



ENERG
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Indoor unit E*SC-**C
Outdoor unit PUHZ-SHW112VHA(-BS)



55 °C

35 °C



A⁺⁺

A⁺⁺



40 dB



70 dB

■ 13
■ **13**
■ 12
kW

■ 14
■ **14**
■ 13
kW



COMBINATION HEATER		For medium-temperature application																									For low-temperature application																								
1		2		3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25				
Outdoor unit	Indoor unit	Medium-temperature application																									Low-temperature application																								
		Decided load profile		Seasonal space heating energy efficiency class		Water heating energy efficiency class		Rated heat output under average climate conditions		For space heating, annual electricity consumption under average climate conditions		For water heating, annual electricity consumption under average climate conditions		Seasonal space heating energy efficiency under average climate conditions		Water heating energy efficiency under average climate conditions		Sound power level L _{WA} , indoor		Work only during off-peak hours		Rated heat output under colder climate conditions		Rated heat output under warmer climate conditions		For space heating, annual electricity consumption under colder climate conditions		For space heating, annual electricity consumption under warmer climate conditions		For water heating, annual electricity consumption under colder climate conditions		For water heating, annual electricity consumption under warmer climate conditions		Seasonal space heating energy efficiency under colder climate conditions		Seasonal space heating energy efficiency under warmer climate conditions		Sound power level L _{WA} , outdoor													
		kW	kWh	kWh	%	%	dB	kW	kWh	kWh	kWh	%	%	dB	kW	kWh	kWh	kWh	%	%	dB	kW	kWh	kWh	kWh	%	%	dB	kW	kWh	kWh	kWh	%	%	dB	kW	kWh	kWh	kWh	%	%	dB									
PUHZ-SW75VHA(-BS)	EHS20D-****C2	✓	L	A++	A+	7	4497	766	127	141	40	-	6	7	6033	2437	880	643	101	153	122	168	68	✓	L	A++	A+	7	3545	766	165	141	40	-	6	7	4456	1645	880	643	139	231	122	168	68						
	ERST20D-****C2	✓	L	A++	A+	7	4442	766	129	141	40	-	6	7	5983	2401	880	643	101	155	122	168	68	✓	L	A++	A+	7	3490	766	167	141	40	-	6	7	4396	1612	880	643	141	236	122	168	68						
	ERST20C-****(W)	✓	L	A++	A	7	4497	1050	127	103	40	-	6	7	6033	2437	1360	1055	100	153	80	112	68	✓	L	A++	A	7	3545	1050	165	103	40	-	6	7	4456	1645	1360	1055	139	231	80	112	68						
	ERST20C-****(W)	✓	L	A++	A	7	4442	1050	129	103	40	-	6	7	5983	2401	1360	1055	101	155	80	112	68	✓	L	A++	A	7	3490	1050	167	103	40	-	6	7	4396	1612	1360	1055	141	236	80	112	68						
	EHS20D-****(W)	✓	L	A++	A	7	4497	1050	127	103	40	-	6	7	6033	2437	1360	1055	100	153	80	112	68	✓	L	A++	A	7	3545	1050	165	103	40	-	6	7	4456	1645	1360	1055	139	231	80	112	68						
PUHZ-SW100VHA(-BS)	ERST20D-****(W)	✓	L	A++	A	7	4442	1050	129	103	40	-	6	7	5983	2401	1360	1055	101	155	80	112	68	✓	L	A++	A	7	3490	1050	167	103	40	-	6	7	4396	1612	1360	1055	141	236	80	112	68						
	EHS20C-****(W)	✓	L	A++	A	10	6451	1044	125	103	40	-	7	10	6269	3509	1330	973	106	149	82	113	70	✓	L	A++	A	10	5160	1044	164	103	40	-	7	10	4970	2558	1330	973	140	214	82	113	70						
PUHZ-SW100YHA(-BS)	ERST20C-****(W)	✓	L	A++	A	10	6375	1044	127	103	40	-	7	10	6168	3448	1330	973	107	152	82	113	70	✓	L	A++	A	10	5078	1044	166	103	40	-	7	10	4875	2507	1330	973	143	219	82	113	70						
	EHS20C-****(W)	✓	L	A++	A	10	6449	1044	125	103	40	-	7	10	6277	3509	1330	973	105	149	82	113	70	✓	L	A++	A	10	5166	1044	163	103	40	-	7	10	4977	2557	1330	973	140	214	82	113	70						
PUHZ-SW120VHA(-BS)	ERST20C-****(W)	✓	L	A++	A	10	6369	1044	127	103	40	-	7	10	6162	3452	1330	973	107	152	82	113	70	✓	L	A++	A	10	5079	1044	166	103	40	-	7	10	4877	2507	1330	973	143	219	82	113	70						
	EHS20C-****(W)	✓	L	A++	A	12	7790	1109	125	99	40	-	8	12	7059	4051	1342	1053	110	157	82	104	72	✓	L	A++	A	13	6448	1109	162	99	40	-	8	13	5946	3067	1342	1053	136	222	82	104	72						
	ERST20C-****(W)	✓	L	A++	A	12	7710	1109	127	99	40	-	8	12	6966	4002	1342	1053	112	159	82	104	72	✓	L	A++	A	13	6377	1109	164	99	40	-	8	13	5851	3012	1342	1053	139	226	82	104	72						
	EHS20C-****D	✓	L	A++	A+	12	7790	788	125	138	40	-	8	12	7059	4051	909	680	110	157	119	160	72	✓	L	A++	A+	13	6448	788	162	138	40	-	8	13	5946	3067	909	680	136	222	119	160	72						
	ERST20C-****D	✓	L	A++	A	12	7710	788	127	138	40	-	8	12	6966	4002	909	680	112	159	119	160	72	✓	L	A++	A+	13	6377	788	164	138	40	-	8	13	5851	3012	909	680	139	226	119	160	72						
PUHZ-SW120YHA(-BS)	EHS20C-****D	✓	XL	A++	A	12	7790	1476	125	118	40	-	8	12	7059	4051	1901	1379	110	157	91	126	72	✓	XL	A++	A	13	6448	1476	162	118	40	-	8	13	5946	3067	1901	1379	136	222	91	126	72						
	ERST30C-****D	✓	XL	A++	A	12	7710	1476	127	118	40	-	8	12	6966	4002	1901	1379	112	159	91	126	72	✓	XL	A++	A	13	6377	1476	164	118	40	-	8	13	5851	3012	1901	1379	139	226	91	126	72						
	EHS20C-****(W)	✓	L	A++	A	12	7788	1109	125	99	40	-	8	12	7052	4052	1342	1053	110	157	82	104	72	✓	L	A++	A	13	6458	1109	162	99	40	-	8	13	5947	3064	1342	1053	136	222	82	104	72						
	ERST20C-****(W)	✓	L	A++	A	12	7708	1109	127	99	40	-	8	12	6947	4000	1342	1053	112	159	82	104	72	✓	L	A++	A	13	6377	1109	164	99	40	-	8	13	5844	3014	1342	1053	139	226	82	104	72						
	EHS20C-****D	✓	L	A++	A+	12	7788	788	125	138	40	-	8	12	7052	4053	909	680	110	157	119	160	72	✓	L	A++	A+	13	6458	788	162	138	40	-	8	13	5947	3064	909	680	136	222	119	160	72						
PUHZ-SW120YHA(-BS)	ERST20C-****D	✓	L	A++	A	12	7708	788	127	138	40	-	8	12	6947	4000	909	680	112	159	119	160	72	✓	L	A++	A	13	6377	788	164	138	40	-	8	13	5844	3014	909	680	139	226	119	160	72						
	EHS20C-****D	✓	XL	A++	A	12	7788	1476	125	118	40	-	8	12	7052	4053	1901	1379	110	157	91	126	72	✓	XL	A++	A	13	6458	1476	162	118	40	-	8	13	5947	3064	1901	1379	136	222	91	126	72						
	ERST30C-****D	✓	XL	A++	A	12	7708	1476	127	118	40	-	8	12	6947	4000	1901	1379	112	159	91	126	72	✓	XL	A++	A	13	6377	1476	164	118	40	-	8	13	5844	3014	1901	1379	139	226	91	126	72						
	EHS20C-****(W)	✓	L	A++	A	9	5548	1044	131	103	40	-	9	9	7373	2963	1330	973	117	159	82	113	69	✓	L	A++	A	10	4553	1044	171	103	40	-	10	10	6058	2275	1330	973	153	222	82	113	69						
	ERST20C-****(W)	✓	L	A++	A	9	5467	1044	133	103	40	-	9	9	7284	2909	1330	973	119	162	82	113	69	✓	L	A++	A	10	4472	1044	174	103	40	-	10	10	5940	2222	1330	973	156	228	82	113	69						
PUHZ-SHW122VHA(-BS)	EHS20C-****(W)	✓	L	A++	A	13	7998	1044	128	103	40	-	13	12	10299	4048	1330	973	119	155	82	113	70	✓	L	A++	A	14	6771	1044	167	103	40	-	14	13	8562	3151	1330	973	157	217	82	113	70						
	ERST20C-****(W)	✓	L	A++	A	13	7917	1044	130	103	40	-	13	12	10210	3999	1330	973	120	157	82	113	70	✓	L	A++	A	14	6691	1044	169	103	40	-	14	13	8475	3096	1330	973	159	221	82	113	70						
PUHZ-SHW112YHA(-BS)	EHS20C-****(W)	✓	L	A++	A	13	7992	1044	128	103	40	-	13	12	10302	4048	1330	973	119	155	82	113	70	✓	L	A++	A	14	6770	1044	167	103	40	-	14	13	8563	3151	1330	973	157	218	82	113	70						
	ERST20C-****(W)	✓	L	A++	A	13	7918	1044	130	103	40	-	13	12	10209	3997	1330	973	120	157	82	113	70	✓	L	A++	A	14	6699	1044	169	103	40	-	14	13	8485	3096	1330	973	159	221	82	113	70						
PUHZ-SHW140YHA(-BS)	EHS20C-****(W)	✓	L	A++	A	16	10054	1044	127	103	40	-	16	14	12569	4811	1330	973	121	153	82	113	70	✓	L	A++	A	17	8446	1044	163	103	40	-	17	16	11031	3914	1330	973	149	209	82	113	70						
	ERST20C-****(W)	✓	L	A++	A	16	9973	1044	128	103	40	-	16	14	12491	4750	1330	973	122	154	82	113	70	✓	L	A++	A	17	8344	1044	165	103	40	-	17	16	10938	3864	1330	973	150	211	82	113	70						
	EHS20C-****D	✓	L	A++	A+	16	10054	788	127	138	40	-	16	14	12569	4811	895	680	121	153	121	160	70	✓	L	A++	A+	17	8446	788	163	138	40	-	17	16	11031	3914	895	680	149	209	121	160	70						
	ERST20C-****D	✓	L	A++	A	16	9973	788	128	138	40	-	16	14	12491	4750	895	680	122	154	121	160	70	✓	L	A++	A+	17	8344	788	165	138	40	-	17	16	10938	3864	895	680	150	211	121	160	70						
	EHS20C-****D	✓	XL	A++	A	16	10054	1476	127	118	40	-	16	14	12569	4811	1901	1379	121	153	91	126	70	✓	XL	A++	A	17	8446	1476	163	118	40	-	17	16	11031	3914	1901	1379	149	209	91	126	70						
PUHZ-S																																																			

	English Nederlands suomi	Deutsch Svenska Čeština	Français Dansk Български	Italiano Português Polski	Español Ελληνικά -
1	Outdoor unit buitenunit Ulkoyksikkö	Außengerät Utomhusenhet Venkovní jednotka	unité extérieure Udendørs enhed Външно тяло	unità esterna unidade exterior jednostka zewnētrzna	unidad exterior Εξωτερική μονάδα -
	Indoor unit binnenunit Sisäyksikkö	Innengerät Inomhusenhet Vnitřní jednotka	unité intérieure Indendørs enhed Вътрешно тяло	unità interna unidade interior jednostka wewnētrzna	unidad interior Εσωτερική μονάδα -
3	Medium-temperature application middentemperatuur-toepassing keskilämpötilan sovellus	Mitteltemperaturanwendung mediumentemperatuurapplikation střednětepelní aplikace	l'application à moyenne température middeltemperatuurvanvendsen среднотемпературното приложение	le applicazioni a media temperatura a aplicação a média temperatura zastosowania w średnich temperaturach	la aplicación de media temperatura η εφαρμογή σε μέση θερμοκρασία -
	Low-temperature application lagetemperatuur-toepassing matalanlämpötilan sovellus	Niedertemperaturanwendung lågtemperatuurapplikation nizkoteplotní 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 obciążēn	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 Ljudeffektivitvå L _{WA} i inomhus hladina akustického výkonu L _{WA} ve vnitřním prostoru	le niveau de puissance acoustique L _{WA} , à l'intérieur lydeeffektiveauet 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 Ljudeffektivitvån L _{WA} i utomhus hladina akustického výkonu L _{WA} ve venkovním prostoru	le niveau de puissance acoustique L _{WA} à l'extérieur lydeeffektiveau 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-SHW112VHA(-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	128	%
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	1.96	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.61	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	1.96	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.90	-
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	2.0	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	7998	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(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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VHA(-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	167	%
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	2.85	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.01	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.8	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.85	-
Tj = operation limit temperature (***)	Pdh	11.6	kW	Tj = operation limit temperature (***)	COPd	2.65	-
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	2.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	6771	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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· 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.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VHA(-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	12.7	kW	Seasonal space heating energy efficiency	ηs	119	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.7	kW	Tj = - 7 °C	COPd	2.72	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	3.55	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.2	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.1	kW	Tj = +12 °C	COPd	6.71	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.47	-
Tj = operation limit temperature (***)	Pdh	9.1	kW	Tj = operation limit temperature (***)	COPd	1.46	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	10.4	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.59	-
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	3.6	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	10299	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

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

Manager, Quality Assurance Department

UNITED KINGDOM

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VHA(-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	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.4	kW	Tj = - 7 °C	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.95	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature (***)	Pdh	9.6	kW	Tj = operation limit temperature (***)	COPd	1.77	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.26	-
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	4.3	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	8562	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-SHW112VHA(-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	12.0	kW	Seasonal space heating energy efficiency	ηs	155	%		
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj					
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-		
Degradation co-efficient (**)	Cdh	-	-						
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 2 °C	COPd	1.95	-		
Degradation co-efficient (**)	Cdh	1.00	-						
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	3.24	-		
Degradation co-efficient (**)	Cdh	0.99	-						
Tj = +12 °C	Pdh	6.8	kW	Tj = +12 °C	COPd	5.63	-		
Degradation co-efficient (**)	Cdh	0.99	-						
Tj = bivalent temperature	Pdh	12.0	kW	Tj = bivalent temperature	COPd	1.95	-		
Tj = operation limit temperature (***)	Pdh	12.0	kW	Tj = operation limit temperature (***)	COPd	1.95	-		
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	-	6000	m ³ /h		
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA						
Annual energy consumption	Q _{HE}	4048	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-SHW112VHA(-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	13.0	kW	Seasonal space heating energy efficiency	ηs	217	%
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	13.0	kW	Tj = + 2 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.92	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.10	-
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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	3151	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-SHW112VHA(-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	128	%
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	1.96	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.61	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	1.96	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.90	-
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	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	7998	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-SHW112VHA(-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	167	%
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	2.85	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.01	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.8	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.85	-
Tj = operation limit temperature (***)	Pdh	11.6	kW	Tj = operation limit temperature (***)	COPd	2.65	-
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	2.3	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	-	6000	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	6771	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 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-SHW112VHA(-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	12.7	kW	Seasonal space heating energy efficiency	ηs	119	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.7	kW	Tj = - 7 °C	COPd	2.72	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	3.55	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.2	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.1	kW	Tj = +12 °C	COPd	6.71	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.47	-
Tj = operation limit temperature (***)	Pdh	9.1	kW	Tj = operation limit temperature (***)	COPd	1.46	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	10.4	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.59	-
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	3.6	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	10299	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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Model(s):	Outdoor unit:	PUHZ-SHW112VHA(-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	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.4	kW	Tj = - 7 °C	COPd	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.60	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	5.95	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature (***)	Pdh	9.6	kW	Tj = operation limit temperature (***)	COPd	1.77	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.26	-
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	4.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	8562	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-SHW112VHA(-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	12.0	kW	Seasonal space heating energy efficiency	ηs	155	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 2 °C	COPd	1.95	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	3.24	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	6.8	kW	Tj = +12 °C	COPd	5.63	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	12.0	kW	Tj = bivalent temperature	COPd	1.95	-
Tj = operation limit temperature (***)	Pdh	12.0	kW	Tj = operation limit temperature (***)	COPd	1.95	-
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			-	6000	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	4048	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-SHW112VHA(-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	13.0	kW	Seasonal space heating energy efficiency	ηs	217	%
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	13.0	kW	Tj = + 2 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.92	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.10	-
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			-	6000	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	3151	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-SHW112VHA(-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	130	%
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	1.96	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.12	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.61	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	1.96	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.90	-
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	2.0	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	7917	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-SHW112VHA(-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	169	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	12.3	kW	Tj = - 7 °C	COPd	2.85	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.04	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.8	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.85	-
Tj = operation limit temperature (***)	Pdh	11.6	kW	Tj = operation limit temperature (***)	COPd	2.65	-
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	2.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	6691	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-SHW112VHA(-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	12.7	kW	Seasonal space heating energy efficiency	ηs	120	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.7	kW	Tj = - 7 °C	COPd	2.72	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	3.60	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.2	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.1	kW	Tj = +12 °C	COPd	6.71	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.47	-
Tj = operation limit temperature (***)	Pdh	9.1	kW	Tj = operation limit temperature (***)	COPd	1.46	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	10.4	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.59	-
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	3.6	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	-	6000	m³/h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	10210	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}.

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VHA(-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	159	%
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	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	6.10	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature (***)	Pdh	9.6	kW	Tj = operation limit temperature (***)	COPd	1.77	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.26	-
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	4.3	kW
Thermostat-off mode	P _{TO}	0.015	kW	Type of energy input	Electrical		
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	8475	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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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

Model(s):	Outdoor unit:	PUHZ-SHW112VHA(-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	12.0	kW	Seasonal space heating energy efficiency	ηs	157	%	
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj				
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-	
Degradation co-efficient (**)	Cdh	-	-					
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 2 °C	COPd	1.95	-	
Degradation co-efficient (**)	Cdh	1.00	-					
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	3.21	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = +12 °C	Pdh	6.8	kW	Tj = +12 °C	COPd	5.63	-	
Degradation co-efficient (**)	Cdh	0.99	-					
Tj = bivalent temperature	Pdh	12.0	kW	Tj = bivalent temperature	COPd	1.95	-	
Tj = operation limit temperature (***)	Pdh	12.0	kW	Tj = operation limit temperature (***)	COPd	1.95	-	
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	-	6000	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA					
Annual energy consumption	Q _{HE}	3999	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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(**) 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-SHW112VHA(-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	13.0	kW	Seasonal space heating energy efficiency	ηs	221	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	13.0	kW	Tj = + 2 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.88	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.10	-
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			-	6000	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	3096	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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(**) 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-SHW112VHA(-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	130	%
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	1.96	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	6.8	kW	Tj = + 2 °C	COPd	3.12	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	4.61	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.2	kW	Tj = bivalent temperature	COPd	1.96	-
Tj = operation limit temperature (***)	Pdh	10.7	kW	Tj = operation limit temperature (***)	COPd	1.90	-
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	2.0	kW
Thermostat-off mode	P _{TO}	0.015	kW				
Standby mode	P _{SB}	0.015	kW				
Crankcase heater mode	P _{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	7917	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-SHW112VHA(-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	169	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	12.3	kW	Tj = - 7 °C	COPd	2.85	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	7.5	kW	Tj = + 2 °C	COPd	4.04	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.8	kW	Tj = + 7 °C	COPd	5.68	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	12.3	kW	Tj = bivalent temperature	COPd	2.85	-
Tj = operation limit temperature (***)	Pdh	11.6	kW	Tj = operation limit temperature (***)	COPd	2.65	-
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	2.3	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	6691	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-SHW112VHA(-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	12.7	kW	Seasonal space heating energy efficiency	ηs	120	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	7.7	kW	Tj = - 7 °C	COPd	2.72	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	3.60	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.2	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.1	kW	Tj = +12 °C	COPd	6.71	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	10.7	kW	Tj = bivalent temperature	COPd	1.47	-
Tj = operation limit temperature (***)	Pdh	9.1	kW	Tj = operation limit temperature (***)	COPd	1.46	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	10.4	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.59	-
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	3.6	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	10210	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-SHW112VHA(-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	159	%
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	3.75	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 2 °C	Pdh	5.1	kW	Tj = + 2 °C	COPd	4.65	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	6.10	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	11.7	kW	Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature (***)	Pdh	9.6	kW	Tj = operation limit temperature (***)	COPd	1.77	-
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW	Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.26	-
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	4.3	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	-	6000	m ³ /h
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	8475	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-SHW112VHA(-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	12.0	kW	Seasonal space heating energy efficiency	ηs	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	12.0	kW	Tj = + 2 °C	COPd	1.95	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	7.7	kW	Tj = + 7 °C	COPd	3.21	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	6.8	kW	Tj = +12 °C	COPd	5.63	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	12.0	kW	Tj = bivalent temperature	COPd	1.95	-
Tj = operation limit temperature (***)	Pdh	12.0	kW	Tj = operation limit temperature (***)	COPd	1.95	-
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			-	6000	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	3999	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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(**) 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-SHW112VHA(-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	13.0	kW	Seasonal space heating energy efficiency	ηs	221	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	-	kW	Tj = - 7 °C	COPd	-	-
Degradation co-efficient (**)	Cdh	-	-				
Tj = + 2 °C	Pdh	13.0	kW	Tj = + 2 °C	COPd	3.10	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.88	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.10	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.10	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.10	-
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			-	6000	m ³ /h	
Sound power level, indoors/outdoors	L _{WA}	40 / 70	dBA				
Annual energy consumption	Q _{HE}	3096	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

· 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.