



ENERG

енергия · ενεργεια



Indoor unit E*SC-**C
Outdoor unit PUHZ-SHW112VAA(-BS)



55 °C

35 °C



A⁺⁺

A⁺⁺



40 dB



60 dB

■ 11
■ **13**
■ 11
kW

■ 14
■ **14**
■ 11
kW



SPACE HEATER		For medium-temperature application														For low-temperature application																
1	2	3	6	8	11	9	13	15	16	21	22	17	18	25	4	6	8	11	9	13	15	16	21	22	17	18	25					
Outdoor unit	Indoor unit	Medium-temperature application	Seasonal space heating energy efficiency class										Seasonal space heating energy efficiency class										Low-temperature application									
			Rated heat output under average climate conditions	Seasonal space heating energy efficiency class	Annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	Rated heat output under average climate conditions	Seasonal space heating energy efficiency class	Annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions	For space heating, annual energy consumption under average climate conditions	For water heating, annual energy consumption under average climate conditions				
			kW	%	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kW	%	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh	kWh					
PUHZ-SW75VAA (BS)	EHSC-****C	✓	A++	7	129	4435	40	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	40	6	7	129	219	4472	1731	58					
	ERSC-****C	✓	A++	7	132	4352	40	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	40	6	7	132	226	4382	1678	58					
	EHSD-****C	✓	A++	7	129	4435	40	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	40	6	7	129	219	4472	1731	58					
	ERSD-****C	✓	A++	7	132	4352	40	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	40	6	7	132	226	4382	1678	58					
	EHSD-****D	✓	A++	7	129	4435	41	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	41	6	7	129	219	4472	1731	58					
PUHZ-SW75YAA (BS)	ERSD-****D	✓	A++	7	132	4352	41	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	41	6	7	132	226	4382	1678	58					
	EHSC-****C	✓	A++	7	128	4470	40	6	7	106	153	5432	2437	58	✓	A++	7	160	3654	40	6	7	128	215	4520	1763	58					
	ERSC-****C	✓	A++	7	132	4361	40	6	7	109	158	5294	2360	58	✓	A++	7	165	3542	40	6	7	132	225	4385	1684	58					
	EHSD-****C	✓	A++	7	128	4470	40	6	7	106	153	5432	2437	58	✓	A++	7	160	3654	40	6	7	128	215	4520	1763	58					
	ERSD-****D	✓	A++	7	132	4361	41	6	7	109	158	5294	2360	58	✓	A++	7	165	3542	41	6	7	132	225	4385	1684	58					
PUHZ-SW75VAA-SC	ERSD-****D	✓	A++	7	128	4470	41	6	7	106	153	5432	2437	58	✓	A++	7	160	3654	41	6	7	128	215	4520	1763	58					
	EHSC-****C	✓	A++	7	129	4435	40	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	40	6	7	129	219	4472	1731	58					
	ERSC-****C	✓	A++	7	132	4352	40	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	40	6	7	132	226	4382	1678	58					
	EHSD-****C	✓	A++	7	129	4435	40	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	40	6	7	129	219	4472	1731	58					
	ERSD-****D	✓	A++	7	132	4352	40	6	7	109	158	5274	2352	58	✓	A++	7	166	3525	40	6	7	132	226	4382	1678	58					
PUHZ-SW75YAA-SC	ERSD-****D	✓	A++	7	129	4435	41	6	7	107	155	5378	2408	58	✓	A++	7	162	3607	41	6	7	129	219	4472	1731	58					
	EHSC-****C	✓	A++	7	128	4470	40	6	7	106	153	5432	2437	58	✓	A++	7	160	3654	40	6	7	128	215	4520	1763	58					
	ERSC-****C	✓	A++	7	132	4361	40	6	7	109	158	5294	2360	58	✓	A++	7	165	3542	40	6	7	132	225	4385	1684	58					
	EHSD-****C	✓	A++	7	128	4470	40	6	7	106	153	5432	2437	58	✓	A++	7	160	3654	40	6	7	128	215	4520	1763	58					
	ERSD-****D	✓	A++	7	132	4361	41	6	7	109	158	5294	2360	58	✓	A++	7	165	3542	41	6	7	132	225	4385	1684	58					
PUHZ-SW100VAA (BS)	EHSC-****C	✓	A++	10	130	6204	40	8	10	108	180	7031	2925	60	✓	A++	11	167	5156	40	8	11	139	255	5472	2196	60					
	ERSC-****C	✓	A++	10	132	6130	40	8	10	109	183	6949	2868	60	✓	A++	11	170	5070	40	8	11	142	261	5382	2143	60					
	EHSD-****C	✓	A++	10	130	6204	40	8	10	108	180	7031	2925	60	✓	A++	11	167	5156	40	8	11	139	255	5472	2196	60					
	ERSD-****C	✓	A++	10	132	6130	40	8	10	109	183	6949	2868	60	✓	A++	11	170	5070	40	8	11	142	261	5382	2143	60					
	EHSD-****D	✓	A++	10	132	6130	41	8	10	109	183	6949	2868	60	✓	A++	11	170	5070	41	8	11	142	261	5382	2143	60					
PUHZ-SW100YAA (BS)	EHSC-****C	✓	A++	10	129	6262	40	8	10	107	178	7112	2955	60	✓	A++	11	165	5204	40	8	11	138	251	5529	2228	60					
	ERSC-****C	✓	A++	10	132	6141	40	8	10	109	183	6959	2878	60	✓	A++	11	169	5086	40	8	11	141	260	5398	2150	60					
	EHSD-****C	✓	A++	10	129	6262	40	8	10	107	178	7112	2955	60	✓	A++	11	165	5204	40	8	11	138	251	5529	2228	60					
	ERSD-****C	✓	A++	10	132	6141	40	8	10	109	183	6959	2878	60	✓	A++	11	169	5086	40	8	11	141	260	5398	2150	60					
	EHSD-****D	✓	A++	10	132	6141	41	8	10	109	183	6959	2878	60	✓	A++	11	169	5086	41	8	11	141	260	5398	2150	60					
PUHZ-SHW80VAA (BS)	EHSC-****C	✓	A++	9	133	5465	40	9	9	112	157	7703	3009	59	✓	A++	10	169	4602	40	10	9	148	217	6278	2190	59					
	ERSC-****C	✓	A++	9	135	5393	40	9	9	114	160	7607	2954	59	✓	A++	10	172	4531	40	10	9	150	222	6178	2141	59					
	EHSD-****C	✓	A++	9	133	5465	40	9	9	112	157	7703	3009	59	✓	A++	10	169	4602	40	10	9	148	217	6278	2190	59					
	ERSD-****C	✓	A++	9	135	5393	40	9	9	114	160	7607	2954	59	✓	A++	10	172	4531	40	10	9	150	222	6178	2141	59					
	EHSD-****D	✓	A++	9	132	5527	40	9	9	111	155	7751	3044	59	✓	A++	10	167	4659	40	10	9	146	213	6340	2224	59					
PUHZ-SHW80YAA (BS)	ERSD-****D	✓	A++	9	134	5413	40	9	9	114	159	7611	2966	59	✓	A++	10	172	4539	40	10	9	150	221	6198	2146	59					
	EHSC-****C	✓	A++	9	132	5527	40	9	9	111	155	7751	3044	59	✓	A++	10	167	4659	40	10	9	146	213	6340	2224	59					
	ERSC-****C	✓	A++	9	134	5413	40	9	9	114	159	7611	2966	59	✓	A++	10	172	4539	40	10	9	150	221	6198	2146	59					
	EHSD-****C	✓	A++	13	135	7588	40	11	11	123	158	8367	3708	60	✓	A++	14	171	6618	40	14	11	164	219	8183	2695	60					
	ERSD-****D	✓	A++	13	137	7498	40	11	11	125	161	8263	3656	60	✓	A++	14	173	6539	40	14	11	166	223	8089	2644	60					
PUHZ-SHW112VAA (BS)	EHSC-****C	✓	A++	13	135	7588	40	11	11	123	158	8367	3708	60	✓	A++	14	171	6618	40	14	11	164	219	8183	2695	60					
	ERSC-****C	✓	A++	13	137	7498	40	11	11	125	161	8263	3656	60	✓	A++	14	173	6539	40	14	11	166	223	8089	2644	60					
	EHSD-****C	✓	A++	13	135	7588	40	11	11	123	158	8367	3708	60	✓	A++	14	171	6618	40	14	11	164	219	8183	2695	60					
	ERSD-****D	✓	A++	13	137	7498	40	11	11	125	161	8263	3656	60	✓	A++	14	173	6539	40	14	11	166	223	8089	2644	60					
	EHSC-****C	✓	A++	13	135	7621	40	11	11	122	157	8427	3745	60	✓	A++	14	169	6667	40	14	11	163	216	8244	2732	60					
PUHZ-SHW112YAA (BS)	ERSC-****C	✓	A++	13	137	7517	40	11	11	124	161	8289	3658	60	✓	A++	14	173	6538	40	14	11	166	223	8095	2653	60					
	EHSD-****C	✓	A++	13	135	7621	40	11	11	122	157	8427	3745	60	✓	A++	14	169	6667	40	14	11	163	216	8244	2732	60					
	ERSD-****D	✓	A++	13	137	7517	40	11	11	124	161	8289	3658	60	✓	A++	14	173	6538	40	14	11	166	223	8095	2653	60					

	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 midentemperatuur-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-SHW112VAA(-BS)
	Indoor unit:	EHSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	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	0.99	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7588	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	EHSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	ηs	171	%
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	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.08	-
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	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6618	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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Atsushi EDAYOSHI

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Manager, Quality Assurance Department

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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-SHW112VAA(-BS)
	Indoor unit:	EHSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10.7	kW	Seasonal space heating energy efficiency	ηs	123	%
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	3.05	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.34	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8367	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	EHSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	ηs	164	%
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	4.26	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8183	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	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

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Manager, Quality Assurance Department

UNITED KINGDOM

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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-SHW112VAA(-BS)
	Indoor unit:	EHSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11.2	kW	Seasonal space heating energy efficiency	ηs	158	%
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	5.34	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3708	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	EHSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	11.2	kW	Seasonal space heating energy efficiency	ηs	219	%	
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	1.00	-					
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.27	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.73	-	
Degradation co-efficient (**)	Cdh	0.98	-					
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.015	kW					
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA					
Annual energy consumption	Q _{HE}	2695	kWh					

For heat pump combination heater:

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

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	EHSC-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:	no	
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	0.99	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.015	kW		Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7588	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	EHSC-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:	no	
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	171	%
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	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.08	-
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	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6618	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	EHSC-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:	no	
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	123	%
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	3.05	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	3.9	kW	Tj = + 2 °C	COPd	3.34	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				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}	8367	kWh				

For heat pump combination heater:

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	EHSC-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:	no	
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	164	%
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	4.26	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.38	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8183	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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Manager, Quality Assurance Department

UNITED KINGDOM

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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-SHW112VAA(-BS)
	Indoor unit:	EHSC-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:		no
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	158	%
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	5.34	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3708	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

Contact details

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	EHSC-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:		no
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	219	%
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	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.27	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.73	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				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}	2695	kWh				
For heat pump combination heater:				Water heating energy efficiency			
Declared load profile	-			ηwh	-	%	
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	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	3.34	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.7	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.99	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7498	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.11	-
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	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6539	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	10.7	kW	Seasonal space heating energy efficiency	ηs	125	%	
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	0.99	-					
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.60	-	
Degradation co-efficient (**)	Cdh	0.98	-					
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-	
Degradation co-efficient (**)	Cdh	0.98	-					
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}	0.015	kW	Rated heat output (*)	Psup	1.7	kW	
Thermostat-off mode	P _{TO}	0.015	kW					
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA					
Annual energy consumption	Q _{HE}	8263	kWh					

For heat pump combination heater:

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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	4.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8089	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	ERSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	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	3.41	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = +12 °C	Pdh	4.1	kW	Tj = +12 °C	COPd	5.34	-	
Degradation co-efficient (**)	Cdh	0.98	-					
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW	
Thermostat-off mode	P _{TO}	0.015	kW					
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical			
Crankcase heater mode	P _{CK}	0.000	kW					
Other items								
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA					
Annual energy consumption	Q _{HE}	3656	kWh					

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	ERSC-****C
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		no
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.72	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				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}	2644	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-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:	no	
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	3.34	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.7	kW	Tj = + 7 °C	COPd	4.79	-
Degradation co-efficient (**)	Cdh	0.99	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.8	kW
Thermostat-off mode	P _{TO}	0.015	kW		Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	7498	kWh				

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	ERSC-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:	no	
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	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.11	-
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	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	2.1	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW	Type of energy input	Electrical		
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	6539	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-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:		no
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	125	%
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	0.99	-				
Tj = + 7 °C	Pdh	3.5	kW	Tj = + 7 °C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.2	kW	Tj = +12 °C	COPd	6.28	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	1.7	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8263	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	kWh				

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

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-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:		no
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	4.33	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.40	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	3.6	kW	Tj = + 7 °C	COPd	5.50	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	7.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	3.5	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	8089	kWh				
For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh				
Annual electricity consumption	AEC	-	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-SHW112VAA(-BS)
	Indoor unit:	ERSC-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:		no
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	3.41	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.1	kW	Tj = +12 °C	COPd	5.34	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	2700	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 60	dBA				
Annual energy consumption	Q _{HE}	3656	kWh				

For heat pump combination heater:

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VAA(-BS)
	Indoor unit:	ERSC-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:		no
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	1.00	-				
Tj = + 7 °C	Pdh	7.2	kW	Tj = + 7 °C	COPd	5.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	4.3	kW	Tj = +12 °C	COPd	6.72	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.015	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items				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}	2644	kWh				

For heat pump combination heater:

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

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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(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_{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.