

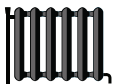


ENERG

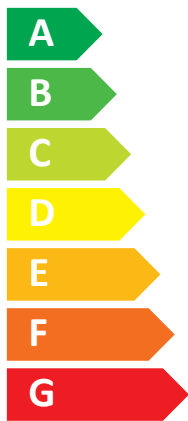
енергия · ενεργεια



Indoor unit E*ST20C-**C (W)
Outdoor unit PUHZ-SHW112YHA (-BS)



A⁺⁺



A



40 dB



70 dB



■ 13 kW

■ **13 kW**

■ 12 kW

2015

811/2013

BH79J465H08

	English	Deutsch	Français	Italiano	Español
	Nederlands suomi	Svenska Čeština	Dansk Български	Português Polski	Ελληνικά -
1	Outdoor unit buitenunit Ulkoyksikkö	Außengerät Utomhusenhet Venkovní jednotka	unité extérieure Udendørs enhed Външно тяло	unità esterna unidad exterior jednostka zewnętrzna	unidad exterior Εξωτερική μονάδα -
2	Indoor unit binnenunit Sisäyksikkö	Innengerät Inomhusenhet Vnitřní jednotka	unité intérieure Indendørs enhed Вътрешно тяло	unità interna unidad interior jednostka wewnętrzna	unidad interior Εσωτερική μονάδα -
3	Medium-temperature application middentemperatuur-toepassing keskilämpötilan sovellus	Mitteltemperaturanwendung mediumtemperaturapplikation středněteplotní aplikace	l'application à moyenne température mitteltemperaturanwendung 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 -
4	Low-temperature application lagetemperatur-toepassing matalanlämpötilan sovellus	Niedertemperaturanwendung lägtemperaturapplikation nízkoteplotní aplikace	l'application à basse température lavtemperaturanvendelsen nízkoteplotní aplikace	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	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 lřada sezonní energetické účinnosti vytápění	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux klassen for årsvirkningsgrad ved rumopvarmning класът 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 -
6	Water heating energy efficiency class de energie-efficiëntieklasse voor waterverwarming vedenlämmityksen energiatehokkuusluokka	die Klasse für die Warmwasserbereitungs-Energieeffizienz energieeffektivitetsklass vid vattenuppvärmning lřada energetické účinnosti ohřevu vody	la classe d'efficacité énergétique, pour le chauffage de l'eau klassen for årsvirkningsgrad ved vandopvarmning класът 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 -
7	Rated heat output under average climate conditions de nominale warmteafgifte(onder gemiddelde klimaatomstandigheden) nimellislämpöteho(keskimääräisissä ilmasto-olosuhteissa)	die Wärmenennleistung bei durchschnittlichen Klimaverhältnissen Den nominella avgivna värmeeffekten(under genomsnittliga klimatförhållanden) jmenovitý tepelný výkon(za průměrných klimatických podmínek)	la puissance thermique nominale dans les conditions climatiques moyennes den nominella nytteeffekt(under genomsnittliga klimatförhållanden) номиналната топлинна мощност(при средни климатични условия)	la potenza termica nominale(in condizioni climatiche medie) A potência calorífica nominal(em condições climáticas médias) znamięniona moc cieplna(w warunkach klimatu umiarkowanego)	la potencia calorífica nominal(en condiciones climáticas medias) η ονομαστική θερμική ισχύς(υπό μέσες κλιματικές συνθήκες) -
8	For space heating, annual energy consumption under average climate conditions voor ruimteverwarming, het jaarlijkse energieverbruik(onder gemiddelde klimaatomstandigheden) tilalämmityksestä vuotuinen energiankulutus(keskimääräisissä ilmasto-olosuhteissa)	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 genomsnittliga klimatförhållanden) 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) -
9	For water heating, annual electricity consumption under average climate conditions voor waterverwarming, het jaarlijkse elektriciteitsverbruik(onder gemiddelde klimaatomstandigheden) vedenlämmityksestä vuotuinen sähkönkulutus(keskimääräisissä ilmasto-olosuhteissa)	für die Warmwasserbereitung, den jährlichen Stromverbrauch bei durchschnittlichen Klimaverhältnissen För vattenuppvärmning, årlig elförbrukning(vid genomsnittliga klimatförhållanden) pro ohřevu 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 electricidade(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) -
10	Seasonal space heating energy efficiency under average climate conditions de seizoensgebonden energie-efficiëntie voor ruimteverwarming(onder gemiddelde klimaatomstandigheden) tilalämmityksen kausittainen energiatehokkuus(keskimääräisissä ilmasto-olosuhteissa)	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) -
11	Water heating energy efficiency under average climate conditions de energie-efficiëntie voor waterverwarming(onder gemiddelde klimaatomstandigheden) vedenlämmityksen energiatehokkuus(keskimääräisissä ilmasto-olosuhteissa)	die Warmwasserbereitungs-Energieeffizienz bei durchschnittlichen Klimaverhältnissen Energieeffektivitet ved 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 genomsnittliga klimatförhållanden) 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) -
12	Sound power level L _{WA} indoor het geluidsvermogensniveau L _{WA} binnen äänitehotaso L _{WA} sisällä	der Schalleistungspegel L _{WA} in Gebäuden Ljudeffektnivå L _{WA} i inomhus hladina akustického výkonu L _{WA} ve vnitřním prostoru	le niveau de puissance acoustique L _{WA} , à l'intérieur lydeeffektniveauet L _{WA} i inde ниво 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 -
13	Work only during off-peak hours werken uitsluitend in de daluren toimimaan ainoastaan kulutushuippujen ulkopuolella	dass ein ausschließlicher Betrieb des Kombiheizgerätes zu Schwachlastzeiten drivas uteslutande under perioder med låg belastning provozu 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 -
14	Rated heat output under colder climate conditions de nominale warmteafgifte, onder koudere klimaatomstandigheden nimellislämpöteho, kylmissä ilmasto-olosuhteissa	die Wärmenennleistung bei kälteren Klimaverhältnissen Nominell avgiven värmeeffekt vid kallare klimatförhållanden jmenovitý 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 znamięniona moc cieplna w warunkach klimatu chłodnego	la potencia calorífica nominal en condiciones climáticas más frías η ονομαστική θερμική ισχύς υπό ψυχρότερες κλιματικές συνθήκες -
15	Rated heat output under warmer climate conditions de nominale warmteafgifte, onder warmere klimaatomstandigheden nimellislämpöteho, lämpimissä ilmasto-olosuhteissa	die Wärmenennleistung bei wärmeren Klimaverhältnissen Nominell avgiven värmeeffekt vid varmare klimatförhållanden jmenovitý 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 znamięniona moc cieplna w warunkach klimatu ciepłego	la potencia calorífica nominal en condiciones climáticas más cálidas η ονομαστική θερμική ισχύς υπό θερμότερες κλιματικές συνθήκες -
16	For space heating, annual energy consumption under colder climate conditions voor ruimteverwarming, het jaarlijkse energieverbruik onder koudere klimaatomstandigheden tilalämmityksestä vuotuinen energiankulutus kylmissä ilmasto-olosuhteissa	für die Raumheizung, der jährliche Energieverbrauch bei kälteren Klimaverhältnissen För rumsuppvärmning, årlig energiförbrukning under kallare klimatförhållanden pro vytápění – roční spotřeba energie za chladnějších 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 -
17	For space heating, annual energy consumption under warmer climate conditions voor ruimteverwarming, het jaarlijkse energieverbruik onder warmere klimaatomstandigheden tilalämmityksestä vuotuinen energiankulutus lämpimissä ilmasto-olosuhteissa	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 -
18	For water heating, annual energy consumption under colder climate conditions voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder koudere klimaatomstandigheden vedenlämmityksestä vuotuinen sähkönkulutus kylmissä ilmasto-olosuhteissa	für die Warmwasserbereitung, der jährliche Stromverbrauch bei kälteren Klimaverhältnissen För vattenuppvärmning, årlig elförbrukning under kallare klimatförhållanden pro ohřevu 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 e più calde para o aquecimento de água, o consumo anual de electricidade 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 -
19	For water heating, annual energy consumption under warmer climate conditions voor waterverwarming, het jaarlijkse elektriciteitsverbruik onder warmere klimaatomstandigheden vedenlämmityksestä vuotuinen sähkönkulutus lämpimissä ilmasto-olosuhteissa	für die Warmwasserbereitung, der jährliche Stromverbrauch bei wärmeren Klimaverhältnissen För vattenuppvärmning, årlig elförbrukning under varmare klimatförhållanden pro ohřevu 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 fredde e più calde para o aquecimento de água, o consumo anual de electricidade 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 -
20	Seasonal space heating energy efficiency under colder climate conditions de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder koudere klimaatomstandigheden tilalämmityksen kausittainen energiatehokkuus kylmissä ilmasto-olosuhteissa	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 -
21	Seasonal space heating energy efficiency under warmer climate conditions de seizoensgebonden energie-efficiëntie voor ruimteverwarming onder warmere klimaatomstandigheden tilalämmityksen kausittainen energiatehokkuus lämpimissä ilmasto-olosuhteissa	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 -
22	Water heating energy efficiency under colder climate conditions de energie-efficiëntie voor waterverwarming onder koudere klimaatomstandigheden vedenlämmityksen energiatehokkuus kylmissä ilmasto-olosuhteissa	die Warmwasserbereitungs-Energieeffizienz bei kälteren Klimaverhältnissen Energieeffektivitet ved 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 -
23	Water heating energy efficiency under warmer climate conditions de energie-efficiëntie voor waterverwarming onder warmere klimaatomstandigheden vedenlämmityksen energiatehokkuus kylmissä ilmasto-olosuhteissa	die Warmwasserbereitungs-Energieeffizienz bei wärmeren Klimaverhältnissen Energieeffektivitet ved 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 -
24	Sound power level L _{WA} outdoor het geluidsvermogensniveau L _{WA} buiten äänitehotaso L _{WA} ulkona	der Schalleistungspegel L _{WA} im Freien Ljudeffektnivå L _{WA} i utomhus hladina akustického výkonu L _{WA} ve venkovním prostoru	le niveau de puissance acoustique L _{WA} à l'extérieur lydeeffektniveauet L _{WA} i ude ниво 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 -

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	η_s	128	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	11.2	kW	T _j = - 7 °C	COP _d	1.96	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	6.8	kW	T _j = + 2 °C	COP _d	3.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	4.4	kW	T _j = + 7 °C	COP _d	4.65	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.0	kW	T _j = +12 °C	COP _d	6.66	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	11.2	kW	T _j = bivalent temperature	COP _d	1.96	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.53	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
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	dB(A)				
Annual energy consumption	Q _{HE}	7792	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		L		η_{wh}	103	%	
Daily electricity consumption	Q _{elec}	4.700	kW/h				
Annual electricity consumption	AEC	1044	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	η_s	167	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	12.3	kW	T _j = - 7 °C	COP _d	2.85	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	7.5	kW	T _j = + 2 °C	COP _d	4.07	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	4.8	kW	T _j = + 7 °C	COP _d	5.72	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.3	kW	T _j = +12 °C	COP _d	7.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	12.3	kW	T _j = bivalent temperature	COP _d	2.85	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.3	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control		variable					
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	6590	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	103	%
Declared load profile		L					
Daily electricity consumption	Q _{elec}	4.700	kW/h				
Annual electricity consumption	AEC	1044	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	η_s	119	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.7	kW	T _j = - 7 °C	COP _d	2.57	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	4.7	kW	T _j = + 2 °C	COP _d	3.42	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	4.2	kW	T _j = + 7 °C	COP _d	4.92	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.1	kW	T _j = +12 °C	COP _d	6.71	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	10.7	kW	T _j = bivalent temperature	COP _d	1.47	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	11.2	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.96	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	3.6	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control		variable					
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	10030	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	82	%
Declared load profile		L					
Daily electricity consumption	Q _{elec}	6.000	kW/h				
Annual electricity consumption	AEC	1330	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	η_s	157	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	8.4	kW	T _j = - 7 °C	COP _d	3.63	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	5.1	kW	T _j = + 2 °C	COP _d	4.48	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.4	kW	T _j = + 7 °C	COP _d	6.04	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.3	kW	T _j = +12 °C	COP _d	7.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	11.7	kW	T _j = bivalent temperature	COP _d	2.09	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	12.3	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.85	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	4.3	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
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	dB(A)				
Annual energy consumption	Q _{HE}	8263	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		L		η_{wh}	82	%	
Daily electricity consumption	Q _{elec}	6.000	kW/h				
Annual electricity consumption	AEC	1330	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	155	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	12	kW	T _j = + 2 °C	COP _d	1.95	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	7.7	kW	T _j = + 7 °C	COP _d	3.24	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	6.8	kW	T _j = +12 °C	COP _d	5.63	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	11.2	kW	T _j = bivalent temperature	COP _d	1.86	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control		variable					
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	3966	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	113	%
Declared load profile		L					
Daily electricity consumption	Q _{elec}	4.400	kW/h				
Annual electricity consumption	AEC	973	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.0	kW	Seasonal space heating energy efficiency	η_s	218	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	13	kW	T _j = + 2 °C	COP _d	3.13	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	8.4	kW	T _j = + 7 °C	COP _d	4.88	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.2	kW	T _j = +12 °C	COP _d	7.13	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	12.3	kW	T _j = bivalent temperature	COP _d	2.85	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
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	dB(A)				
Annual energy consumption	Q _{HE}	3069	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		L		η_{wh}	113	%	
Daily electricity consumption	Q _{elec}	4.400	kW/h				
Annual electricity consumption	AEC	973	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	η_s	130	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	11.2	kW	T _j = - 7 °C	COP _d	1.96	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	6.8	kW	T _j = + 2 °C	COP _d	3.14	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	4.4	kW	T _j = + 7 °C	COP _d	4.65	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.0	kW	T _j = +12 °C	COP _d	6.66	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	11.2	kW	T _j = bivalent temperature	COP _d	1.96	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.53	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control		variable					
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	7792	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	103	%
Declared load profile		L					
Daily electricity consumption	Q _{elec}	4.700	kW/h				
Annual electricity consumption	AEC	1044	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	η_s	169	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	12.3	kW	T _j = - 7 °C	COP _d	2.85	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 2 °C	P _{dh}	7.5	kW	T _j = + 2 °C	COP _d	4.07	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	4.8	kW	T _j = + 7 °C	COP _d	5.72	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.3	kW	T _j = +12 °C	COP _d	7.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	12.3	kW	T _j = bivalent temperature	COP _d	2.85	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	2.3	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
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	dB(A)				
Annual energy consumption	Q _{HE}	6590	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		L		η_{wh}	103	%	
Daily electricity consumption	Q _{elec}	4.700	kW/h				
Annual electricity consumption	AEC	1044	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	η_s	120	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	7.7	kW	T _j = - 7 °C	COP _d	2.57	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	4.7	kW	T _j = + 2 °C	COP _d	3.42	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	4.2	kW	T _j = + 7 °C	COP _d	4.92	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.1	kW	T _j = +12 °C	COP _d	6.71	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	10.7	kW	T _j = bivalent temperature	COP _d	1.47	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	11.2	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	1.96	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	3.6	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
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	dB(A)				
Annual energy consumption	Q _{HE}	10030	kWh				

For heat pump combination heater:				Water heating energy efficiency			
Declared load profile		L		η_{wh}	82	%	
Daily electricity consumption	Q _{elec}	6.000	kW/h				
Annual electricity consumption	AEC	1330	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	η_s	159	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	8.4	kW	T _j = - 7 °C	COP _d	3.63	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 2 °C	P _{dh}	5.1	kW	T _j = + 2 °C	COP _d	4.48	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	4.4	kW	T _j = + 7 °C	COP _d	6.04	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.3	kW	T _j = +12 °C	COP _d	7.51	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	11.7	kW	T _j = bivalent temperature	COP _d	2.09	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	12.3	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	2.85	-
Bivalent temperature	T _{biv}	-16	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	4.3	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control	variable						
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	8263	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	82	%
Declared load profile	L						
Daily electricity consumption	Q _{elec}	6.000	kW/h				
Annual electricity consumption	AEC	1330	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.0	kW	Seasonal space heating energy efficiency	η_s	157	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	12	kW	T _j = + 2 °C	COP _d	1.95	-
Degradation co-efficient (**)	C _{dh}	0.98	-				
T _j = + 7 °C	P _{dh}	7.7	kW	T _j = + 7 °C	COP _d	3.24	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	6.8	kW	T _j = +12 °C	COP _d	5.63	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	11.2	kW	T _j = bivalent temperature	COP _d	1.86	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control		variable					
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	3966	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	113	%
Declared load profile		L					
Daily electricity consumption	Q _{elec}	4.400	kW/h				
Annual electricity consumption	AEC	973	kW/h				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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

Model(s):	Outdoor unit:	PUHZ-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.0	kW	Seasonal space heating energy efficiency	η_s	221	%
Declared capacity for heating for part load at indoor <input type="checkbox"/> temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	-	kW	T _j = - 7 °C	COP _d	-	-
Degradation co-efficient (**)	C _{dh}	-	-				
T _j = + 2 °C	P _{dh}	13	kW	T _j = + 2 °C	COP _d	3.13	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = + 7 °C	P _{dh}	8.4	kW	T _j = + 7 °C	COP _d	4.88	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = +12 °C	P _{dh}	7.2	kW	T _j = +12 °C	COP _d	7.13	-
Degradation co-efficient (**)	C _{dh}	0.99	-				
T _j = bivalent temperature	P _{dh}	12.3	kW	T _j = bivalent temperature	COP _d	2.85	-
T _j = operation limit temperature	P _{dh}	7.5	kW	T _j = operation limit temperature	COP _d	1.45	-
T _j = - 15 °C (if TOL < - 20 °C)	P _{dh}	-	kW	T _j = - 15 °C (if TOL < - 20 °C)	COP _d	-	-
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-28	°C
				Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P _{OFF}	0.022	kW	Rated heat output (*)	P _{sup}	0.0	kW
Thermostat-off mode	P _{TO}	0.022	kW				
Standby mode	P _{SB}	0.022	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW				

Other items				Rated air flow rate, outdoors	-	6000	m ³ /h
Capacity control		variable					
Sound power level, indoors/outdoors	L _{WA}	40/70	dB(A)				
Annual energy consumption	Q _{HE}	3069	kWh				

For heat pump combination heater:				Water heating energy efficiency	η_{wh}	113	%
Declared load profile		L					
Daily electricity consumption	Q _{elec}	4.400	kWh				
Annual electricity consumption	AEC	973	kWh				

Contact details

MITSUBISHI ELECTRIC AIR CODITIONING SYSTEM EUROPE LTD Nettlehill Road, Houston Industrial Estate, Livingston, EH54 5EQ, Scotland, U.K.

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

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