteissa)	für die Warmwasserbereitung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen För vattenuppvärmning, årlig elförbrukning(vid genomsnittliga klimatförhållanden) pro ohřev vody – roční spotřeba elektrické energie za průměrných klimatických podmínek	pour le chauffage de l'eau, la consommation annuelle d'électricité(dans les conditions climatiques moyennes) for vandopvarmning det årlige elforbrug(under gennemsnitlige klimaforhold) за подгряване на вода, годишното потребление(при средни климатични условия)	per il riscaldamento dell'acqua, il consumo annuo di energia(in condizioni climatiche medie) para o aquecimento de água, o consumo anual de eletricidade(em condições climáticas médias) w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej(w warunkach klimatu umiarkowanego)	para calentar agua, el consumo anual de electricidad(en condiciones climáticas medias) για την θέρμανση νερού, η ετήσια κατανάλωση ηλεκτρικής ενέργειας(υπό μέσες κλιματικές συνθήκες) -
11	Seasonal space heating energy efficiency under average climate conditions de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden) tilalämmityksen kausittainen energiatehokkuus(keskimääräisissä ilmastoloosuhteissa)	die jahreszeitbedingte Raumheizungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen Säsongmedelverkningsgrad för rumsuppvärmning(vid genomsnittliga klimatförhållanden) sezonní energetická účinnost vytápění za průměrných klimatických podmínek	l'efficacité énergétique saisonnière pour le chauffage des locaux(dans les conditions climatiques moyennes) årsvirkningsgraden ved rumopvarmning(under gennemsnitlige klimaforhold) сезонната енергийна ефективност при отопление(при средни климатични условия)	l'efficienza energetica stagionale di riscaldamento d'ambiente(in condizioni climatiche medie) A eficiência energética do aquecimento ambiente sazonal(em condições climáticas médias) sezonowa efektywność energetyczna ogrzewania pomieszczeń(w warunkach klimatu umiarkowanego)	la eficiencia energética estacional de calefacción(en condiciones climáticas medias) η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου(υπό μέσες κλιματικές συνθήκες) -
12	Water heating energy efficiency under average climate conditions de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden) vedenlämmityksen energiatehokkuus(keskimääräisissä ilmastoloosuhteissa)	die Warmwasserbereitungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen Energieeffektivität vid vattenuppvärmning(vid genomsnittliga klimatförhållanden) energetická účinnost ohřevu vody za průměrných klimatických podmínek	l'efficacité énergétique pour le chauffage de l'eau(dans les conditions climatiques moyennes) energieeffektiviteten ved vandopvarmning(under gennemsnitlige klimaforhold) енергийната ефективност при подгряване на вода(при средни климатични условия)	l'efficienza energetica di riscaldamento dell'acqua(in condizioni climatiche medie) a eficiência energética do aquecimento de água(em condições climáticas médias) efektywność energetyczna podgrzewania wody(w warunkach klimatu umiarkowanego)	la eficiencia energética del caldeo de agua(en condiciones climáticas medias) η ενεργειακή απόδοση θέρμανσης νερού(υπό μέσες κλιματικές συνθήκες) -
13	Sound power level L _{WA} indoor het geluidsvermogensniveau L _{WA} binnen äänitehotaso L _{WA} sisällä	der Schalleistungspegel L _{WA} in Gebäuden Ljudeffektivitv L _{WA} i inomhus hladina akustického výkonu L _{WA} ve vnitřním prostoru	le niveau de puissance acoustique L _{WA} , à l'intérieur lydeeffektiveaut L _{WA} i inde нивото на звуковата мощност L _{WA} на закрито	il livello di potenza sonora L _{WA} all'interno O nível de potência sonora L _{WA} no interior poziom mocy akustycznej L _{WA} w pomieszczeniu	el nivel de potencia acústica L _{WA} en interiores η στάθμη ηχητικής ισχύος L _{WA} εσωτερικού χώρου -
14	Work only during off-peak hours werken uitsluitend in de daluren toimimaan ainoastaan kulutushuipujen ulkopuolella	dass ein ausschließlicher Betrieb des Kombiheizgerätes zu Schwachlastzeiten drivas uteslutande under perioder med låg belastning provazu pouze mimo špičku	fonctionner qu'en heures creuses fungere uden for spidsbelastningsperioder работи само в часовете извън върховото натоварване	funzione soltanto durante le ore morte de funcionar unicamente fora das horas de pico pracować jedynie w godzinach poza szczytowym obciążeniem	funcionar solamente durante las horas de baja demanda λειτουργία μόνο εκτός των ωρών αιχμής -
15	Rated heat output under colder climate conditions de nominale warmteafgifte, onder koudere klimaatomstandigheden nimellislämpöteho, kylmissä ilmastoloosuhteissa	die Wärmenennleistung bei kälteren Klimaverhältnissen Nominell avgiven värmeeffekt vid kallare klimatförhållanden jmenovitě tepelný výkon za chladnějších klimatických podmínek	la puissance thermique nominale, dans les conditions climatiques plus froides den nominelle nytteeffekt under koldere klimaforhold номиналната топлинна мощност при по-студени климатични условия	la potenza termica nominale, in condizioni climatiche più fredde A potência calorífica nominal em condições climáticas mais frias Znamionowa moc cieplna w warunkach klimatu chłodnego	la potencia calorífica nominal en condiciones climáticas más frías η ονομαστική θερμική ισχύς υπό ψυχρότερες κλιματικές συνθήκες -
16	Rated heat output under warmer climate conditions de nominale warmteafgifte, onder warmere klimaatomstandigheden nimellislämpöteho, lämpimissä ilmastoloosuhteissa	die Wärmenennleistung bei wärmeren Klimaverhältnissen Nominell avgiven värmeeffekt vid varmare klimatförhållanden jmenovitě tepelný výkon za teplejších klimatických podmínek	la puissance thermique nominale, dans les conditions climatiques plus chaudes den nominelle nytteeffekt under varmere klimaforhold номиналната топлинна мощност при по-топли климатични условия	la potenza termica nominale, in condizioni climatiche più calde A potência calorífica nominal em condições climáticas mais quentes Znamionowa moc cieplna w warunkach klimatu ciepłego	la potencia calorífica nominal en condiciones climáticas más cálidas η ονομαστική θερμική ισχύς υπό θερμότερες κλιματικές συνθήκες -
17	For space heating, annual energy consumption under colder climate conditions voor ruimteverwarming, het jaarlijkse energieverbruik onder koudere klimaatomstandigheden tilalämmityksestä vuotuinen energiankulutus kylmissä ilmastoloosuhteissa	für die Raumheizung, der jährliche Energieverbrauch bei kälteren Klimaverhältnissen För rumsuppvärmning, årlig energiförbrukning under kallare klimatförhållanden pro vytápění – roční spotřeba energie za chladnější klimatických podmínek	pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques plus froides for rumopvarmning det årlige energiforbrug under koldere klimaforhold за отопление, годишното потребление на енергия при по-студени климатични условия	per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più fredde Para o aquecimento ambiente, o consumo anual de energia em condições climáticas mais frias w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii w warunkach klimatu chłodnego	para calentar espacios, el consumo anual de energía en condiciones climáticas más frías για θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας υπό ψυχρότερες κλιματικές συνθήκες -
18	For space heating, annual energy consumption under warmer climate conditions voor ruimteverwarming, het jaarlijkse energieverbruik onder warmere klimaatomstandigheden tilalämmityksestä vuotuinen energiankulutus lämpimissä ilmastoloosuhteissa	für die Raumheizung, der jährliche Energieverbrauch bei wärmeren Klimaverhältnissen För rumsuppvärmning, årlig energiförbrukning under varmare klimatförhållanden pro vytápění – roční spotřeba energie za teplejších klimatických podmínek	pour le chauffage des locaux, la consommation annuelle d'énergie, dans les conditions climatiques plus chaudes for rumopvarmning det årlige energiforbrug under varmere klimaforhold за отопление, годишното потребление на енергия при по-топли климатични условия	per il riscaldamento d'ambiente, il consumo annuo di energia, in condizioni climatiche più calde Para o aquecimento ambiente, o consumo anual de energia em condições climáticas mais quentes w odniesieniu do ogrzewania pomieszczeń, roczne zużycie energii w warunkach klimatu ciepłego	para calentar espacios, el consumo anual de energía en condiciones climáticas más cálidas για θέρμανση χώρου, η ετήσια κατανάλωση ενέργειας υπό θερμότερες κλιματικές συνθήκες -
19	For water heating, annual energy consumption under colder climate conditions voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden vedenlämmityksestä vuotuinen sähkönkulutus kylmissä ilmastoloosuhteissa	für die Warmwasserbereitung, der jährliche Stromverbrauch bei kälteren Klimaverhältnissen För vattenuppvärmning, årlig elförbrukning under kallare klimatförhållanden pro ohřev vody – roční spotřeba elektrické energie za chladnějších klimatických podmínek	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques plus froides for vandopvarmning det årlige elforbrug under koldere klimaforhold за подгряване на вода, годишното потребление на електроенергия при по-студени климатични условия	per il riscaldamento dell'acqua, il consumo annuo di energia, in condizioni climatiche più fredde para o aquecimento de água, o consumo anual de eletricidade em condições climáticas mais frias w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu chłodnego	para calentar agua, el consumo anual de electricidad en condiciones climáticas más frías για θέρμανση νερού, η ετήσια κατανάλωση ηλεκτρικής ενέργειας υπό ψυχρότερες κλιματικές συνθήκες -
20	For water heating, annual energy consumption under warmer climate conditions voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden vedenlämmityksestä vuotuinen sähkönkulutus lämpimissä ilmastoloosuhteissa	für die Warmwasserbereitung, der jährliche Stromverbrauch bei wärmeren Klimaverhältnissen För vattenuppvärmning, årlig elförbrukning under varmare klimatförhållanden pro ohřev vody – roční spotřeba elektrické energie za teplejších klimatických podmínek	pour le chauffage de l'eau, la consommation annuelle d'électricité, dans les conditions climatiques plus chaudes for vandopvarmning det årlige elforbrug under varmere klimaforhold за подгряване на вода, годишното потребление на електроенергия при по-топли климатични условия	per il riscaldamento dell'acqua, il consumo annuo di energia, in condizioni climatiche più calde para o aquecimento de água, o consumo anual de eletricidade em condições climáticas mais quentes w odniesieniu do podgrzewania wody, roczne zużycie energii elektrycznej w warunkach klimatu ciepłego	para calentar agua, el consumo anual de electricidad en condiciones climáticas más cálidas για θέρμανση νερού, η ετήσια κατανάλωση ηλεκτρικής ενέργειας υπό θερμότερες κλιματικές συνθήκες -
21	Seasonal space heating energy efficiency under colder climate conditions de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder koudere klimaatomstandigheden tilalämmityksen kausittainen energiatehokkuus kylmissä ilmastoloosuhteissa	die jahreszeitbedingte Raumheizungs-Energieeffizienz bei kälteren Klimaverhältnissen Säsongmedelverkningsgrad för rumsuppvärmning under kallare klimatförhållanden sezonní energetická účinnost vytápění za chladnějších klimatických podmínek	l'efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus froides årsvirkningsgraden ved rumopvarmning under koldere klimaforhold сезонната енергийна ефективност при отопление при по-студени климатични условия	l'efficienza energetica stagionale di riscaldamento d'ambiente in condizioni climatiche più fredde A eficiência energética do aquecimento ambiente sazonal em condições climáticas mais frias sezonowa efektywność energetyczna ogrzewania pomieszczeń w warunkach klimatu chłodnego	la eficiencia energética estacional de calefacción en condiciones climáticas más frías η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου υπό ψυχρότερες κλιματικές συνθήκες -
22	Seasonal space heating energy efficiency under warmer climate conditions de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder warmere klimaatomstandigheden tilalämmityksen kausittainen energiatehokkuus lämpimissä ilmastoloosuhteissa	die jahreszeitbedingte Raumheizungs-Energieeffizienz bei wärmeren Klimaverhältnissen Säsongmedelverkningsgrad för rumsuppvärmning under varmare klimatförhållanden sezonní energetická účinnost vytápění za teplejších klimatických podmínek	l'efficacité énergétique saisonnière pour le chauffage des locaux, dans les conditions climatiques plus chaudes årsvirkningsgraden ved rumopvarmning under varmere klimaforhold сезонната енергийна ефективност при отопление при по-топли климатични условия	l'efficienza energetica stagionale di riscaldamento d'ambiente in condizioni climatiche più calde A eficiência energética do aquecimento ambiente sazonal em condições climáticas mais quentes sezonowa efektywność energetyczna ogrzewania pomieszczeń w warunkach klimatu ciepłego	la eficiencia energética estacional de calefacción en condiciones climáticas más cálidas η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου υπό θερμότερες κλιματικές συνθήκες -
23	Water heating energy efficiency under colder climate conditions de energie-efficiëntie voor waterverwarming onder koudere klimaatomstandigheden vedenlämmityksen energiatehokkuus kylmissä ilmastoloosuhteissa	die Warmwasserbereitungs-Energieeffizienz bei kälteren Klimaverhältnissen Energieeffektivität vid vattenuppvärmning under kallare klimatförhållanden energetická účinnost ohřevu vody za chladnějších klimatických podmínek	l'efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus froides energieeffektiviteten ved vandopvarmning under koldere klimaforhold енергийната ефективност при подгряване на вода при по-студени климатични условия	l'efficienza energetica di riscaldamento dell'acqua in condizioni climatiche più fredde a eficiência energética do aquecimento de água em condições climáticas mais frias efektywność energetyczna podgrzewania wody w warunkach klimatu chłodnego	la eficiencia energética de caldeo de agua en condiciones climáticas más frías η ενεργειακή απόδοση της θέρμανσης νερού υπό ψυχρότερες κλιματικές συνθήκες -
24	Water heating energy efficiency under warmer climate conditions de energie-efficiëntie voor waterverwarming onder warmere klimaatomstandigheden vedenlämmityksen energiatehokkuus lämpimissä ilmastoloosuhteissa	die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen Energieeffektivität vid vattenuppvärmning under varmare klimatförhållanden energetická účinnost ohřevu vody za teplejších klimatických podmínek	l'efficacité énergétique pour le chauffage de l'eau, dans les conditions climatiques plus chaudes energieeffektiviteten ved vandopvarmning under varmere klimaforhold енергийната ефективност при подгряване на вода при по-топли климатични условия	l'efficienza energetica di riscaldamento dell'acqua in condizioni climatiche più calde a eficiência energética do aquecimento de água em condições climáticas mais quentes efektywność energetyczna podgrzewania wody w warunkach klimatu ciepłego	la eficiencia energética de caldeo de agua en condiciones climáticas más cálidas η ενεργειακή απόδοση της θέρμανσης νερού υπό θερμότερες κλιματικές συνθήκες -
25	Sound power level L _{WA} outdoor het geluidsvermogensniveau L _{WA} buiten äänitehotaso L _{WA} ulkona	der Schalleistungspegel L _{WA} im Freien Ljudeffektivitv L _{WA} i utomhus hladina akustického výkonu L _{WA} ve venkovním prostoru	le niveau de puissance acoustique L _{WA} à l'extérieur lydeeffektiveaut L _{WA} i ude нивото на звуковата мощност L _{WA} на открито	il livello di potenza sonora L _{WA} all'esterno O nível de potência sonora L _{WA} no exterior poziom mocy akustycznej L _{WA} na zewnątrz	el nivel de potencia acústica L _{WA} en exteriores η στάθμη ηχητικής ισχύος L _{WA} εξωτερικού χώρου -

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-****C(W)
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	12.7	kW	Seasonal space heating energy efficiency	ηs	135	%
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	11.2	kW	Tj = - 7 °C	COPd	2.12	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.7	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.3	kW	Tj = +12 °C	COPd	6.12	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.12	-
Tj = operation limit temperature (***)	Pdh	10.9	kW	Tj = operation limit temperature (***)	COPd	2.03	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7621	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1048	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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



 Atsushi EDAYOSHI
 Manager, Quality Assurance Department
 UNITED KINGDOM

* 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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-****C(W)
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	13.9	kW	Seasonal space heating energy efficiency	ηs	169	%
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	12.3	kW	Tj = - 7 °C	COPd	3.15	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.06	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.6	kW	Tj = +12 °C	COPd	7.45	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	3.15	-
Tj = operation limit temperature (***)	Pdh	11.8	kW	Tj = operation limit temperature (***)	COPd	2.90	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6667	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	1048	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

The signature is signed in the average climate / medium-temperature section.

Manager, Quality Assurance Department

UNITED KINGDOM

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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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-****C(W)
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	10.7	kW	Seasonal space heating energy efficiency	ηs	122	%
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	6.5	kW	Tj = - 7 °C	COPd	3.00	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.35	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	9.0	kW	Tj = bivalent temperature	COPd	1.86	-
Tj = operation limit temperature (***)	Pdh	9.0	kW	Tj = operation limit temperature (***)	COPd	1.63	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.7	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.98	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8427	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1320	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

The signature is signed in the average climate / medium-temperature section.

Manager, Quality Assurance Department

UNITED KINGDOM

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 (**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-****C(W)
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	13.9	kW	Seasonal space heating energy efficiency	ηs	163	%
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	8.4	kW	Tj = - 7 °C	COPd	4.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.62	-
Tj = operation limit temperature (***)	Pdh	10.4	kW	Tj = operation limit temperature (***)	COPd	2.01	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.80	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8244	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	1320	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-****C(W)
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	11.2	kW	Seasonal space heating energy efficiency	ηs	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	2.29	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	3.46	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.1	kW	Tj = +12 °C	COPd	5.32	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.29	-
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	2.29	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3745	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			ηwh	113	%	
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	962	kWh				

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 (**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-****C(W)
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	11.2	kW	Seasonal space heating energy efficiency	ηs	216	%		
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj					
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-		
Degradation co-efficient (**)	Cdh	-	-						
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	3.22	-		
Degradation co-efficient (**)	Cdh	0.99	-						
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.27	-		
Degradation co-efficient (**)	Cdh	0.98	-						
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.75	-		
Degradation co-efficient (**)	Cdh	0.97	-						
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	3.22	-		
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	3.22	-		
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C		
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C		
Power consumption in modes other than active mode				Supplementary heater					
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW		
Thermostat-off mode	P _{TO}	0.022	kW						
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical				
Crankcase heater mode	P _{CK}	0.000	kW						
Other items									
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA						
Annual energy consumption	Q _{HE}	2732	kWh						
For heat pump combination heater:									
Declared load profile	L			Water heating energy efficiency	ηwh	113	%		
Daily electricity consumption	Qelec	0.000	kWh						
Annual electricity consumption	AEC	962	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 design,h of the considered climate then the outdoor dry bulb temperature Tj is equal to T design,h.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-MEC
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	12.7	kW	Seasonal space heating energy efficiency	ηs	135	%
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	11.2	kW	Tj = - 7 °C	COPd	2.12	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.31	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.7	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.3	kW	Tj = +12 °C	COPd	6.12	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.12	-
Tj = operation limit temperature (***)	Pdh	10.9	kW	Tj = operation limit temperature (***)	COPd	2.03	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7621	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1048	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-MEC
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	13.9	kW	Seasonal space heating energy efficiency	ηs	169	%
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	12.3	kW	Tj = - 7 °C	COPd	3.15	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.06	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.6	kW	Tj = +12 °C	COPd	7.45	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	3.15	-
Tj = operation limit temperature (***)	Pdh	11.8	kW	Tj = operation limit temperature (***)	COPd	2.90	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6667	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	103	%
Daily electricity consumption	Q _{elec}	0.000	kWh				
Annual electricity consumption	AEC	1048	kWh				

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(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-MEC
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	10.7	kW	Seasonal space heating energy efficiency	ηs	122	%
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	6.5	kW	Tj = - 7 °C	COPd	3.00	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.35	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	9.0	kW	Tj = bivalent temperature	COPd	1.86	-
Tj = operation limit temperature (***)	Pdh	9.0	kW	Tj = operation limit temperature (***)	COPd	1.63	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.7	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.98	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8427	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1320	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-MEC
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	13.9	kW	Seasonal space heating energy efficiency	ηs	163	%
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	8.4	kW	Tj = - 7 °C	COPd	4.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.62	-
Tj = operation limit temperature (***)	Pdh	10.4	kW	Tj = operation limit temperature (***)	COPd	2.01	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.80	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8244	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	1320	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

The signature is signed in the average climate / medium-temperature section.

Manager, Quality Assurance Department

UNITED KINGDOM

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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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-MEC
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	11.2	kW	Seasonal space heating energy efficiency	ηs	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	2.29	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	3.46	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.1	kW	Tj = +12 °C	COPd	5.32	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.29	-
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	2.29	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3745	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			ηwh	113	%	
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	962	kWh				

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 (**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	EHST20C-MEC
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	11.2	kW	Seasonal space heating energy efficiency	ηs	216	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.27	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.75	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	3.22	-
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	3.22	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	2732	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	113	%
Daily electricity consumption	Q _{elec}	0.000	kWh				
Annual electricity consumption	AEC	962	kWh				

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(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-****C(W)
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	12.7	kW	Seasonal space heating energy efficiency	ηs	137	%
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	11.2	kW	Tj = - 7 °C	COPd	2.12	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.7	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.3	kW	Tj = +12 °C	COPd	6.12	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.12	-
Tj = operation limit temperature (***)	Pdh	10.9	kW	Tj = operation limit temperature (***)	COPd	2.03	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7517	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1048	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-****C(W)
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	13.9	kW	Seasonal space heating energy efficiency	ηs	173	%
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	12.3	kW	Tj = - 7 °C	COPd	3.15	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.12	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.6	kW	Tj = +12 °C	COPd	7.45	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	3.15	-
Tj = operation limit temperature (***)	Pdh	11.8	kW	Tj = operation limit temperature (***)	COPd	2.90	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6538	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	1048	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-****C(W)
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	10.7	kW	Seasonal space heating energy efficiency	ηs	124	%
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	6.5	kW	Tj = - 7 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.35	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	9.0	kW	Tj = bivalent temperature	COPd	1.86	-
Tj = operation limit temperature (***)	Pdh	9.0	kW	Tj = operation limit temperature (***)	COPd	1.63	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.7	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.98	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8289	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1320	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-****C(W)
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	13.9	kW	Seasonal space heating energy efficiency	ηs	166	%
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	8.4	kW	Tj = - 7 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.62	-
Tj = operation limit temperature (***)	Pdh	10.4	kW	Tj = operation limit temperature (***)	COPd	2.01	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.80	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8095	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			ηwh	82	%	
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	1320	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.

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Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-****C(W)
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	11.2	kW	Seasonal space heating energy efficiency	ηs	161	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	2.29	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	3.44	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.1	kW	Tj = +12 °C	COPd	5.32	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.29	-
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	2.29	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3658	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	113	%
Daily electricity consumption	Q _{elec}		kWh				
Annual electricity consumption	AEC	962	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

The signature is signed in the average climate / medium-temperature section.

Manager, Quality Assurance Department

UNITED KINGDOM

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(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-****C(W)
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	11.2	kW	Seasonal space heating energy efficiency	ηs	223	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	3.22	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.19	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.75	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	3.22	-
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	3.22	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	2653	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			ηwh	113	%	
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	962	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-MEC
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	12.7	kW	Seasonal space heating energy efficiency	ηs	137	%
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	11.2	kW	Tj = - 7 °C	COPd	2.12	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.7	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.3	kW	Tj = +12 °C	COPd	6.12	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.12	-
Tj = operation limit temperature (***)	Pdh	10.9	kW	Tj = operation limit temperature (***)	COPd	2.03	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7517	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1048	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.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-MEC
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	13.9	kW	Seasonal space heating energy efficiency	ηs	173	%
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	12.3	kW	Tj = - 7 °C	COPd	3.15	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.12	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	5.0	kW	Tj = + 7 °C	COPd	5.56	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	5.6	kW	Tj = +12 °C	COPd	7.45	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	3.15	-
Tj = operation limit temperature (***)	Pdh	11.8	kW	Tj = operation limit temperature (***)	COPd	2.90	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-10	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6538	kWh				

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	103	%
Daily electricity consumption	Q _{elec}	0.000	kWh				
Annual electricity consumption	AEC	1048	kWh				

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(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-MEC
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	10.7	kW	Seasonal space heating energy efficiency	ηs	124	%
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	6.5	kW	Tj = - 7 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.35	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	9.0	kW	Tj = bivalent temperature	COPd	1.86	-
Tj = operation limit temperature (***)	Pdh	9.0	kW	Tj = operation limit temperature (***)	COPd	1.63	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	8.7	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.98	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8289	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	1320	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-MEC
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	13.9	kW	Seasonal space heating energy efficiency	ηs	166	%
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	8.4	kW	Tj = - 7 °C	COPd	4.30	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.45	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.96	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.62	-
Tj = operation limit temperature (***)	Pdh	10.4	kW	Tj = operation limit temperature (***)	COPd	2.01	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.80	-
Bivalent temperature	Tbiv	-16	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	-22	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8095	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	0.000	kWh				
Annual electricity consumption	AEC	1320	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:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-MEC
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	11.2	kW	Seasonal space heating energy efficiency	ηs	161	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	2.29	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	3.44	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.1	kW	Tj = +12 °C	COPd	5.32	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	2.29	-
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	2.29	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.022	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				Rated air flow rate, outdoors			
Capacity control	variable			-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3658	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	L			ηwh	113	%	
Daily electricity consumption	Qelec		kWh				
Annual electricity consumption	AEC	962	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 design,h of the considered climate then the outdoor dry bulb temperature Tj is equal to T design,h.

This information is based on EU regulation No 811/2013 and No 813/2013.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112YAA(-BS)
	Indoor unit:	ERST20C-MEC
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	11.2	kW	Seasonal space heating energy efficiency	ηs	223	%	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-	
Degradation co-efficient (**)	Cdh	-	-					
Tj = + 2 °C	Pdh	11.2	kW	Tj = + 2 °C	COPd	3.22	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.19	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.75	-	
Degradation co-efficient (**)	Cdh	0.97	-					
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	3.22	-	
Tj = operation limit temperature (***)	Pdh	11.2	kW	Tj = operation limit temperature (***)	COPd	3.22	-	
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C	
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C	
Power consumption in modes other than active mode				Supplementary heater				
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.022	kW					
Standby mode	P _{SB}	0.022	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA					
Annual energy consumption	Q _{HE}	2653	kWh					

For heat pump combination heater:

Declared load profile	L			Water heating energy efficiency	η_{wh}	113	%
Daily electricity consumption	Q _{elec}	0.000	kWh				
Annual electricity consumption	AEC	962	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD.

Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

Atsushi EDAYOSHI

The signature is signed in the average climate / medium-temperature section.

Manager, Quality Assurance Department

UNITED KINGDOM

· 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 Pdesign,h, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T_j).

(**) If C_{d,h} is not determined by measurement then the default degradation coefficient is C_{d,h} = 0,9.

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

This information is based on EU regulation No 811/2013 and No 813/2013.