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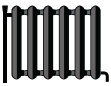
MITSUBISHI ELECTRIC

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



A+++
A++
A+
A
B
C
D

A++

A+
A
B
C
D
E
F

A

40 dB

70 dB

13 kW
13 kW
12 kW

2019

811/2013

BH79V003H37

MITSUBISHI ELECTRIC

PRODUCT FICHE

Mitsubishi Electric Erp Directive Related Product Information: erp.mitsubishielectric.eu/erp
Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.
This information is based on EU regulation No 811/2013 and No 813/2013.

1.SPACE HEATER

		For medium-temperature application													For low-temperature application											
1	2	3	6	8	11	9	13	15	16	21	22	17	18	25	4	6	8	11	9	13	15	16	21	22	17	18	25
Outdoor unit	Indoor unit	Medium-temperature application	Seasonal space heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	For space heating, annual energy consumption under average climate conditions	Sound power level L_{WA} indoor	Rated heat output under colder climate conditions	Rated heat output under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	For space heating, annual energy consumption under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	Sound power level L_{WA} outdoor	Low-temperature application	Seasonal space heating energy efficiency class	Rated heat output under average climate conditions	Seasonal space heating energy efficiency under average climate conditions	For space heating, annual energy consumption under average climate conditions	Sound power level L_{WA} indoor	Rated heat output under colder climate conditions	Rated heat output under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	For space heating, annual energy consumption under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	Sound power level L_{WA} outdoor
				kW	%	kWh	dB	kW	kW	%	%	kWh	kWh	dB			kW	%	kWh	dB	kW	kW	%	%	kWh	kWh	dB
PUHZ-SW75VHA(-BS)	EHSC-****C	✔	A++	7	127	4497	40	6	7	100	153	6033	2437	68	✔	A++	7	165	3545	40	6	7	139	231	4456	1645	68
	ERSC-****C	✔	A++	7	129	4442	40	6	7	101	155	5983	2401	68	✔	A++	7	167	3490	40	6	7	141	236	4396	1612	68
	EHSD-****C	✔	A++	7	127	4497	40	6	7	100	153	6033	2437	68	✔	A++	7	165	3545	40	6	7	139	231	4456	1645	68
	ERSD-****C	✔	A++	7	129	4442	40	6	7	101	155	5983	2401	68	✔	A++	7	167	3490	40	6	7	141	236	4396	1612	68
PUHZ-SW100VHA(-BS)	EHSC-****C	✔	A++	10	125	6451	40	7	10	106	149	6269	3509	70	✔	A++	10	164	5160	40	7	10	140	214	4970	2558	70
	ERSC-****C	✔	A++	10	127	6375	40	7	10	107	152	6168	3448	70	✔	A++	10	166	5078	40	7	10	143	219	4875	2507	70
PUHZ-SW100YHA(-BS)	EHSC-****C	✔	A++	10	125	6449	40	7	10	105	149	6277	3509	70	✔	A++	10	163	5166	40	7	10	140	214	4977	2557	70
	ERSC-****C	✔	A++	10	127	6369	40	7	10	107	152	6162	3452	70	✔	A++	10	166	5079	40	7	10	143	219	4877	2507	70
PUHZ-SW120VHA(-BS)	EHSC-****C	✔	A++	12	125	7790	40	8	12	110	157	7059	4051	72	✔	A++	13	162	6448	40	8	13	136	222	5946	3067	72
	ERSC-****C	✔	A++	12	127	7710	40	8	12	112	159	6966	4002	72	✔	A++	13	164	6377	40	8	13	139	226	5851	3012	72
	EHSC-****D	✔	A++	12	125	7790	40	8	12	110	157	7059	4051	72	✔	A++	13	162	6448	40	8	13	136	222	5946	3067	72
	ERSC-****D	✔	A++	12	127	7710	40	8	12	112	159	6966	4002	72	✔	A++	13	164	6377	40	8	13	139	226	5851	3012	72
PUHZ-SW120YHA(-BS)	EHSC-****C	✔	A++	12	125	7788	40	8	12	110	157	7052	4053	72	✔	A++	13	162	6458	40	8	13	136	222	5947	3064	72
	ERSC-****C	✔	A++	12	127	7708	40	8	12	112	159	6947	4000	72	✔	A++	13	164	6377	40	8	13	139	226	5844	3014	72
	EHSC-****D	✔	A++	12	125	7788	40	8	12	110	157	7052	4053	72	✔	A++	13	162	6458	40	8	13	136	222	5947	3064	72
	ERSC-****D	✔	A++	12	127	7708	40	8	12	112	159	6947	4000	72	✔	A++	13	164	6377	40	8	13	139	226	5844	3014	72
PUHZ-SW160YKA(-BS)	EHSE-****C	✔	A++	14	125	8716	45	10	14	106	151	8945	4697	78	✔	A++	15	161	7702	45	12	15	139	212	8221	3807	78
	ERSE-****C	✔	A++	14	126	8636	45	10	14	107	152	8841	4654	78	✔	A++	15	163	7621	45	12	15	140	215	8133	3754	78
	EHSE-****D	✔	A++	14	125	8716	45	10	14	106	151	8945	4697	78	✔	A++	15	161	7702	45	12	15	139	212	8221	3807	78
	ERSE-****D	✔	A++	14	126	8636	45	10	14	107	152	8841	4654	78	✔	A++	15	163	7621	45	12	15	140	215	8133	3754	78
PUHZ-SW200YKA(-BS)	EHSE-****C	✔	A++	16	127	9820	45	11	16	109	147	9809	5535	78	✔	A++	17	163	8638	45	14	17	142	209	9329	4368	78
	ERSE-****C	✔	A++	16	129	9740	45	11	16	110	148	9690	5480	78	✔	A++	17	164	8558	45	14	17	143	211	9237	4312	78
	EHSE-****D	✔	A++	16	127	9820	45	11	16	109	147	9809	5535	78	✔	A++	17	163	8638	45	14	17	142	209	9329	4368	78
	ERSE-****D	✔	A++	16	129	9740	45	11	16	110	148	9690	5480	78	✔	A++	17	164	8558	45	14	17	143	211	9237	4312	78
PUHZ-SHW80VHA(-BS)	EHSC-****C	✔	A++	9	131	5548	40	9	9	117	159	7373	2963	69	✔	A++	10	171	4553	40	10	10	153	222	6058	2275	69
	ERSC-****C	✔	A++	9	133	5467	40	9	9	119	162	7284	2909	69	✔	A++	10	174	4472	40	10	10	156	228	5940	2222	69
PUHZ-SHW112VHA(-BS)	EHSC-****C	✔	A++	13	128	7998	40	13	12	119	155	10299	4048	70	✔	A++	14	167	6771	40	14	13	157	217	8562	3151	70
	ERSC-****C	✔	A++	13	130	7917	40	13	12	120	157	10210	3999	70	✔	A++	14	169	6691	40	14	13	159	221	8475	3096	70
PUHZ-SHW112YHA(-BS)	EHSC-****C	✔	A++	13	128	7992	40	13	12	119	155	10302	4048	70	✔	A++	14	167	6770	40	14	13	157	218	8563	3151	70
	ERSC-****C	✔	A++	13	130	7918	40	13	12	120	157	10209	3997	70	✔	A++	14	169	6689	40	14	13	159	221	8485	3096	70
PUHZ-SHW140YHA(-BS)	EHSC-****C	✔	A++	16	127	10054	40	16	14	121	153	12569	4811	70	✔	A++	17	163	8446	40	17	16	149	209	11031	3914	70
	ERSC-****C	✔	A++	16	128	9973	40	16	14	122	154	12491	4750	70	✔	A++	17	165	8344	40	17	16	150	211	10938	3864	70
	EHSC-****D	✔	A++	16	127	10054	40	16	14	121	153	12569	4811	70	✔	A++	17	163	8446	40	17	16	149	209	11031	3914	70
	ERSC-****D	✔	A++	16	128	9973	40	16	14	122	154	12491	4750	70	✔	A++	17	165	8344	40	17	16	150	211	10938	3864	70

2.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	Declared load profile	Seasonal space heating energy efficiency class	Water heating energy efficiency class	Rated heat output under average climate conditions	For space heating, annual energy 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 energy consumption under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	For water heating, annual energy consumption under colder climate conditions	For water heating, annual energy consumption under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Water heating energy efficiency under colder climate conditions	Water heating energy efficiency under warmer climate conditions	Sound power level L_{WA} outdoor	Low-temperature application	Declared load profile	Seasonal space heating energy efficiency class	Water heating energy efficiency class	Rated heat output under average climate conditions	For space heating, annual energy 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 energy consumption under colder climate conditions	For space heating, annual energy consumption under warmer climate conditions	For water heating, annual energy consumption under colder climate conditions	For water heating, annual energy consumption under warmer climate conditions	Seasonal space heating energy efficiency under colder climate conditions	Seasonal space heating energy efficiency under warmer climate conditions	Water heating energy efficiency under colder climate conditions	Water heating energy efficiency under warmer climate conditions	Sound power level L_{WA} outdoor
						kW	kWh	kWh	%	%	dB		kW	kW	kWh	kWh	kWh	kWh	%	%	%	%	dB					kW	kWh	kWh	%	%	dB		kW	kW	kWh	kWh	kWh	kWh	%	%	%	%	dB
PUHZ-SW75VHA(-BS)	EHST20D-****C2	✔	L	A++	A+	7	4497	766	127	141	40	-	6	7	6033	2437	880	643	100	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
	EHST20C-****C(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-****C(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
	EHST20D-****C(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
	ERST20D-****C(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
PUHZ-SW100VHA(-BS)	EHST20C-****C(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
	ERST20C-****C(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
PUHZ-SW100YHA(-BS)	EHST20C-****C(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
	ERST20C-****C(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
PUHZ-SW120VHA(-BS)	EHST20C-****C(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-****C(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
	EHST20C-****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
	EHST30C-****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
PUHZ-SW120YHA(-BS)	EHST20C-****C(W)	✔	L	A++	A	12	7788	1109	125	99	40	-	8	12	7052	4053	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-****C(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
	EHST20C-****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
	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
	EHST30C-****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
PUHZ-SHW80VHA(-BS)	EHST20C-****C(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-****C(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-SHW112VHA(-BS)	EHST20C-****C(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-****C(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)	EHST20C-****C(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-****C(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	6689	1044	169	103	40	-	14	13	8485	3096	1330	973	159	221	82	113	70
PUHZ-SHW140YHA(-BS)	EHST20C-****C(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-****C(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
	EHST20C-****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
	EHST30C-****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
	ERST30C-****D	✔	XL	A++	A	16	9973	1476	128	118	40	-	16	14	12491	4750	1901	1379	122	154	91	126	70	✔	XL	A++	A	17	8344	1476	165	118	40	-	17	16	10938	3864	1901	1379	150	211	91	126	70

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	ηs	128	%
Declared capacity for heating for part load at indoor 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 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	4.65	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	2.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	7992	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	4.745	kWh				
Annual electricity consumption	AEC	1044	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 Assuarance 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-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****C(W)
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = - 7 °C	Pdh	12.3	kW
Degradation co-efficient (**)	Cdh	1.00	-
Tj = + 2 °C	Pdh	7.5	kW
Degradation co-efficient (**)	Cdh	0.99	-
Tj = + 7 °C	Pdh	4.8	kW
Degradation co-efficient (**)	Cdh	0.97	-
Tj = +12 °C	Pdh	7.3	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = bivalent temperature	Pdh	12.3	kW
Tj = operation limit temperature (***)	Pdh	11.6	kW
Bivalent temperature	Tbiv	-7	°C
Reference design conditions for space heating	Tdesignh	-10	°C
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.022	kW
Thermostat-off mode	P_{TO}	0.022	kW
Standby mode	P_{SB}	0.022	kW
Crankcase heater mode	P_{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA
Annual energy consumption	Q_{HE}	6770	kWh
For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Qelec	4.745	kWh
Annual electricity consumption	AEC	1044	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	167	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	2.85	-
Tj = + 2 °C	COPd	4.04	-
Tj = + 7 °C	COPd	5.72	-
Tj = +12 °C	COPd	7.51	-
Tj = bivalent temperature	COPd	2.85	-
Tj = operation limit temperature (***)	COPd	2.65	-
Operation limit temperature	TOL	-28	°C
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (*)	Psup	2.3	kW
Type of energy input		Electrical	
Rated air flow rate, outdoors	-	6000	m^3/h
Water heating energy efficiency	ηwh	103	%

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = - 7 °C	Pdh	7.7	kW
Degradation co-efficient (**)	Cdh	0.99	-
Tj = + 2 °C	Pdh	4.7	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = + 7 °C	Pdh	4.2	kW
Degradation co-efficient (**)	Cdh	0.97	-
Tj = +12 °C	Pdh	7.1	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = bivalent temperature	Pdh	10.7	kW
Tj = operation limit temperature (***)	Pdh	9.1	kW
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	10.4	kW
Bivalent temperature	Tbiv	-16	°C
Reference design conditions for space heating	Tdesignh	-22	°C
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.022	kW
Thermostat-off mode	P_{TO}	0.022	kW
Standby mode	P_{SB}	0.022	kW
Crankcase heater mode	P_{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA
Annual energy consumption	Q_{HE}	10302	kWh
For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Qelec	6.045	kWh
Annual electricity consumption	AEC	1330	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	119	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	2.72	-
Tj = + 2 °C	COPd	3.57	-
Tj = + 7 °C	COPd	5.00	-
Tj = +12 °C	COPd	6.71	-
Tj = bivalent temperature	COPd	1.47	-
Tj = operation limit temperature (***)	COPd	1.46	-
Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.59	-
Operation limit temperature	TOL	-28	°C
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (*)	Psup	3.6	kW
Type of energy input		Electrical	
Rated air flow rate, outdoors	-	6000	m^3/h
Water heating energy efficiency	ηwh	82	%

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	ηs	157	%
Declared capacity for heating for part load at indoor 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 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	4.62	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	6.04	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	4.3	kW
Thermostat-off mode	P_{TO}	0.022	kW				
Standby mode	P_{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA				
Annual energy consumption	Q_{HE}	8563	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	6.045	kWh				
Annual electricity consumption	AEC	1330	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-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****C(W)
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	3.26	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	6.8	kW	Tj = +12 °C	COPd	5.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	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-SHW112YHA(-BS)
	Indoor unit:	EHST20C-****C(W)
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.0	kW	Seasonal space heating energy efficiency	ηs	218	%
Declared capacity for heating for part load at indoor 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 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	3.13	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.94	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.29	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.13	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.13	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	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-SHW112YHA(-BS)
	Indoor unit:	EHST20C-MEC
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		average climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	ηs	128	%
Declared capacity for heating for part load at indoor 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 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	4.65	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	2.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	7992	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	4.745	kWh				
Annual electricity consumption	AEC	1044	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 Assuarance Department
UNITED KINGDOM

· Details and precautions on installation, maintenance and assembly can be found in the installation and or operation manuals.

· Details and precautions on recycling and/or disposal at end-of-life can be found in the installation and or operation manuals.

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

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

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

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	ηs	167	%
Declared capacity for heating for part load at indoor 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 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	5.72	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	2.3	kW
Thermostat-off mode	P_{TO}	0.022	kW				
Standby mode	P_{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA				
Annual energy consumption	Q_{HE}	6770	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	4.745	kWh				
Annual electricity consumption	AEC	1044	kWh				

Contact details

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	3.57	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.2	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	7.1	kW	Tj = +12 °C	COPd	6.71	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	3.6	kW
Thermostat-off mode	P_{TO}	0.022	kW				
Standby mode	P_{SB}	0.022	kW	Type of energy input		Electrical	
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors	-	6000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA				
Annual energy consumption	Q_{HE}	10302	kWh				
For heat pump combination heater:							
Declared load profile		L		Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	6.045	kWh				
Annual electricity consumption	AEC	1330	kWh				

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

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = - 7 °C	Pdh	8.4	kW
Degradation co-efficient (**)	Cdh	0.99	-
Tj = + 2 °C	Pdh	5.1	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = + 7 °C	Pdh	4.4	kW
Degradation co-efficient (**)	Cdh	0.97	-
Tj = +12 °C	Pdh	7.3	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = bivalent temperature	Pdh	11.7	kW
Tj = operation limit temperature (***)	Pdh	9.6	kW
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW
Bivalent temperature	Tbiv	-16	°C
Reference design conditions for space heating	Tdesignh	-22	°C
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.022	kW
Thermostat-off mode	P_{TO}	0.022	kW
Standby mode	P_{SB}	0.022	kW
Crankcase heater mode	P_{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA
Annual energy consumption	Q_{HE}	8563	kWh
For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Qelec	6.045	kWh
Annual electricity consumption	AEC	1330	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	157	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	3.75	-
Tj = + 2 °C	COPd	4.62	-
Tj = + 7 °C	COPd	6.04	-
Tj = +12 °C	COPd	7.51	-
Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature (***)	COPd	1.77	-
Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.26	-
Operation limit temperature	TOL	-28	°C
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (*)	Psup	4.3	kW
Type of energy input		Electrical	
Rated air flow rate, outdoors	-	6000	m^3/h
Water heating energy efficiency	ηwh	82	%

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	3.26	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	6.8	kW	Tj = +12 °C	COPd	5.75	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	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-SHW112YHA(-BS)
	Indoor unit:	EHST20C-MEC
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.0	kW	Seasonal space heating energy efficiency	ηs	218	%
Declared capacity for heating for part load at indoor 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 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	3.13	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.94	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.29	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.13	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.13	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	kWh				

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

PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	ηs	130	%
Declared capacity for heating for part load at indoor 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 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	4.63	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	2.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	7918	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	4.745	kWh				
Annual electricity consumption	AEC	1044	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = - 7 °C	Pdh	12.3	kW
Degradation co-efficient (**)	Cdh	1.00	-
Tj = + 2 °C	Pdh	7.5	kW
Degradation co-efficient (**)	Cdh	0.99	-
Tj = + 7 °C	Pdh	4.8	kW
Degradation co-efficient (**)	Cdh	0.97	-
Tj = +12 °C	Pdh	7.3	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = bivalent temperature	Pdh	12.3	kW
Tj = operation limit temperature (***)	Pdh	11.6	kW
Bivalent temperature	Tbiv	-7	°C
Reference design conditions for space heating	Tdesignh	-10	°C
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.022	kW
Thermostat-off mode	P_{TO}	0.022	kW
Standby mode	P_{SB}	0.022	kW
Crankcase heater mode	P_{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA
Annual energy consumption	Q_{HE}	6689	kWh
For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Qelec	4.745	kWh
Annual electricity consumption	AEC	1044	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	169	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	2.85	-
Tj = + 2 °C	COPd	4.04	-
Tj = + 7 °C	COPd	5.72	-
Tj = +12 °C	COPd	7.51	-
Tj = bivalent temperature	COPd	2.85	-
Tj = operation limit temperature (***)	COPd	2.65	-
Operation limit temperature	TOL	-28	°C
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (*)	Psup	2.3	kW
Type of energy input		Electrical	
Rated air flow rate, outdoors	-	6000	m^3/h
Water heating energy efficiency	ηwh	103	%

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;

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

Atsushi EDAYOSHI
Manager, Quality Assuarance 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-SHW112YHA(-BS)
	Indoor unit:	ERST20C-****C(W)
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		yes
Heat pump combination heater:		yes
Parameters for		medium-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = - 7 °C	Pdh	7.7	kW
Degradation co-efficient (**)	Cdh	0.99	-
Tj = + 2 °C	Pdh	4.7	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = + 7 °C	Pdh	4.2	kW
Degradation co-efficient (**)	Cdh	0.97	-
Tj = +12 °C	Pdh	7.1	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = bivalent temperature	Pdh	10.7	kW
Tj = operation limit temperature (***)	Pdh	9.1	kW
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	10.4	kW
Bivalent temperature	Tbiv	-16	°C
Reference design conditions for space heating	Tdesignh	-22	°C
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.022	kW
Thermostat-off mode	P_{TO}	0.022	kW
Standby mode	P_{SB}	0.022	kW
Crankcase heater mode	P_{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA
Annual energy consumption	Q_{HE}	10209	kWh
For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Qelec	6.045	kWh
Annual electricity consumption	AEC	1330	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	120	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	2.72	-
Tj = + 2 °C	COPd	3.61	-
Tj = + 7 °C	COPd	5.00	-
Tj = +12 °C	COPd	6.71	-
Tj = bivalent temperature	COPd	1.47	-
Tj = operation limit temperature (***)	COPd	1.46	-
Tj = – 15 °C (if TOL < – 20 °C)	COPd	1.59	-
Operation limit temperature	TOL	-28	°C
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (*)	Psup	3.6	kW
Type of energy input		Electrical	
Rated air flow rate, outdoors	-	6000	m^3/h
Water heating energy efficiency	ηwh	82	%

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	ηs	159	%
Declared capacity for heating for part load at indoor 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 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	4.66	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.4	kW	Tj = + 7 °C	COPd	6.04	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	4.3	kW
Thermostat-off mode	P_{TO}	0.022	kW				
Standby mode	P_{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA				
Annual energy consumption	Q_{HE}	8485	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	6.045	kWh				
Annual electricity consumption	AEC	1330	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	3997	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	3.13	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.90	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.13	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.13	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.13	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	3096	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	kWh				

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	ηs	130	%
Declared capacity for heating for part load at indoor 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 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	4.63	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = +12 °C	Pdh	7.0	kW	Tj = +12 °C	COPd	6.66	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	2.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	7918	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	4.745	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW	Seasonal space heating energy efficiency	ηs	169	%
Declared capacity for heating for part load at indoor 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 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	5.72	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	7.3	kW	Tj = +12 °C	COPd	7.51	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	2.3	kW
Thermostat-off mode	P_{TO}	0.022	kW				
Standby mode	P_{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA				
Annual energy consumption	Q_{HE}	6689	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	103	%
Daily electricity consumption	Qelec	4.745	kWh				
Annual electricity consumption	AEC	1044	kWh				

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	0.99	-				
Tj = + 2 °C	Pdh	4.7	kW	Tj = + 2 °C	COPd	3.61	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = + 7 °C	Pdh	4.2	kW	Tj = + 7 °C	COPd	5.00	-
Degradation co-efficient (**)	Cdh	0.97	-				
Tj = +12 °C	Pdh	7.1	kW	Tj = +12 °C	COPd	6.71	-
Degradation co-efficient (**)	Cdh	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	3.6	kW
Thermostat-off mode	P_{TO}	0.022	kW				
Standby mode	P_{SB}	0.022	kW	Type of energy input	Electrical		
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
Capacity control	variable			Rated air flow rate, outdoors	-	6000	m^3/h
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA				
Annual energy consumption	Q_{HE}	10209	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	82	%
Daily electricity consumption	Qelec	6.045	kWh				
Annual electricity consumption	AEC	1330	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;

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

Atsushi EDAYOSHI
Manager, Quality Assuarance 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-SHW112YHA(-BS)
	Indoor unit:	ERST20C-MEC
Air-to-water heat pump:		yes
Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		colder climate conditions.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.9	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j			
Tj = - 7 °C	Pdh	8.4	kW
Degradation co-efficient (**)	Cdh	0.99	-
Tj = + 2 °C	Pdh	5.1	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = + 7 °C	Pdh	4.4	kW
Degradation co-efficient (**)	Cdh	0.97	-
Tj = +12 °C	Pdh	7.3	kW
Degradation co-efficient (**)	Cdh	0.98	-
Tj = bivalent temperature	Pdh	11.7	kW
Tj = operation limit temperature (***)	Pdh	9.6	kW
Tj = – 15 °C (if TOL < – 20 °C)	Pdh	11.3	kW
Bivalent temperature	Tbiv	-16	°C
Reference design conditions for space heating	Tdesignh	-22	°C
Power consumption in modes other than active mode			
Off mode	P_{OFF}	0.022	kW
Thermostat-off mode	P_{TO}	0.022	kW
Standby mode	P_{SB}	0.022	kW
Crankcase heater mode	P_{CK}	0.000	kW
Other items			
Capacity control		variable	
Sound power level, indoors/outdoors	L_{WA}	40 / 70	dBA
Annual energy consumption	Q_{HE}	8485	kWh
For heat pump combination heater:			
Declared load profile		L	
Daily electricity consumption	Qelec	6.045	kWh
Annual electricity consumption	AEC	1330	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	159	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	COPd	3.75	-
Tj = + 2 °C	COPd	4.66	-
Tj = + 7 °C	COPd	6.04	-
Tj = +12 °C	COPd	7.51	-
Tj = bivalent temperature	COPd	2.09	-
Tj = operation limit temperature (***)	COPd	1.77	-
Tj = – 15 °C (if TOL < – 20 °C)	COPd	2.26	-
Operation limit temperature	TOL	-28	°C
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (*)	Psup	4.3	kW
Type of energy input		Electrical	
Rated air flow rate, outdoors	-	6000	m^3/h
Water heating energy efficiency	ηwh	82	%

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PRODUCT INFORMATION / TECHNICAL DOCUMENTATION

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	0.98	-				
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}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	3997	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	kWh				

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	Indoor unit:	ERST20C-MEC
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Water-to-water heat pump:		no
Brine-to-water heat pump:		no
Low-temperature heat pump:		no
Equipped with a supplementary heater:		no
Heat pump combination heater:		yes
Parameters for		low-temperature application.
Parameters for		warmer climate conditions.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	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 T j				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	3.13	-
Degradation co-efficient (**)	Cdh	1.00	-				
Tj = + 7 °C	Pdh	8.4	kW	Tj = + 7 °C	COPd	4.90	-
Degradation co-efficient (**)	Cdh	0.99	-				
Tj = +12 °C	Pdh	7.2	kW	Tj = +12 °C	COPd	7.13	-
Degradation co-efficient (**)	Cdh	0.98	-				
Tj = bivalent temperature	Pdh	13.0	kW	Tj = bivalent temperature	COPd	3.13	-
Tj = operation limit temperature (***)	Pdh	13.0	kW	Tj = operation limit temperature (***)	COPd	3.13	-
Bivalent temperature	Tbiv	2	°C	Operation limit temperature	TOL	-28	°C
Reference design conditions for space heating	Tdesignh	2	°C	Heating water operating limit temperature	WTOL	60	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	P_{OFF}	0.022	kW	Rated heat output (*)	Psup	0.0	kW
Thermostat-off mode	P_{TO}	0.022	kW	Type of energy input	Electrical		
Standby mode	P_{SB}	0.022	kW				
Crankcase heater mode	P_{CK}	0.000	kW				
Other items							
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}	3096	kWh				
For heat pump combination heater:							
Declared load profile	L			Water heating energy efficiency	ηwh	113	%
Daily electricity consumption	Qelec	4.423	kWh				
Annual electricity consumption	AEC	973	kWh				

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