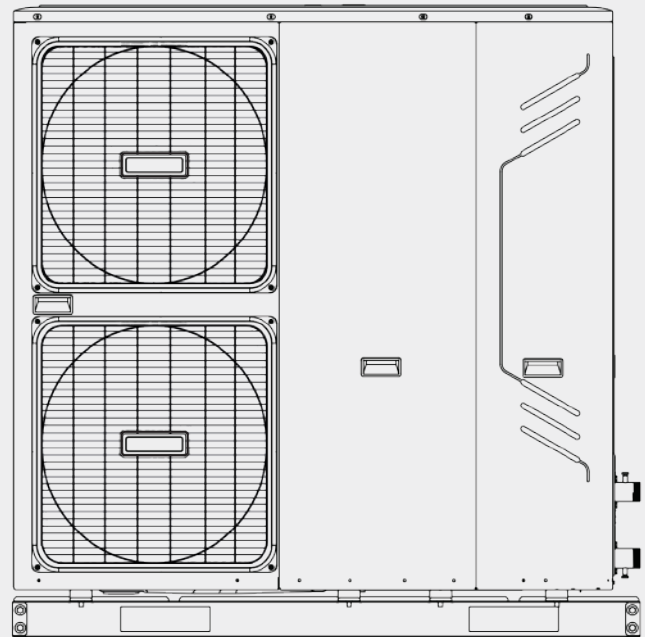
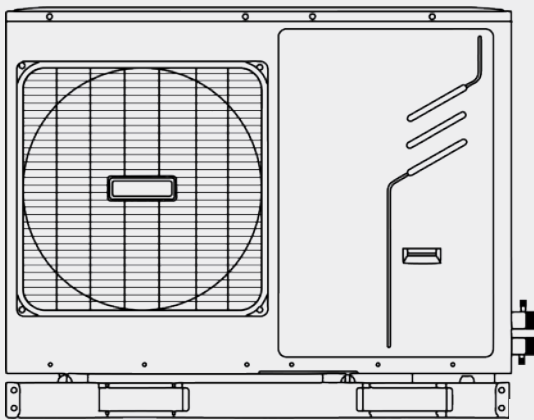


MONO HEAT PUMPS

TECHNICAL DATA MANUAL



IMPORTANT NOTE:



Thank you very much for purchasing our product,
Before using your unit , please read this manual carefully and keep it for future reference.

Product fiche 1

Heat pump space heater	unit	MHP5RP24MI	MHP7RP24MI	MHP9RP24MI	MHP12RP24MI	MHP14RP24MI	MHP16RP24MI	MHP12RP24P3MI	MHP14RP24P3MI	MHP16RP24P3MI	
Indoor unit sound power (*)	[dB(A)]	/	/	/	/	/	/	/	/	/	
Outdoor unit sound power (*)	[dB(A)]	61	64	67	68	71	71	68	71	71	
Capacity of the back-up heater integrated in the unit	[kW]	0	0	0	0	0	0	0	0	0	
Heat pump	Y/N	No	No	No	No	No	No	No	No	No	
Space heating	Energy efficiency class 35°C (Low temp. app.)	A+++	A+++	A+++	A++	A++	A++	A++	A++	A++	
Space heating	Energy efficiency class 55°C (Medium temp. app.)	A++	A++	A++	A++	A++	A++	A++	A++	A++	
Average climate (Design temperature= -10°C)											
Prated(declared heating capacity) @-10°C	[kW]	7	7	8	12	14	16	12	14	16	
Seasonal space heating efficiency(ηs)	[%]	176	176	177	169	168	169	169	168	169	
Annual energy consumption	[kWh]	3,071	3,071	3,844	5,726	6,819	7,687	5,726	6,819	7,687	
Prated(declared heating capacity) @-10°C	[kW]	7	7	7	13	14	15	13	14	15	
Seasonal space heating efficiency(ηs)	[%]	127	127	126	126	128	128	126	128	128	
Annual energy consumption	[kWh]	4,203	4,203	4,770	8,164	8,724	9,216	8,164	8,724	9,216	
Part load conditions space heating average climate low temperature application											
(A) condition (-7°C)	Pdh(declared heating capacity)	[kW]	5.88	5.88	7.42	12.47	14.15	10.52	12.47	14.15	
	COPd (declared COP)	-	2.91	2.80	2.88	2.84	2.72	2.88	2.84	2.72	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
(B) condition (2°C)	Pdh(declared heating capacity)	[kW]	3.64	3.64	4.83	7.48	8.92	6.50	7.48	8.92	
	COPd (declared COP)	-	4.38	4.38	4.33	4.19	4.17	4.15	4.19	4.17	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
(C) condition (7°C)	Pdh(declared heating capacity)	[kW]	2.42	2.42	3.20	5.04	5.64	4.12	5.04	5.64	
	COPd (declared COP)	-	5.89	5.89	6.20	5.99	5.86	5.74	5.99	5.86	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
(D) condition (12°C)	Pdh(declared heating capacity)	[kW]	1.03	1.03	1.55	2.23	2.47	2.23	2.23	2.47	
	COPd (declared COP)	-	5.89	5.89	7.61	5.30	6.28	5.40	5.30	6.28	
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	

Product fiche 2

Heat pump space heater		unit	MHP5RP24MI	MHP7RP24MI	MHP9RP24MI	MHP12RP24MI	MHP14RP24MI	MHP16RP24MI	MHP12RP24P3MI	MHP14RP24P3MI	MHP16RP24P3MI	MHP16RP24P3MI
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	6.62	6.62	6.64	12.01	12.72	12.93	12.01	12.72	12.93	12.93
	COPd (declared COP)	-	2.63	2.63	2.54	2.60	2.51	2.41	2.60	2.51	2.41	2.41
	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60	60	60	60	60	60	60
(F) Tbivalent temperature	Tbiv	[°C]	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	5.88	5.88	7.42	10.52	12.47	14.15	10.52	12.47	14.15	14.15
Supplementary capacity at P_design	COPd (declared COP)	-	2.91	2.91	2.80	2.88	2.84	2.72	2.88	2.84	2.72	2.72
Supplementary capacity at P_design	Psup (@Tdesignh,-10°C)	[kW]	0.00	0.00	1.80	0.00	1.40	3.10	0.00	1.40	3.10	3.10
Part load conditions space heating average climate medium temperature application												
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	5.83	5.83	6.58	11.29	12.18	12.90	11.29	12.18	12.90	12.90
	COPd (declared COP)	-	1.97	1.97	1.87	2.05	2.05	2.04	2.05	2.05	2.04	2.04
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	3.68	3.68	4.25	7.31	7.84	8.25	7.31	7.84	8.25	8.25
(B) condition (2°C)	COPd (declared COP)	-	3.22	3.22	3.19	3.14	3.18	3.21	3.14	3.18	3.21	3.21
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	2.47	2.47	2.80	4.96	5.21	5.45	4.96	5.21	5.45	5.45
	COPd (declared COP)	-	4.21	4.21	4.38	4.25	4.29	4.32	4.25	4.29	4.32	4.32
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	1.26	1.26	1.27	2.37	2.57	2.57	2.37	2.57	2.57	2.57
(D) condition (12°C)	COPd (declared COP)	-	4.91	4.91	5.04	4.94	5.14	5.12	4.94	5.14	5.12	5.12
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
	Pdh (declared heating capacity)	[kW]	5.86	5.86	5.53	11.88	11.68	11.16	11.88	11.68	11.16	11.16
	COPd (declared COP)	-	1.62	1.62	1.51	1.79	1.74	1.65	1.79	1.74	1.65	1.65
	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60	60	60	60	60	60	60
(F) Tbivalent temperature	Tbiv	[°C]	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7
	Pdh (declared heating capacity)	[kW]	5.83	5.83	6.58	11.29	12.18	12.90	11.29	12.18	12.90	12.90
Supplementary capacity at P_design	COPd (declared COP)	-	1.97	1.97	1.87	2.05	2.05	2.04	2.05	2.05	2.04	2.04
Supplementary capacity at P_design	Psup (@Tdesignh,-10°C)	[kW]	0.70	0.70	1.80	0.90	2.10	3.40	0.90	2.10	3.40	3.40

Product fiche 3

Heat pump space heater		unit	MHP5RP24MI	MHP7RP24MI	MHP9RP24MI	MHP12RP24MI	MHP14RP24MI	MHP16RP24MI	MHP12RP24P3MI	MHP14RP24P3MI	MHP16RP24P3MI	MHP14RP24P3MI	MHP16RP24P3MI
Colder climate (Design temperature = -22°C)													
Space heating 35°C	Prated (declared heating capacity) @ -22°C	[kW]	5	7	8	13	14	16	13	14	16	14	16
	Seasonal space heating efficiency (ηs)	[%]	133	150	149	131	143	143	131	143	143	143	143
	Annual energy consumption	[kWh]	3,486	4,217	5,303	9,294	9,427	10,487	9,294	9,427	10,487	9,427	10,487
Space heating 55°C	Prated (declared heating capacity) @ -22°C	[kW]	5	7	8	12	14	15	12	14	15	14	15
	Seasonal space heating efficiency (ηs)	[%]	97	104	109	96	102	106	96	102	106	102	106
	Annual energy consumption	[kWh]	4,661	6,136	7,286	12,299	13,449	13,768	12,299	13,449	13,768	13,449	13,768
Part load conditions space heating colder climate low temperature application													
condition (-15°C)	Pdh (declared heating capacity)	[kW]	3.92	5.35	5.85	10.31	11.39	11.38	10.31	11.39	11.38	11.39	11.38
	COPd (declared COP)	-	2.43	2.48	2.42	2.38	2.32	2.33	2.38	2.32	2.33	2.32	2.33
	Cdh (degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	2.86	4.19	5.31	7.74	8.71	9.98	7.74	8.71	9.98	8.71	9.98
	COPd (declared COP)	-	3.09	3.22	3.22	3.18	3.17	3.15	3.18	3.17	3.15	3.17	3.15
	Cdh (degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	1.74	2.59	3.35	4.32	5.48	5.83	4.32	5.48	5.83	5.48	5.83
	COPd (declared COP)	-	4.09	4.53	4.76	4.00	4.27	4.33	4.00	4.27	4.33	4.27	4.33
	Cdh (degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	1.12	1.79	2.09	3.00	3.50	4.13	3.00	3.50	4.13	3.50	4.13
	COPd (declared COP)	-	4.52	6.13	6.34	5.69	5.89	6.12	5.69	5.89	6.12	5.89	6.12
	Cdh (degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	0.69	1.03	1.03	1.81	1.84	2.57	1.81	1.84	2.57	1.84	2.57
	COPd (declared COP)	-	4.04	6.00	5.75	4.56	4.52	6.50	4.56	4.52	6.50	4.52	6.50
	Cdh (degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(E) Tol (temperature operating limit)	Tol (temperature operating limit)	[°C]	-20	-20	-20	-22	-22	-22	-22	-22	-22	-22	-22
	Pdh (declared heating capacity)	[kW]	4.78	4.93	4.91	8.54	8.77	9.06	8.54	8.77	9.06	8.77	9.06
	COPd (declared COP)	-	2.10	2.10	2.08	1.80	1.84	1.88	1.80	1.84	1.88	1.84	1.88
(F) Tbivalent temperature	WTOL (Heating water Operation Limit)	[°C]	40	40	40	37	37	37	37	37	37	37	37
	Tbiv	[°C]	-15	-15	-13	-15	-15	-13	-15	-15	-13	-15	-13
	Pdh (declared heating capacity)	[kW]	3.92	5.35	6.26	10.30	11.39	11.85	10.30	11.39	11.85	11.39	11.85
Supplementary capacity at P_design	COPd (declared COP)	-	2.43	2.48	2.53	2.38	2.32	2.39	2.38	2.32	2.39	2.32	2.39
	Psup (@Tdesign:-22°C)	[kW]	1.10	3.00	4.50	4.10	5.20	6.50	4.10	5.20	6.50	5.20	6.50

Product fiche 4

Heat pump space heater		unit	MHP5RP24MI	MHP7RP24MI	MHP9RP24MI	MHP12RP24MI	MHP14RP24MI	MHP16RP24MI	MHP18RP24MI	MHP20RP24MI	MHP24RP24MI	MHP30RP24MI	MHP36RP24MI	
Part load conditions space heating colder climate medium temperature application														
condition (-15°C)	Pdh (declared heating capacity)	[kW]	3.86	5.42	5.49	10.09	10.82	10.74	10.09	10.82	10.74	10.09	10.82	10.74
	COPd (declared COP)	-	1.73	1.80	1.76	1.78	1.77	1.76	1.78	1.77	1.76	1.78	1.77	1.76
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(A) condition (-7°C)	Pdh (declared heating capacity)	[kW]	2.97	4.15	5.41	7.34	8.86	9.64	7.34	8.86	9.64	7.34	8.86	9.64
	COPd (declared COP)	-	2.18	2.38	2.43	2.27	2.35	2.38	2.27	2.35	2.38	2.27	2.35	2.38
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	1.75	2.67	3.30	4.47	5.30	5.59	4.47	5.30	5.59	4.47	5.30	5.59
	COPd (declared COP)	-	2.94	3.05	3.40	2.90	3.16	3.31	2.90	3.16	3.31	2.90	3.16	3.31
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh (declared heating capacity)	[kW]	1.16	1.71	2.17	2.88	3.28	3.95	2.88	3.28	3.95	2.88	3.28	3.95
	COPd (declared COP)	-	3.57	4.16	4.59	3.96	4.10	4.47	3.96	4.10	4.47	3.96	4.10	4.47
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh (declared heating capacity)	[kW]	0.61	0.91	0.90	1.44	1.44	1.90	1.44	1.44	1.90	1.44	1.44	1.90
	COPd (declared COP)	-	2.93	4.28	4.28	3.22	3.20	4.05	3.22	3.20	4.05	3.22	3.20	4.05
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(E) Tol(temperature operating limit)	Tol (temperature operating limit)	[°C]	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18	-18
	Pdh (declared heating capacity)	[kW]	4.10	4.05	4.17	7.66	7.65	6.72	7.66	7.65	6.72	7.66	7.65	6.72
	COPd (declared COP)	-	1.28	1.25	1.29	1.27	1.26	1.10	1.27	1.26	1.10	1.27	1.26	1.10
(F) Tbiivalent temperature	WTOL (Heating water Operation Limit)	[°C]	44	44	44	44	44	44	44	44	44	44	44	44
	Tbiv	[°C]	-15	-15	-12	-15	-14	-13	-15	-14	-13	-15	-14	-13
	Pdh (declared heating capacity)	[kW]	3.86	5.42	6.08	10.09	11.33	11.64	10.09	11.33	11.64	10.09	11.33	11.64
Supplementary capacity at P_design	COPd (declared COP)	-	1.73	1.80	1.98	1.78	1.85	1.88	1.78	1.85	1.88	1.78	1.85	1.88
	Psup (@Tdesign:-22°C)	[kW]	2.70	4.60	6.30	6.80	8.70	9.60	6.80	8.70	9.60	6.80	8.70	9.60
Warmer climate (Design temperature =2°C)														
Space heating 35°C	Prated (declared heating capacity) @ 2°C	[kW]	5	7	8	12	14	16	12	14	16	12	14	16
	Seasonal space heating efficiency (ηs)	[%]	224	218	248	236	240	233	236	240	233	236	240	233
	Annual energy consumption	[kWh]	1,109	1,660	1,597	2,724	3,098	3,574	2,724	3,098	3,574	2,724	3,098	3,574
Space heating 55°C	Prated (declared heating capacity) @ 2°C	[kW]	5	7	9	12	14	16	12	14	16	12	14	16
	Seasonal space heating efficiency (ηs)	[%]	142	154	164	148	154	154	148	154	154	148	154	154
	Annual energy consumption	[kWh]	1,683	2,255	2,774	4,207	4,746	5,367	4,207	4,746	5,367	4,207	4,746	5,367

Product fiche 5

Heat pump space heater	unit	MHP5RP24MI	MHP7RP24MI	MHP9RP24MI	MHP12RP24MI	MHP14RP24MI	MHP16RP24MI	MHP12RP24P3MI	MHP14RP24P3MI	MHP16RP24P3MI	
Part load conditions space heating warmer climate low temperature application											
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	4.80	6.76	7.58	12.03	14.13	15.25	12.03	14.13	15.25
	COPd (declared COP)	-	3.78	3.75	2.90	3.60	3.39	2.94	3.60	3.39	2.94
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	3.03	4.42	4.82	7.84	9.03	10.13	7.84	9.03	10.13
(C) condition (7°C)	COPd (declared COP)	-	5.29	5.53	5.46	5.45	5.38	5.32	5.45	5.38	5.32
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	1.45	1.89	2.44	3.49	4.30	4.91	3.49	4.30	4.91
	COPd (declared COP)	-	6.47	7.53	8.24	7.14	7.45	7.48	7.14	7.45	7.48
(D) condition (12°C)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Toi (temperature operating limit)	[°C]	2	2	2	2	2	2	2	2	2
	Pdh (declared heating capacity)	[kW]	4.80	6.76	7.58	12.03	14.13	15.25	12.03	14.13	15.25
	COPd (declared COP)	-	3.78	3.75	2.90	3.60	3.39	2.94	3.60	3.39	2.94
(E) Toi(temperature operating limit)	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60	60	60	60	60	60
	Tbiv	[°C]	7	7	7	7	7	7	7	7	7
	Pdh (declared heating capacity)	[kW]	3.03	4.42	4.82	7.84	9.03	10.13	7.84	9.03	10.13
	COPd (declared COP)	-	5.29	5.53	5.46	5.45	5.38	5.32	5.45	5.38	5.32
Supplementary capacity at P_design	[kW]	0.00	0.10	0.00	0.20	0.00	0.50	0.20	0.00	0.50	
Part load conditions space heating warmer climate medium temperature application											
(B) condition (2°C)	Pdh (declared heating capacity)	[kW]	4.70	6.63	8.57	11.88	13.80	14.12	11.88	13.80	14.12
	COPd (declared COP)	-	2.27	2.18	2.15	2.18	2.17	2.14	2.18	2.17	2.14
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	2.94	4.26	5.55	7.61	8.95	10.10	7.61	8.95	10.10
(C) condition (7°C)	COPd (declared COP)	-	3.10	3.34	3.43	3.08	3.18	3.22	3.08	3.18	3.22
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	1.48	1.94	2.59	3.52	4.15	4.77	3.52	4.15	4.77
	COPd (declared COP)	-	4.56	4.99	5.57	4.94	5.26	5.46	4.94	5.26	5.46
(D) condition (12°C)	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Toi (temperature operating limit)	[°C]	2	2	2	2	2	2	2	2	2
	Pdh (declared heating capacity)	[kW]	4.70	6.63	8.57	11.88	13.80	14.12	11.88	13.80	14.12
	COPd (declared COP)	-	2.27	2.18	2.15	2.18	2.17	2.14	2.18	2.17	2.14
(E) Toi(temperature operating limit)	WTOL (Heating water Operation Limit)	[°C]	60	60	60	60	60	60	60	60	60

Product fiche 6

Heat pump space heater		unit	MHP5RP24MI	MHP7RP24MI	MHP9RP24MI	MHP12RP24MI	MHP14RP24MI	MHP16RP24MI	MHP12RP24P3MI	MHP14RP24P3MI	MHP16RP24P3MI
(F) T _{bivalent} temperature	T _{biv}	[°C]	7	7	7	7	7	7	7	7	7
	P _{dth} (declared heating capacity)	[kW]	2.94	4.26	5.55	7.61	8.95	10.10	7.61	8.95	10.10
Supplementary capacity at P _{design}	COP _d (declared COP)	-	3.10	3.34	3.43	3.08	3.18	3.22	3.08	3.18	3.22
	P _{sup} (@T _{designh} :2°C)	[kW]	0.00	0.00	0.00	0.00	0.10	1.60	0.00	0.10	1.60
Ecodesign technical data											
Product description	Air-to-water heat pump	Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No	No	No	No	No	No
	Brine-to-water heat pump	Y/N	No	No	No	No	No	No	No	No	No
	Low-temperature heat pump	Y/N	No	No	No	No	No	No	No	No	No
	Equipped with a supplementary heater	Y/N	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
	Heat pump combination heater	Y/N	No	No	No	No	No	No	No	No	No
Air to water unit	Rated airflow (outdoor)	[m ³ /h]	3050	3050	3050	6150	6150	6150	6150	6150	6150
Brine/water to water unit	Rated water/brine flow (outdoor H/E)	[m ³ /h]	/	/	/	/	/	/	/	/	/
Other	Capacity control	-	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	P _{off} (Power consumption Off mode)	[kW]	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
	P _{to} (Power consumption Thermostat off mode)	[kW]	0.009	0.006	0.010	0.015	0.026	0.041	0.015	0.015	0.041
	P _{sb} (Power consumption Standby mode)	[kW]	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
	P _{CK} (Power crankcase heater model)	[kW]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Q _{elec} (Daily electricity consumption)	[kWh/h]	/	/	/	/	/	/	/	/	/
	Q _{fuel} (Daily fuel consumption)	[kWh/h]	/	/	/	/	/	/	/	/	/

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

Product fiche data according to energy label directive 2010/30/EC regulation (EU) 811/2013.

Technical parameters

Model(s):	MHP5RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	5.8	kW
Tj = 2 °C	Pdh	3.7	kW
Tj = 7 °C	Pdh	2.5	kW
Tj = 12 °C	Pdh	1.3	kW
Tj = bivalent temperature	Pdh	5.8	kW
Tj = operating limit	Pdh	5.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.006	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/61	dB
Annual energy consumption	QHE	4203	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	127	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	1.97	-
Tj = 2 °C	COPd	3.22	-
Tj = 7 °C	COPd	4.21	-
Tj = 12 °C	COPd	4.91	-
Tj = bivalent temperature	COPd	1.97	-
Tj = operating limit	COPd	1.62	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.7	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

Contact details

AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia
Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP5RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	3.0	kW
Tj = 2 °C	Pdh	1.8	kW
Tj = 7 °C	Pdh	1.2	kW
Tj = 12 °C	Pdh	0.6	kW
Tj = bivalent temperature	Pdh	3.9	kW
Tj = operating limit	Pdh	4.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	3.9	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.009	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-/61	dB
Annual energy consumption	Q _{HE}	4661	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	97	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.18	-
Tj = 2 °C	COPd	2.94	-
Tj = 7 °C	COPd	3.57	-
Tj = 12 °C	COPd	2.93	-
Tj = bivalent temperature	COPd	1.73	-
Tj = operating limit	COPd	1.28	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.73	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	44	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	2.7	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η _{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

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Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP5RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	4.7	kW
Tj = 7 °C	Pdh	2.9	kW
Tj = 12 °C	Pdh	1.5	kW
Tj = bivalent temperature	Pdh	2.9	kW
Tj = operating limit	Pdh	4.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.009	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/61	dB
Annual energy consumption	QHE	1683	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	142	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.27	-
Tj = 7 °C	COPd	3.10	-
Tj = 12 °C	COPd	4.56	-
Tj = bivalent temperature	COPd	3.10	-
Tj = operating limit	COPd	2.27	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.0	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

Contact details

AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia
Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP7RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	5.8	kW
Tj = 2 °C	Pdh	3.7	kW
Tj = 7 °C	Pdh	2.5	kW
Tj = 12 °C	Pdh	1.3	kW
Tj = bivalent temperature	Pdh	5.8	kW
Tj = operating limit	Pdh	5.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.006	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/64	dB
Annual energy consumption	QHE	4203	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	127	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	1.97	-
Tj = 2 °C	COPd	3.22	-
Tj = 7 °C	COPd	4.21	-
Tj = 12 °C	COPd	4.91	-
Tj = bivalent temperature	COPd	1.97	-
Tj = operating limit	COPd	1.62	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.7	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	ηwh	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ

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Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP7RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	4.2	kW
Tj = 2 °C	Pdh	2.7	kW
Tj = 7 °C	Pdh	1.7	kW
Tj = 12 °C	Pdh	0.9	kW
Tj = bivalent temperature	Pdh	5.4	kW
Tj = operating limit	Pdh	4.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	5.4	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.006	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/64	dB
Annual energy consumption	QHE	6136	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	104	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.38	-
Tj = 2 °C	COPd	3.05	-
Tj = 7 °C	COPd	4.16	-
Tj = 12 °C	COPd	4.28	-
Tj = bivalent temperature	COPd	1.80	-
Tj = operating limit	COPd	1.25	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.80	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	4.6	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:

Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

Contact details

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Tel. 0445/519933 - Mail info@mitsuiairconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP7RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	6.6	kW
Tj = 7 °C	Pdh	4.3	kW
Tj = 12 °C	Pdh	1.9	kW
Tj = bivalent temperature	Pdh	4.3	kW
Tj = operating limit	Pdh	6.6	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.006	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/64	dB
Annual energy consumption	QHE	2255	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	154	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.18	-
Tj = 7 °C	COPd	3.34	-
Tj = 12 °C	COPd	4.99	-
Tj = bivalent temperature	COPd	3.34	-
Tj = operating limit	COPd	2.18	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.0	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Qelec	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	ηwh	-	%
Daily fuel consumption	Qfuel	-	kWh
Annual fuel consumption	AFC	-	GJ

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Tel. 0445/519933 - Mail info@mitsuiairconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP9RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	6.6	kW
Tj = 2 °C	Pdh	4.3	kW
Tj = 7 °C	Pdh	2.8	kW
Tj = 12 °C	Pdh	1.3	kW
Tj = bivalent temperature	Pdh	6.6	kW
Tj = operating limit	Pdh	5.5	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.010	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-67	dB
Annual energy consumption	QHE	4770	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	126	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	1.87	-
Tj = 2 °C	COPd	3.19	-
Tj = 7 °C	COPd	4.38	-
Tj = 12 °C	COPd	5.04	-
Tj = bivalent temperature	COPd	1.87	-
Tj = operating limit	COPd	1.51	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	1.8	kW
Type of energy input	Electrical		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP9RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.2	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	5.4	kW
Tj = 2 °C	Pdh	3.3	kW
Tj = 7 °C	Pdh	2.2	kW
Tj = 12 °C	Pdh	0.9	kW
Tj = bivalent temperature	Pdh	6.1	kW
Tj = operating limit	Pdh	4.2	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	5.5	kW
Bivalent temperature	Tbiv	-12	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.010	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-/67	dB
Annual energy consumption	Q _{HE}	7286	kWh

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	109	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COP _d	2.43	-
Tj = 2 °C	COP _d	3.40	-
Tj = 7 °C	COP _d	4.59	-
Tj = 12 °C	COP _d	4.28	-
Tj = bivalent temperature	COP _d	1.98	-
Tj = operating limit	COP _d	1.29	-
For air-to-water heat pumps: Tj = -15 °C	COP _d	1.76	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	44	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	6.3	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

Water heating energy efficiency	η _{wh}	-	%
Daily fuel consumption	Q _{fuel}	-	kWh
Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP9RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	8.6	kW
Tj = 7 °C	Pdh	5.6	kW
Tj = 12 °C	Pdh	2.6	kW
Tj = bivalent temperature	Pdh	5.6	kW
Tj = operating limit	Pdh	8.6	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.010	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-/67	dB
Annual energy consumption	Q _{HE}	2774	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	164	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.15	-
Tj = 7 °C	COPd	3.43	-
Tj = 12 °C	COPd	5.57	-
Tj = bivalent temperature	COPd	3.43	-
Tj = operating limit	COPd	2.14	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	0.0	kW
Type of energy input	-		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	3050	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η _{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP12RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	11.3	kW
Tj = 2 °C	Pdh	7.3	kW
Tj = 7 °C	Pdh	5.0	kW
Tj = 12 °C	Pdh	2.4	kW
Tj = bivalent temperature	Pdh	11.3	kW
Tj = operating limit	Pdh	11.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.015	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-68	dB
Annual energy consumption	Q _{HE}	8164	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	126	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.05	-
Tj = 2 °C	COPd	3.14	-
Tj = 7 °C	COPd	4.25	-
Tj = 12 °C	COPd	4.94	-
Tj = bivalent temperature	COPd	2.05	-
Tj = operating limit	COPd	1.79	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	0.9	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η _{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP12RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	7.3	kW
Tj = 2 °C	Pdh	4.5	kW
Tj = 7 °C	Pdh	2.9	kW
Tj = 12 °C	Pdh	1.4	kW
Tj = bivalent temperature	Pdh	10.1	kW
Tj = operating limit	Pdh	7.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	10.1	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.015	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/68	dB
Annual energy consumption	QHE	12299	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	96	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.27	-
Tj = 2 °C	COPd	2.90	-
Tj = 7 °C	COPd	3.96	-
Tj = 12 °C	COPd	3.22	-
Tj = bivalent temperature	COPd	1.78	-
Tj = operating limit	COPd	1.27	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.78	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	6.8	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP12RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11.8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	11.9	kW
Tj = 7 °C	Pdh	7.6	kW
Tj = 12 °C	Pdh	3.5	kW
Tj = bivalent temperature	Pdh	7.6	kW
Tj = operating limit	Pdh	11.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.015	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-/68	dB
Annual energy consumption	Q _{HE}	4207	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	148	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.18	-
Tj = 7 °C	COPd	3.08	-
Tj = 12 °C	COPd	4.94	-
Tj = bivalent temperature	COPd	3.08	-
Tj = operating limit	COPd	2.18	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	0.0	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η _{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP14RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	12.2	kW
Tj = 2 °C	Pdh	7.8	kW
Tj = 7 °C	Pdh	5.2	kW
Tj = 12 °C	Pdh	2.6	kW
Tj = bivalent temperature	Pdh	12.2	kW
Tj = operating limit	Pdh	11.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.026	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	8724	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	128	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.05	-
Tj = 2 °C	COPd	3.18	-
Tj = 7 °C	COPd	4.29	-
Tj = 12 °C	COPd	5.14	-
Tj = bivalent temperature	COPd	2.05	-
Tj = operating limit	COPd	1.74	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	2.1	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP14RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.3	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	8.9	kW
Tj = 2 °C	Pdh	5.3	kW
Tj = 7 °C	Pdh	3.3	kW
Tj = 12 °C	Pdh	1.4	kW
Tj = bivalent temperature	Pdh	11.3	kW
Tj = operating limit	Pdh	7.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	10.8	kW
Bivalent temperature	Tbiv	-14	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.026	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	13449	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	102	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.35	-
Tj = 2 °C	COPd	3.16	-
Tj = 7 °C	COPd	4.10	-
Tj = 12 °C	COPd	3.20	-
Tj = bivalent temperature	COPd	1.85	-
Tj = operating limit	COPd	1.26	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.77	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	8.7	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP14RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

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 Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	13.8	kW
Tj = 7 °C	Pdh	9.0	kW
Tj = 12 °C	Pdh	4.2	kW
Tj = bivalent temperature	Pdh	9.0	kW
Tj = operating limit	Pdh	13.8	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.026	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	4746	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	154	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.17	-
Tj = 7 °C	COPd	3.18	-
Tj = 12 °C	COPd	5.26	-
Tj = bivalent temperature	COPd	3.18	-
Tj = operating limit	COPd	2.17	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.1	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP16RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	12.9	kW
Tj = 2 °C	Pdh	8.3	kW
Tj = 7 °C	Pdh	5.5	kW
Tj = 12 °C	Pdh	2.6	kW
Tj = bivalent temperature	Pdh	12.9	kW
Tj = operating limit	Pdh	11.2	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.041	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	9216	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	128	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.04	-
Tj = 2 °C	COPd	3.21	-
Tj = 7 °C	COPd	4.32	-
Tj = 12 °C	COPd	5.12	-
Tj = bivalent temperature	COPd	2.04	-
Tj = operating limit	COPd	1.65	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	3.4	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP16RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15.2	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	9.6	kW
Tj = 2 °C	Pdh	5.6	kW
Tj = 7 °C	Pdh	4.0	kW
Tj = 12 °C	Pdh	1.9	kW
Tj = bivalent temperature	Pdh	11.6	kW
Tj = operating limit	Pdh	6.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	10.7	kW
Bivalent temperature	Tbiv	-13	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.041	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	13768	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	106	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.38	-
Tj = 2 °C	COPd	3.31	-
Tj = 7 °C	COPd	4.47	-
Tj = 12 °C	COPd	4.05	-
Tj = bivalent temperature	COPd	1.88	-
Tj = operating limit	COPd	1.10	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.76	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	9.6	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP16RP24MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	14.1	kW
Tj = 7 °C	Pdh	10.1	kW
Tj = 12 °C	Pdh	4.8	kW
Tj = bivalent temperature	Pdh	10.1	kW
Tj = operating limit	Pdh	14.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.041	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-71	dB
Annual energy consumption	Q _{HE}	5367	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	154	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.14	-
Tj = 7 °C	COPd	3.22	-
Tj = 12 °C	COPd	5.46	-
Tj = bivalent temperature	COPd	3.22	-
Tj = operating limit	COPd	2.14	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	1.6	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η _{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP12RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	11.3	kW
Tj = 2 °C	Pdh	7.3	kW
Tj = 7 °C	Pdh	5.0	kW
Tj = 12 °C	Pdh	2.4	kW
Tj = bivalent temperature	Pdh	11.3	kW
Tj = operating limit	Pdh	11.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.015	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-/68	dB
Annual energy consumption	Q _{HE}	8164	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	126	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.05	-
Tj = 2 °C	COPd	3.14	-
Tj = 7 °C	COPd	4.25	-
Tj = 12 °C	COPd	4.94	-
Tj = bivalent temperature	COPd	2.05	-
Tj = operating limit	COPd	1.79	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	0.9	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Q _{elec}	-	kWh	Water heating energy efficiency	η _{wh}	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP12RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12.4	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	7.3	kW
Tj = 2 °C	Pdh	4.5	kW
Tj = 7 °C	Pdh	2.9	kW
Tj = 12 °C	Pdh	1.4	kW
Tj = bivalent temperature	Pdh	10.1	kW
Tj = operating limit	Pdh	7.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	10.1	kW
Bivalent temperature	Tbiv	-15	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.015	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-/68	dB
Annual energy consumption	QHE	12299	kWh

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η_{wh}	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	96	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.27	-
Tj = 2 °C	COPd	2.90	-
Tj = 7 °C	COPd	3.96	-
Tj = 12 °C	COPd	3.22	-
Tj = bivalent temperature	COPd	1.78	-
Tj = operating limit	COPd	1.27	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.78	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	6.8	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

Contact details

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Tel. 0445/519933 - Mail info@mitsuiairconditioner.com

(*) 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.

Technical parameters

Model(s):	MHP12RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER
Parameters are declared for medium-temperature application.	

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11.8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	11.9	kW
Tj = 7 °C	Pdh	7.6	kW
Tj = 12 °C	Pdh	3.5	kW
Tj = bivalent temperature	Pdh	7.6	kW
Tj = operating limit	Pdh	11.9	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.015	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-/68	dB
Annual energy consumption	Q _{HE}	4207	kWh

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	148	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COP _d	-	-
Tj = 2 °C	COP _d	2.18	-
Tj = 7 °C	COP _d	3.08	-
Tj = 12 °C	COP _d	4.94	-
Tj = bivalent temperature	COP _d	3.08	-
Tj = operating limit	COP _d	2.18	-
For air-to-water heat pumps: Tj = -15 °C	COP _d	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	0.0	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

Water heating energy efficiency	η _{wh}	-	%
Daily fuel consumption	Q _{fuel}	-	kWh
Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP14RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13.8	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	12.2	kW
Tj = 2 °C	Pdh	7.8	kW
Tj = 7 °C	Pdh	5.2	kW
Tj = 12 °C	Pdh	2.6	kW
Tj = bivalent temperature	Pdh	12.2	kW
Tj = operating limit	Pdh	11.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.026	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	8724	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	128	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.05	-
Tj = 2 °C	COPd	3.18	-
Tj = 7 °C	COPd	4.29	-
Tj = 12 °C	COPd	5.14	-
Tj = bivalent temperature	COPd	2.05	-
Tj = operating limit	COPd	1.74	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	2.1	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP14RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.3	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	8.9	kW
Tj = 2 °C	Pdh	5.3	kW
Tj = 7 °C	Pdh	3.3	kW
Tj = 12 °C	Pdh	1.4	kW
Tj = bivalent temperature	Pdh	11.3	kW
Tj = operating limit	Pdh	7.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	10.8	kW
Bivalent temperature	Tbiv	-14	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.026	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	13449	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	102	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.35	-
Tj = 2 °C	COPd	3.16	-
Tj = 7 °C	COPd	4.10	-
Tj = 12 °C	COPd	3.20	-
Tj = bivalent temperature	COPd	1.85	-
Tj = operating limit	COPd	1.26	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.77	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	8.7	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP14RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

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 Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	13.8	kW
Tj = 7 °C	Pdh	9.0	kW
Tj = 12 °C	Pdh	4.2	kW
Tj = bivalent temperature	Pdh	9.0	kW
Tj = operating limit	Pdh	13.8	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.026	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	4746	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η_s	154	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.17	-
Tj = 7 °C	COPd	3.18	-
Tj = 12 °C	COPd	5.26	-
Tj = bivalent temperature	COPd	3.18	-
Tj = operating limit	COPd	2.17	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	0.1	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water- or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:			
Declared load profile	-		
Daily electricity consumption	Q _{elec}	-	kWh
Annual electricity consumption	AEC	-	kWh
Water heating energy efficiency	η_{wh}	-	%
Daily fuel consumption	Q _{fuel}	-	kWh
Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP16RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	AVERAGE

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14.6	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	12.9	kW
Tj = 2 °C	Pdh	8.3	kW
Tj = 7 °C	Pdh	5.5	kW
Tj = 12 °C	Pdh	2.6	kW
Tj = bivalent temperature	Pdh	12.9	kW
Tj = operating limit	Pdh	11.2	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	-7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.041	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	9216	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	128	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.04	-
Tj = 2 °C	COPd	3.21	-
Tj = 7 °C	COPd	4.32	-
Tj = 12 °C	COPd	5.12	-
Tj = bivalent temperature	COPd	2.04	-
Tj = operating limit	COPd	1.65	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	60	°C
Supplementary heater			
Rated heat output (**)	Psup	3.4	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-						
Daily electricity consumption	Qelec	-	kWh	Water heating energy efficiency	ηwh	-	%
Annual electricity consumption	AEC	-	kWh	Daily fuel consumption	Qfuel	-	kWh
				Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP16RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	COLDER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15.2	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	9.6	kW
Tj = 2 °C	Pdh	5.6	kW
Tj = 7 °C	Pdh	4.0	kW
Tj = 12 °C	Pdh	1.9	kW
Tj = bivalent temperature	Pdh	11.6	kW
Tj = operating limit	Pdh	6.7	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	10.7	kW
Bivalent temperature	Tbiv	-13	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.041	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	LWA	-71	dB
Annual energy consumption	QHE	13768	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	ηs	106	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	2.38	-
Tj = 2 °C	COPd	3.31	-
Tj = 7 °C	COPd	4.47	-
Tj = 12 °C	COPd	4.05	-
Tj = bivalent temperature	COPd	1.88	-
Tj = operating limit	COPd	1.10	-
For air-to-water heat pumps: Tj = -15 °C	COPd	1.76	-
For air-to-water heat pumps: Operation limit temperature	TOL	-18	°C
Cycling interval efficiency	COPcyc	-	-
Heating water operating limit temperature	WTOL	44	°C
Supplementary heater			
Rated heat output (**)	Psup	9.6	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m³/h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	ηwh	-	%
Daily electricity consumption	Qelec	-	kWh	Daily fuel consumption	Qfuel	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters

Model(s):	MHP16RP24P3MI
Air-to-water heat pump:	YES
Water-to-water heat pump:	NO
Brine-to-water heat pump:	NO
Low-temperature heat pump:	NO
Equipped with a supplementary heater:	NO
Heat pump combination heater:	NO
Declared climate condition:	WARMER

Parameters are declared for medium-temperature application.

Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15.7	kW
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	Pdh	-	kW
Tj = 2 °C	Pdh	14.1	kW
Tj = 7 °C	Pdh	10.1	kW
Tj = 12 °C	Pdh	4.8	kW
Tj = bivalent temperature	Pdh	10.1	kW
Tj = operating limit	Pdh	14.1	kW
For air-to-water heat pumps: Tj = -15 °C	Pdh	-	kW
Bivalent temperature	Tbiv	7	°C
Cycling interval capacity for heating	Pcyc	-	kW
Degradation co-efficient (**)	Cdh	0.9	--
Power consumption in modes other than active mode			
Off mode	Poff	0.009	kW
Standby mode	Psb	0.009	kW
Thermostat-off mode	Pto	0.041	kW
Crankcase heater mode	Pck	0.000	kW

Other items			
Capacity control	variable		
Sound power level, indoors/outdoors	L _{WA}	-71	dB
Annual energy consumption	Q _{HE}	5367	kWh

Item	Symbol	Value	Unit
Seasonal space heating energy efficiency	η _s	154	%
Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = -7 °C	COPd	-	-
Tj = 2 °C	COPd	2.14	-
Tj = 7 °C	COPd	3.22	-
Tj = 12 °C	COPd	5.46	-
Tj = bivalent temperature	COPd	3.22	-
Tj = operating limit	COPd	2.14	-
For air-to-water heat pumps: Tj = -15 °C	COPd	-	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	COP _{cy}	-	-
Heating water operating limit temperature	W _{TOL}	60	°C
Supplementary heater			
Rated heat output (**)	P _{sup}	1.6	kW
Type of energy input	Electrical Heating		

For air-to-water heat pumps: Rated air flow rate, outdoors	-	6150	m ³ /h
For water-or brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m ³ /h

For heat pump combination heater:							
Declared load profile	-			Water heating energy efficiency	η _{wh}	-	%
Daily electricity consumption	Q _{elec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ

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(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).
(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Information requirements for comfort chillers

Model(s):	MHP5RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	4.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	186	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	4.9	kW	$T_j=+35^\circ\text{C}$	EER_d	3.01	-
$T_j=+30^\circ\text{C}$	P_{dc}	3.6	kW	$T_j=+30^\circ\text{C}$	EER_d	4.36	-
$T_j=+25^\circ\text{C}$	P_{dc}	2.2	kW	$T_j=+25^\circ\text{C}$	EER_d	5.61	-
$T_j=+20^\circ\text{C}$	P_{dc}	1.0	kW	$T_j=+20^\circ\text{C}$	EER_d	5.14	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.004	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3050	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/61	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP5RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	4.6	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	301	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}C$	P_{dc}	4.6	kW	$T_j=+35^{\circ}C$	EER_d	4.97	-
$T_j=+30^{\circ}C$	P_{dc}	3.4	kW	$T_j=+30^{\circ}C$	EER_d	6.96	-
$T_j=+25^{\circ}C$	P_{dc}	2.2	kW	$T_j=+25^{\circ}C$	EER_d	9.40	-
$T_j=+20^{\circ}C$	P_{dc}	1.1	kW	$T_j=+20^{\circ}C$	EER_d	8.50	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.004	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3050	m^3/h
Sound power level, indoors / outdoors	LWA	-/61	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP7RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	6.2	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	196	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	6.2	kW	$T_j=+35^{\circ}\text{C}$	EER_d	2.78	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	4.7	kW	$T_j=+30^{\circ}\text{C}$	EER_d	4.21	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	3.0	kW	$T_j=+25^{\circ}\text{C}$	EER_d	6.10	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	1.4	kW	$T_j=+20^{\circ}\text{C}$	EER_d	6.65	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.002	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3050	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/64	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP7RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	6.4	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	340	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	6.4	kW	$T_j=+35^\circ\text{C}$	EER_d	4.72	-
$T_j=+30^\circ\text{C}$	P_{dc}	4.9	kW	$T_j=+30^\circ\text{C}$	EER_d	6.80	-
$T_j=+25^\circ\text{C}$	P_{dc}	3.1	kW	$T_j=+25^\circ\text{C}$	EER_d	10.70	-
$T_j=+20^\circ\text{C}$	P_{dc}	1.6	kW	$T_j=+20^\circ\text{C}$	EER_d	12.16	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.002	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3050	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/64	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP9RP24MI
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	7.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	194	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	7.9	kW	$T_j=+35^\circ\text{C}$	EER_d	2.39	-
$T_j=+30^\circ\text{C}$	P_{dc}	5.9	kW	$T_j=+30^\circ\text{C}$	EER_d	3.86	-
$T_j=+25^\circ\text{C}$	P_{dc}	3.9	kW	$T_j=+25^\circ\text{C}$	EER_d	5.95	-
$T_j=+20^\circ\text{C}$	P_{dc}	1.7	kW	$T_j=+20^\circ\text{C}$	EER_d	7.47	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
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Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.003	kW	Standby mode	P_{SB}	0.009	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3050	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/67	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Low temperature application
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	MHP9RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	7.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	312	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	7.9	kW	$T_j=+35^\circ\text{C}$	EER_d	4.17	-
$T_j=+30^\circ\text{C}$	P_{dc}	6.1	kW	$T_j=+30^\circ\text{C}$	EER_d	6.14	-
$T_j=+25^\circ\text{C}$	P_{dc}	3.8	kW	$T_j=+25^\circ\text{C}$	EER_d	9.80	-
$T_j=+20^\circ\text{C}$	P_{dc}	2.0	kW	$T_j=+20^\circ\text{C}$	EER_d	11.53	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.003	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	3050	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/67	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP12RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	11.3	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	191	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	11.3	kW	$T_j=+35^\circ\text{C}$	EER_d	2.90	-
$T_j=+30^\circ\text{C}$	P_{dc}	8.1	kW	$T_j=+30^\circ\text{C}$	EER_d	4.05	-
$T_j=+25^\circ\text{C}$	P_{dc}	5.2	kW	$T_j=+25^\circ\text{C}$	EER_d	5.42	-
$T_j=+20^\circ\text{C}$	P_{dc}	2.5	kW	$T_j=+20^\circ\text{C}$	EER_d	6.73	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.012	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/68	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP12RP24MI
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.6	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	297	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	12.6	kW	$T_j=+35^\circ\text{C}$	EER_d	4.74	-
$T_j=+30^\circ\text{C}$	P_{dc}	8.9	kW	$T_j=+30^\circ\text{C}$	EER_d	6.50	-
$T_j=+25^\circ\text{C}$	P_{dc}	5.9	kW	$T_j=+25^\circ\text{C}$	EER_d	8.65	-
$T_j=+20^\circ\text{C}$	P_{dc}	3.0	kW	$T_j=+20^\circ\text{C}$	EER_d	9.00	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
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Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.012	kW	Standby mode	P_{SB}	0.009	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/68	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Medium temperature application
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	MHP14RP24MI
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	186	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	12.9	kW	$T_j=+35^\circ\text{C}$	EER_d	2.71	-
$T_j=+30^\circ\text{C}$	P_{dc}	9.6	kW	$T_j=+30^\circ\text{C}$	EER_d	3.90	-
$T_j=+25^\circ\text{C}$	P_{dc}	6.0	kW	$T_j=+25^\circ\text{C}$	EER_d	5.37	-
$T_j=+20^\circ\text{C}$	P_{dc}	2.9	kW	$T_j=+20^\circ\text{C}$	EER_d	6.71	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
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Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.022	kW	Standby mode	P_{SB}	0.009	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Low temperature application
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	MHP14RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	14.2	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	283	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	14.2	kW	$T_j=+35^{\circ}\text{C}$	EER_d	4.42	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	10.5	kW	$T_j=+30^{\circ}\text{C}$	EER_d	6.14	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	6.6	kW	$T_j=+25^{\circ}\text{C}$	EER_d	8.44	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	2.9	kW	$T_j=+20^{\circ}\text{C}$	EER_d	8.43	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.022	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	LWA	-/71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP16RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	13.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	178	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	13.9	kW	$T_j=+35^{\circ}\text{C}$	EER_d	2.53	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	10.5	kW	$T_j=+30^{\circ}\text{C}$	EER_d	3.81	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	6.4	kW	$T_j=+25^{\circ}\text{C}$	EER_d	5.16	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	3.1	kW	$T_j=+20^{\circ}\text{C}$	EER_d	6.49	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.031	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m ³ /h
Sound power level, indoors / outdoors	L_{WA}	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m ³ /h
GWP of the refrigerant	-	675	kg CO ₂ eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP16RP24MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	15.3	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	268	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	15.3	kW	$T_j=+35^\circ\text{C}$	EER_d	4.19	-
$T_j=+30^\circ\text{C}$	P_{dc}	11.3	kW	$T_j=+30^\circ\text{C}$	EER_d	5.94	-
$T_j=+25^\circ\text{C}$	P_{dc}	7.2	kW	$T_j=+25^\circ\text{C}$	EER_d	7.98	-
$T_j=+20^\circ\text{C}$	P_{dc}	3.4	kW	$T_j=+20^\circ\text{C}$	EER_d	8.27	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.031	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	LWA	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP12RP24P3MI
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	11.3	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	191	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	11.3	kW	$T_j=+35^\circ\text{C}$	EER_d	2.90	-
$T_j=+30^\circ\text{C}$	P_{dc}	8.1	kW	$T_j=+30^\circ\text{C}$	EER_d	4.05	-
$T_j=+25^\circ\text{C}$	P_{dc}	5.2	kW	$T_j=+25^\circ\text{C}$	EER_d	5.42	-
$T_j=+20^\circ\text{C}$	P_{dc}	2.5	kW	$T_j=+20^\circ\text{C}$	EER_d	6.73	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
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Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.012	kW	Standby mode	P_{SB}	0.009	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/68	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Low temperature application
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	MHP12RP24P3MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.6	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	297	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	12.6	kW	$T_j=+35^{\circ}\text{C}$	EER_d	4.74	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	8.9	kW	$T_j=+30^{\circ}\text{C}$	EER_d	6.50	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	5.9	kW	$T_j=+25^{\circ}\text{C}$	EER_d	8.65	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	3.0	kW	$T_j=+20^{\circ}\text{C}$	EER_d	9.00	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.012	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-/68	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP14RP24P3MI
Outdoor side heat exchanger of chiller:	Air to water
Indoor side heat exchanger chiller:	Water
Type:	Compressor driven vapour compression
Driver of compressor:	Electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{\text{rated,c}}$	12.9	kW	Seasonal space cooling energy efficiency	$\eta_{\text{s,c}}$	186	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	12.9	kW	$T_j=+35^\circ\text{C}$	EER_d	2.71	-
$T_j=+30^\circ\text{C}$	P_{dc}	9.6	kW	$T_j=+30^\circ\text{C}$	EER_d	3.90	-
$T_j=+25^\circ\text{C}$	P_{dc}	6.0	kW	$T_j=+25^\circ\text{C}$	EER_d	5.37	-
$T_j=+20^\circ\text{C}$	P_{dc}	2.9	kW	$T_j=+20^\circ\text{C}$	EER_d	6.71	-

Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
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Power consumption in modes other than "active mode"

Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.022	kW	Standby mode	P_{SB}	0.009	kW

Other items

Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				

Standard rating conditions used	Low temperature application
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com

(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9.
(**) From 26 September 2018.

Information requirements for comfort chillers

Model(s):	MHP14RP24P3MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	14.2	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	283	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	14.2	kW	$T_j=+35^{\circ}\text{C}$	EER_d	4.42	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	10.5	kW	$T_j=+30^{\circ}\text{C}$	EER_d	6.14	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	6.6	kW	$T_j=+25^{\circ}\text{C}$	EER_d	8.44	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	2.9	kW	$T_j=+20^{\circ}\text{C}$	EER_d	8.43	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.022	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP16RP24P3MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	13.9	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	178	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	13.9	kW	$T_j=+35^\circ\text{C}$	EER_d	2.53	-
$T_j=+30^\circ\text{C}$	P_{dc}	10.5	kW	$T_j=+30^\circ\text{C}$	EER_d	3.81	-
$T_j=+25^\circ\text{C}$	P_{dc}	6.4	kW	$T_j=+25^\circ\text{C}$	EER_d	5.16	-
$T_j=+20^\circ\text{C}$	P_{dc}	3.1	kW	$T_j=+20^\circ\text{C}$	EER_d	6.49	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.031	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Low temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Information requirements for comfort chillers

Model(s):	MHP16RP24P3MI						
Outdoor side heat exchanger of chiller:	Air to water						
Indoor side heat exchanger chiller:	Water						
Type:	Compressor driven vapour compression						
Driver of compressor:	Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	15.3	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	268	%
Declared cooling capacity for part load at given outdoor temperature T_j				Declared energy efficiency ratio for part load at given outdoor temperature T_j			
$T_j=+35^{\circ}\text{C}$	P_{dc}	15.3	kW	$T_j=+35^{\circ}\text{C}$	EER_d	4.19	-
$T_j=+30^{\circ}\text{C}$	P_{dc}	11.3	kW	$T_j=+30^{\circ}\text{C}$	EER_d	5.94	-
$T_j=+25^{\circ}\text{C}$	P_{dc}	7.2	kW	$T_j=+25^{\circ}\text{C}$	EER_d	7.98	-
$T_j=+20^{\circ}\text{C}$	P_{dc}	3.4	kW	$T_j=+20^{\circ}\text{C}$	EER_d	8.27	-
Degradation co-efficient for chillers (*)	C_{dc}	0.9	-				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.009	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermosat-off mode	P_{TO}	0.031	kW	Standby mode	P_{SB}	0.009	kW
Other items							
Capacity control	variable			For air-to-water comfort chillers: air flow rate, outdoor measured	-	6150	m^3/h
Sound power level, indoors / outdoors	L_{WA}	-71	dB				
Emissions of nitrogen oxides (if applicable)	NO_x (**)	-	mg/kWh input GCV	For water / brine-to-water chillers: Rated brine or water flow rate, outdoor side heat exchanger	-	-	m^3/h
GWP of the refrigerant	-	675	kg CO_2 eq (100years)				
Standard rating conditions used	Medium temperature application						
Contact details	AMG SPA Via delle Arti e dei Mestieri, 1/3 San Vito di Leguzzano (VI) Italia Tel. 0445/519933 - Mail info@mitsui-airconditioner.com						
(*) If C_{dc} is not determined by measurement then the default degradation coefficient of chillers shall be 0,9. (**) From 26 September 2018.							

Model	Mode	Heating					Cooling	
	Ambient temperature	7/6			2/1	-7/-8	35/24	
	Water temperature	30-35	40-45	47-55	30-35	30-35	23-18	12-7
MHP5RP24MI	Capacity /W	4650	4800	4650	4600	4900	4600	4850
	Power input /W	930	1333	1768	1156	1639	954	1628
	COP / EER	5.00	3.60	2.63	3.98	2.99	4.82	2.98
MHP7RP24MI	Capacity /W	6650	6700	6800	6200	6450	6450	6300
	Power input /W	1348	1879	2424	1590	2164	1387	2274
	COP / EER	4.94	3.57	2.81	3.90	2.98	4.65	2.77
MHP9RP24MI	Capacity /W	8600	8600	8600	7100	7500	8000	7950
	Power input /W	1870	2500	3127	2034	2534	1923	3149
	COP / EER	4.60	3.44	2.75	3.49	2.96	4.16	2.53
MHP12RP24MI	Capacity /W	12300	12400	11900	12200	12000	12200	10900
	Power input /W	2557	3518	4281	3406	4290	2552	3739
	COP / EER	4.81	3.53	2.78	3.58	2.80	4.78	2.92
MHP14RP24MI	Capacity /W	14100	14100	14200	13000	12800	14000	12900
	Power input /W	3065	4063	5173	3657	4602	3101	4615
	COP / EER	4.60	3.47	2.75	3.56	2.78	4.52	2.80
MHP16RP24MI	Capacity /W	16300	16200	16100	15000	13500	15500	13800
	Power input /W	3663	4723	5908	4492	4913	3643	5208
	COP / EER	4.45	3.43	2.73	3.34	2.75	4.26	2.65
MHP12RP24P3MI	Capacity /W	12300	12400	11900	12200	12000	12200	10900
	Power input /W	2541	3454	4235	3351	4221	2528	3720
	COP / EER	4.84	3.59	2.81	3.64	2.84	4.83	2.93
MHP14RP24P3MI	Capacity /W	14100	14100	14200	13000	12800	14000	12900
	Power input /W	3045	3989	5099	3627	4548	3111	4615
	COP / EER	4.63	3.54	2.79	3.58	2.81	4.50	2.80
MHP16RP24P3MI	Capacity /W	16300	16200	16100	15000	13500	15500	13800
	Power input /W	3634	4702	5833	4449	4845	3634	5188
	COP / EER	4.49	3.45	2.76	3.37	2.79	4.27	2.66

NOTE

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