HYUNDAI

AIR CONDITIONING SYSTEMS AIR-TO-WATER HEAT PUMP - MONOBLOCK

• PRODUCT FICHE



MODELS:

HY/R290-70B/EN7BP HY/R290-100B/EN7BP HY/R290-120B/EN7BP HY/R290-160B/EN7BP HY/R290-100B/EN7BP-3 HY/R290-120B/EN7BP-3 HY/R290-160B/EN7BP-3

ENGLISH



Licensed by Hyundai Corporation Holdings, Korea

						For low-temperatur	e application						
				Average climate			Colder climate			Warmer climate			
Model	Energy efficiency class	Unit sound power	Rated heat output	Seasonal Space heating energy efficiency	y For space heating annual energy consumption	, Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption		
		dB	kW	%	kWh	kW	%	kWh	kW	%	kWh		
HY/R290-70B/EN7BP	A+++	61	7.0	182	3114	6.3	155	3939	7.1	196	1913		
HY/R290-100B/EN7BP	A+++	63	9.2	186	4015	8.8	152	5579	9.2	214	2274		
HY/R290-120B/EN7BP	A+++	64	12.0	180	5408	11.3	151	7208	12.6	239	2789		
HY/R290-160B/EN7BP	A+++	68	14.7	180	6650	13.9	148	9097	16.0	196	4299		
HY/R290-100B/EN7BP-3	A+++	63	9.0	183	3992	8.8	152	5579	9.2	214	2274		
HY/R290-120B/EN7BP-3	A+++	64	12.3	185	5400	11.3	151	7208	12.6	239	2789		
HY/R290-160B/EN7BP-3	A+++	68	14.7	182	6557	13.9	148	9097	16.0	196	4299		
	1					For modium tompore							
				A		Colder climate Warr					er climate		
Madal				Average climate			Colder climate			warmer climate	1		
Model	Energy efficiency class	Unit sound power	Rated heat output	Seasonal Space heating energy efficiency	y For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption	Rated heat output	Seasonal Space heating energy efficiency	For space heating annual energy consumption		
		dB	kW	%	kWh	kW	%	kWh	kW	%	kWh		
HY/R290-70B/EN7BP	A++	62	6.8	137	4007	6.2	119	5023	7.1	149	2513		
HY/R290-100B/EN7BP	A++	64	9.1	141	5253	8.7	119	7011	9.0	170	2778		
HY/R290-120B/EN7BP	A++	65	11.7	134	7082	11.4	120	9121	12.7	156	4250		
HY/R290-160B/EN7BP	A++	69	13.8	133	8343	12.9	117	10636	15.9	155	5362		
HY/R290-100B/EN7BP-3	A++	64	9.1	140	5257	8.7	119	7011	9.0	170	2778		
HY/R290-120B/EN7BP-3	A++	65	11.6	132	7090	11.4	120	9121	12.7	156	4250		
HY/R290-160B/EN7BP-3	A++	69	13.8	131	8507	12.9	117	10636	15.9	155	5362		

Product fich	ne 1								
Heat pump spa	ace heater	Model	HY/R290-70B/EN7BP	HY/R290-100B/EN7BP	HY/R290-120B/EN7BP	HY/R290-160B/EN7BP	HY/R290-100B/EN7BP-3	HY/R290-120B/EN7BP-3	HY/R290-160B/EN7BP-3
Unit sound power (*)	Average climate low temperature application	[dB]	61	63	64	68	63	64	68
	Average climate medium temperature application	[dB]	62	64	65	69	64	65	69
Capicity of the back-up heater integrated in the unit	Psup back-up heater	[kW]	3	3	3	3	9	9	9
Space beating	Energy efficiency class 35°C (Low temp. app.)	-	A+++	A+++	A+++	A+++	A+++	A+++	A+++
Space nearing	Energy efficiency class 55°C (Medium temp. app.)	-	A++	A++	A++	A++	A++	A++	A++
Average climate (Design temp	erature = -10°C)								
Prated (declared heating capacity) @-10°C			7.0	9.2	12.0	14.7	9.0	12.3	14.7
Space heating 35°C	Space heating 35°C Seasonal space heating efficiency (η)		182	186	180	180	183	185	182
	Annual energy consumption	[kWh]	3114	4015	5408	6650	3992	5400	6557
	Prated (declared heating capacity) @-10°C	[kW]	6.8	9.1	11.7	13.8	9.1	11.6	13.8
Space heating 55°C	Seasonal space heating efficiency (η)	[%]	137	141	134	133	140	132	131
	Annual energy consumption	[kWh]	4007	5253	7082	8343	5257	7090	8507
Part load conditions space he	ating average climate low temperature application								
	Pdh (declared heating capacity)	[kW]	6.2	8.1	10.6	13.0	8.0	10.8	13.0
(A) condition (-7°C)	COPd (declared COP)	-	2.82	2.75	2.50	2.32	2.90	2.49	2.27
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	3.8	4.9	6.3	7.8	4.9	6.2	7.8
(B) condition (2°C)	COPd (declared COP)	-	4.76	4.50	4.49	4.51	4.32	4.52	4.51
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	2.6	3.3	4.6	5.7	3.3	4.6	5.3
(C) condition (7°C)	COPd (declared COP)	-	6.41	6.84	6.66	6.71	6.70	7.28	7.08
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	1.6	2.7	3.6	4.5	3.5	3.5	4.6
(D) condition (12°C)	COPd (declared COP)	-	5.14	8.87	8.11	9.18	9.68	8.86	10.32
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98

Product fic	he 2								
Heat pump sp	ace heater	Model	HY/R290-70B/EN7BP	HY/R290-100B/EN7BP	HY/R290-120B/EN7BP	HY/R290-160B/EN7BP	HY/R290-100B/EN7BP-3	HY/R290-120B/EN7BP-3	HY/R290-160B/EN7BP-3
• • •	Tol (temperature operating limit)	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00
(E) Tol (temperature	Pdh (declared heating capacity)	[kW]	5.6	7.5	8.5	12.8	7.4	8.2	11.8
operating limit)	COPd (declared COP)	-	2.58	2.90	2.53	2.18	2.60	2.47	2.04
	WTOL (Heating water Operation Limit)	[°C]	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Tbiv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
(F) Tbivalent temperature	Pdh (declared heating capacity)	[kW]	6.2	8.1	10.6	13.0	8.0	10.8	13.0
	COPd (declared COP)	-	2.82	2.75	2.50	2.32	2.90	2.49	2.27
Supplementary capacity at P_design	Psup (@Tdesignh: –10°C)	[kW]	1.36	1.72	3.42	1.92	1.59	4.10	2.82
Part load conditions space he	ating average climate medium temperature	applicatio	n					-	-
	Pdh (declared heating capacity)	[kW]	6.0	8.1	10.4	12.2	8.1	10.3	12.2
(A) condition (-7°C) COPd (declared COP)		-	2.34	2.22	2.14	1.80	2.07	1.96	1.70
() (-)	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	4.0	5.1	6.5	7.4	5.2	6.4	7.4
(B) condition (2°C)	COPd (declared COP)	-	3.45	3.51	3.40	3.38	3.40	3.37	3.34
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	2.6	3.0	4.3	5.2	3.3	4.3	5.5
(C) condition (7°C)	COPd (declared COP)	-	4.38	4.54	4.49	4.73	5.04	4.54	4.77
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Pdh (declared heating capacity)	[kW]	1.8	2.6	2.6	4.4	3.3	2.8	4.5
(D) condition (12°C)	COPd (declared COP)	-	5.60	7.18	4.96	6.62	7.46	5.58	6.70
	Cdh(degradation coefficient)	-	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	Tol (temperature operating limit)	[°C]	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00	-10.00
(E) Tol (temperature	Pdh (declared heating capacity)	[kW]	5.1	7.9	8.8	12.1	7.4	8.9	12.0
operating limit)	COPd (declared COP)	-	1.93	1.78	1.90	1.58	1.92	1.83	1.55
	WTOL (Heating water Operation Limit)	[°C]	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Tbiv	[°C]	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00	-7.00
(F) Tbivalent temperature	Pdh (declared heating capacity)	[kW]	6.0	8.1	10.4	12.2	8.1	10.3	12.2
	COPd (declared COP)	-	2.34	2.22	2.14	1.80	2.07	1.96	1.70
Supplementary capacity at P_design	Psup (@Tdesignh: −10°C)	[kW]	1.62	1.24	2.97	1.69	1.68	2.76	1.84

Product fiche 3									
Heat pump space he	eater	Model	HY/R290-70B/EN7BP	HY/R290-100B/EN7BP	HY/R290-120B/EN7BP	HY/R290-160B/EN7BP	HY/R290-100B/EN7BP-3	HY/R290-120B/EN7BP-3	HY/R290-160B/EN7BP-3
Colder climate (Design temperature = -2	22°C)							1	
	Prated (declared heating capacity) @–22°C	[kW]	6.3	8.8	11.3	13.9	8.8	11.3	13.9
Space heating 35°C	Seasonal space heating efficiency (η)	[%]	155	152	151	148	152	151	148
	Annual energy consumption	[kWh]	3939	5579	7208	9097	5579	7208	9097
	Prated(declared heating capacity)@-22°C	[kW]	6.2	8.7	11.4	12.9	8.7	11.4	12.9
Space heating 55°C	Seasonal space heating efficiency (η)	[%]	119	119	120	117	119	120	117
	Annual energy consumption	[kWh]	5023	7011	9121	10636	7011	9121	10636
Part load conditions space heating colde	r climate low temperature application	-	-		-			-	
Pdh (declared heating capacity)@-22°C			4.38	5.6	7.8	7.5	5.6	7.8	7.5
(A) condition (-7°C) COPd (declared COP)		-	3.55	3.30	3.31	3.28	3.30	3.31	3.28
Cdh(degradation coefficient)		-	0.9	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)@-22°C		2.78	3.4	4.9	4.7	3.4	4.9	4.7
(B) condition (2 C)	COPd (declared COP)	-	4.60	4.31	4.88	4.32	4.31	4.88	4.32
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(0) and it on $(7^{\circ}0)$	Pdh (declared heating capacity)@–22°C	[kW]	1.8	2.2	3.2	3.3	2.2	3.2	3.3
(C) condition (7°C)	COPd (declared COP)	-	5.83	7.89	5.62	5.55	7.89	5.62	5.55
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)@–22°C	[kW]	1.73	2.5	3.5	3.7	2.5	3.5	3.7
(D) condition (12°C)	COPd (declared COP)	-	7.3	11.18	7.51	7.40	11.18	7.51	7.40
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Tol (temperature operating limit)	[°C]	-22.00	-22.00	-22.00	-22.00	-22.00	-22.00	-22.00
	Pdh (declared heating capacity)@–22°C	[kW]	4.25	6.0	8.4	10.1	6.0	8.4	10.1
(E) I of (temperature operating limit)	COPd (declared COP)	-	1.9	2.03	2.00	2.01	2.03	2.00	2.01
	WTOL (Heating water Operation Limit)	[°C]	60.00	60.00	60.00	60.00	60.00	60.00	60.00
	Tbiv	[°C]	-15.00	-15.00	-15.00	-15.00	-15.00	-15.00	-15.00
(F) Tbivalent temperature	Pdh (declared heating capacity)@–22°C	[kW]	5.15	7.1	9.2	11.4	7.1	9.2	11.4
	COPd (declared COP)	-	2.65	2.38	2.13	2.31	2.38	2.13	2.31
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	2.06	2.77	2.88	3.78	2.77	2.88	3.78

Product fiche 4									
Heat pump space he	eater	Model	HY/R290-70B/EN7BP	HY/R290-100B/EN7BP	HY/R290-120B/EN7BP	HY/R290-160B/EN7BP	HY/R290-100B/EN7BP-3	HY/R290-120B/EN7BP-3	HY/R290-160B/EN7BP-3
Part load conditions space heating colde	r climate medium temperature application	I							
	Pdh (declared heating capacity)	[kW]	4.4	5.5	7.6	7.5	5.5	7.6	7.5
(A) condition (-7°C)	COPd (declared COP)	-	2.79	2.58	2.66	2.51	2.58	2.66	2.51
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	2.7	3.5	4.3	4.6	3.5	4.3	4.6
(B) condition (2°C)	COPd (declared COP)	-	3.44	3.37	3.68	3.64	3.37	3.68	3.64
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh (declared heating capacity)	[kW]	1.7	2.2	3.0	2.9	2.2	3.0	2.9
(C) condition (7°C)	COPd (declared COP)	-	4.33	5.80	4.51	4.27	5.80	4.51	4.27
Cdh(degradation coefficient)		-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Pdh (declared heating capacity)		[kW]	1.7	2.5	3.4	4.1	2.5	3.4	4.1
(D) condition (12°C) COPd (declared COP)		-	6.03	7.59	6.34	7.09	7.59	6.34	7.09
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Tol (temperature operating limit)		-22.0	-22.0	-22.0	-22.00	-22.0	-22.00	-22.0
(E) Tol (temperature exercting limit)	Pdh (declared heating capacity)	[kW]	4.0	5.6	6.8	9.0	5.6	6.8	9.0
(E) Tor (temperature operating limit)	COPd (declared COP)	-	1.71	1.59	1.32	1.45	1.59	1.32	1.45
	WTOL (Heating water Operation Limit)	[°C]	60.00	60.00	60.00	60.00	60.00	60.00	60.00
	Tbiv	[°C]	-15.00	-15.00	-15.00	-15.00	-15.00	-15.00	-15.00
(F) Tbivalent temperature	Pdh (declared heating capacity)	[kW]	5.1	7.1	9.3	10.5	7.1	9.3	10.5
	COPd (declared COP)	-	2.11	1.96	1.86	1.65	1.96	1.86	1.65
Supplementary capacity at P_design	Psup (@Tdesignh: –22°C)	[kW]	2.27	3.02	4.59	3.94	3.02	4.59	3.94
Warmer climate (Design temperature = 2°	°C)								
	Prated (declared heating capacity) @ 2°C	[kW]	7.1	9.2	12.6	16.0	9.2	12.6	16.0
Space heating 35°C	Seasonalspaceheating efficiency(η)	[%]	196	214	239	196	214	239	196
	Annual energy consumption	[kWh]	1913	2274	2789	4299	2274	2789	4299
	Prated (declared heating capacity) @ 2°C	[kW]	7.1	9.0	12.7	15.9	9.0	12.7	15.9
Space heating 55°C	Seasonalspaceheating efficiency(η)	[%]	149	170	156	155	170	156	155
	Annual energy consumption	[kWh]	2513	2778	4250	5362	2778	4250	5362

Product fiche 5									
Heat pump space h	eater	Model	HY/R290-70B/EN7BP	HY/R290-100B/EN7BP	HY/R290-120B/EN7BP	HY/R290-160B/EN7BP	HY/R290-100B/EN7BP-3	HY/R290-120B/EN7BP-3	HY/R290-160B/EN7BP-3
Part load conditions space heating warme	er climate low temperature application		-	-	-	-	-	-	
	Pdh(declared heating capacity)	[kW]	4.4	5.5	11.7	9.6	5.5	11.7	9.6
(B) condition (2°C)	COPd (declared COP)	-	4.21	3.37	2.48	2.87	3.37	2.48	2.87
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh(declared heating capacity)	[kW]	4.6	5.9	8.1	10.3	5.9	8.1	10.3
C) condition (7°C)	COPd (declared COP)	-	4.93	5.02	5.32	4.88	5.02	5.32	4.88
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	Pdh(declared heating capacity)	[kW]	2.1	3.3	3.6	4.8	3.3	3.6	4.8
D) condition (12°C) COPd (declared COP)		-	7.06	9.17	8.42	7.43	9.17	8.42	7.43
Cdh(degradation coefficient)		-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Tol (temperature operating limit)		[°C]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	Pdh(declared heating capacity)	[kW]	4.4	5.5	11.7	9.6	5.5	11.7	9.6
(E) Toi (temperature operating limit)	COPd (declared COP)	-	4.21	3.37	2.48	2.87	3.37	2.48	2.87
	WTOL (Heating water Operation Limit)	[°C]	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Tbiv	[°C]	7.00	7.00	7.00	7.00	7.00	7.00	7.00
(F) Tbivalent temperature	Pdh(declared heating capacity)	[kW]	4.6	5.9	8.1	10.3	5.9	8.1	10.3
	COPd (declared COP)	-	4.93	5.02	5.32	4.88	5.02	5.32	4.88
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	2.77	3.74	0.89	6.39	0.00	0.89	0.00
Part load conditions space heating warm	ner climate medium temperature applicat	ion		•	•				•
	Pdh(declared heating capacity)	[kW]	4.1	5.9	10.9	9.7	5.9	10.9	9.7
(B) condition (2°C)	COPd (declared COP)	-	2.75	2.33	2.01	2.12	2.33	2.01	2.12
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(C) condition (7°C)	Pdh(declared heating capacity)	[kW]	4.6	5.8	8.2	10.2	5.8	8.2	10.2
	COPd (declared COP)	-	3.49	3.80	3.71	3.59	3.80	3.71	3.59
	Cdh(degradation coefficient)	-	0.90	0.90	0.90	0.90	0.90	0.90	0.90
(D) condition (12°C)	Pdh(declared heating capacity)	[kW]	2.3	3.2	3.5	4.7	3.2	3.5	4.7
	COPd (declared COP)	-	5.44	6.82	5.06	5.86	6.82	5.06	5.86
	Cdh(degradation coefficient)	-	3.03	3.11	1.77	6.17	3.11	1.77	6.17

Product fiche 6									
Heat pump space h	eater	Model	HY/R290-70B/EN7BP	HY/R290-100B/EN7BP	HY/R290-120B/EN7BP	HY/R290-160B/EN7BP	HY/R290-100B/EN7BP-3	HY/R290-120B/EN7BP-3	HY/R290-160B/EN7BP-
	Tol (temperature operating limit)	[.c]	2.00	2.00	2.00	2.00	2.00	2.00	2.00
(F) Tol (tomoscotics constituent)	Pdh (declared heating capacity)	[kW]	4.1	5.9	10.9	9.7	5.9	10.9	9.7
	COPd (declared COP)	ı	2.75	2.33	2.01	2.12	2.33	2.01	2.12
	WTOL (Heating water Operation Limit)	[.c]	75.00	75.00	75.00	75.00	75.00	75.00	75.00
	Tbiv	[.c]	7.00	7.00	7.00	7.00	7.00	7.00	7.00
(F) Tbivalent temperature	Pdh (declared heating capacity)	[kW]	4.6	5.8	8.2	8.1	5.8	8.1	10.2
	COPd (declared COP)		3.49	3.80	3.71	3.59	3.80	3.71	3.59
Supplementary capacity at P_design	Psup (@Tdesignh: 2°C)	[kW]	3.03	3.11	1.77	2.88	3.11	1.68	6.17
	Air-to-water heat pump	۲/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Water-to-water heat pump	Y/N	No	No	No	No	No	No	No
a contraction of the second	Brine-to-water heat pump	۸/N	No	No	No	No	No	No	No
	Low -temperature heat pump	Y/N	No	No	No	No	No	No	No
	Equipped with a supplementary heater	۸/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Heat pump combination heater	۸/N	No	No	No	No	No	No	No
Air to water unit	Rated airflow	[m³/h]	2650	3350	4050	4050	3350	4050	4050
Brine/water to water unit	Rated water/brine flow (outdoor H/E)		1	1	1	1	1	/	1
	Capacity control	•	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
	P(Power consumption Off mode)	[kW]	0.007	0.007	0.007	0.007	0.007	0.007	0.007
	P (Power consumption Thermostat off mode)	[kW]	0.021	0.025	0.027	0.027	0.025	0.027	0.027
Other	P(Power consumption Standby mode)	[kW]	0.007	0.007	0.007	0.007	0.007	0.007	0.007
	P(Power crankcase heater model)	[kW]	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Q(Daily electricity consumption)	[kWh]	1	1	/	/	/	/	1
	Q(Daily fuel consumption)	[kWh]	1	1	/	/	1	/	1

Technical parameters												
Model(s):				HY/R290-70B/EN7BP								
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/YES								
Heat pump combination heater:			NO									
Declared climate condition:			AVERAGE									
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	6.8	kW	Seasonal space heating energy efficiency	ηs	137	%					
Declared capacity for heating for part load at indoor temp temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	6.0	kW	Tj = -7℃	COPd	2.34	-					
Tj = 2℃	Pdh	4.0	kW	Tj = 2°C	COPd	3.45	-					
Tj = 7℃	Pdh	2.6	kW	Tj = 7°C	COPd	4.38	-					
Tj = 12℃	Pdh	1.8	kW	Tj = 12°C	COPd	5.60	-					
Tj = bivalent temperature	Pdh	6.0	kW	Tj = bivalent temperature	COPd	2.34	-					
Tj = operating limit	Pdh	5.1	kW	Tj = operating limit	COPd	1.93	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode	-	-		Supplementary heater		-						
Off mode	Poff	0.007	kW		P	1.4	1.107					
Standby mode	Psb	0.007	kW	Rated heat output (***)	Psup	1.4	KVV					
Thermostat-off mode	Pto	0.021	kW	Time of an annihilation of		El a atria al						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2650	m³/h					
Sound power level, indoors/outdoors	L _{WA}	62	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	^Q НЕ	4007	kWh	exchanger	-	-	m³/n					
For heat pump combination heater:												
Declared load profile		-		Water heating energyefficiency	٩ _{wh}	-	%					
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
					-	1						
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	I heat output Prated is equal to the design	n load for he	ating Pdes	ignh, and					

		Technic	cal pa	arameters									
Model(s):				HY/R290-70B/EN7BP									
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/YES									
Heat pump combination heater:			NO										
Declared climate condition:			COLDER										
Parameters are declared for medium-temperatu	re applicatio	n.	GOLDER										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit						
Rated heat output (*)	Prated	6.2	kW	Seasonal space heating energy efficiency	ηs	119	%						
Declared capacity for heating for part load at indoor temp temperature Ti	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Ti	o for part loa	d at indoor						
Ti = −7°C	Pdh	4.4	kW	Ti = −7°C	, COPd	2.79	-						
Тј = 2°С	Pdh	2.7	kW	Tj = 2°C	COPd	3.44	-						
Ti = 7°C	Pdh	1.7	kW	Ti = 7°C	COPd	4.33	-						
Tj = 12°C	Pdh	1.7	kW	., Tj = 12℃	COPd	6.03	-						
Tj = bivalent temperature	Pdh	5.1	kW	Tj = bivalent temperature	COPd	2.11	-						
Ti = operating limit	Pdh	4.0	kW	Tj = operating limit	COPd	1.71	-						
For air-to-water heat pumps: Tj = -15° C	Pdh	-	kW	For air-to-water heat pumps: $T_i = -15^{\circ}C$	COPd	-	-						
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C						
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-						
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C						
Power consumption in modes other than active mode		•		Supplementary heater									
Off mode	Poff	0.007	kW		5								
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	2.3	KVV						
Thermostat-off mode	Pto	0.021	kW	T									
Crankcase heater mode	Pck	0.000	kW	l ype of energy input		Electrical							
	-	-	·										
Other items													
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2650	m³/h						
Sound power level, indoors/outdoors	L _{WA}	62	dB	For water-or brine-to-water heat pumps:									
Annual energy consumption	Q _{HE}	5023	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h						
For heat nump combination heater													
Declared load profile		-		Water heating energy efficiency	η	-	%						
	Q		kWb		Q _{6.11}		kW/b						
Annual electricity consumption			kWh				GI						
		-	KIVII		A U	-							
Contact details													
	<u> </u>		41	line and the second	1		·						
(") For neat pump space heaters and heat pump	compinatio	n neaters,	ine rated	i neat output Prated is equal to the design	i load for he	eating Pdes	ignn, and						

	•	Technic	echnical parameters										
Model(s):				HY/R290-70B/EN7BP									
Air-to-water heat pump:				YES									
Water-to-water heat pump:		İ		NO									
Brine-to-water heat pump:		İ		NO									
Low-temperature heat pump:				NO									
Equipped with a supplementary heater:				NO/YES									
Heat pump combination heater:			NO										
Declared climate condition:			WARMER										
Parameters are declared for medium-temperatu	re applicatio	n.											
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit						
Rated heat output (*)	Prated	7.1	kW	Seasonal space heating energy efficiency	ηs	149	%						
Declared capacity for heating for part load at indoor temp temperature Tj	berature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor						
Tj = −7°C	Pdh	-	kW	Tj = −7°C	COPd	-	-						
Tj = 2°C	Pdh	4.1	kW	Tj = 2°C	COPd	2.75	-						
Tj = 7°C	Pdh	4.6	kW	Tj = 7℃	COPd	3.49	-						
Tj = 12°C	Pdh	2.3	kW	Tj = 12°C	COPd	5.44	-						
Tj = bivalent temperature	Pdh	4.6	kW	Tj = bivalent temperature	COPd	3.49	-						
Tj = operating limit	Pdh	4.1	kW	Tj = operating limit	COPd	2.75	-						
For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-						
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C						
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-						
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	75	°C						
Power consumption in modes other than active mode				Supplementary heater									
Off mode	Poff	0.007	kW	Potod boot output (**)	D	2.0	k\\/						
Standby mode	Psb	0.007	kW		Psup	5.0	KVV						
Thermostat-off mode	Pto	0.021	kW			Electrical							
Crankcase heater mode	Pck	0.000	kW	rype of energy input		Electrical							
Other items													
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2650	m³/h						
Sound power level, indoors/outdoors	L _{WA}	62	dB	For water-or brine-to-water heat pumps:			۰ <i>1</i>						
Annual energy consumption	Q _{HE}	2513	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h						
For heat pump combination heater:													
Declared load profile		-		Water heating energyefficiency	ⁿ wh	-	%						
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q fuel	-	kWh						
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ						
	•	-											
Contact details													
(*) For heat pump space heaters and heat pump	combinatio	n heaters.	the rated	I heat output Prated is equal to the design	load for he	ating Pdes	ionh. and						

	•	Technic	cal pa	arameters								
Model(s):			HY/R290-100B/EN7BP									
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/YES								
Heat pump combination heater:			NO									
Declared climate condition:			AVERAGE									
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	9.1	kW	Seasonal space heating energy efficiency	ηs	141	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = −7°C	Pdh	8.1	kW	Tj = −7°C	COPd	2.22	-					
Tj = 2℃	Pdh	5.1	kW	Tj = 2℃	COPd	3.51	-					
Tj = 7℃	Pdh	3.0	kW	Tj = 7℃	COPd	4.54	-					
Tj = 12℃	Pdh	2.6	kW	Tj = 12℃	COPd	7.18	-					
Tj = bivalent temperature	Pdh	8.1	kW	Tj = bivalent temperature	COPd	2.22	-					
Tj = operating limit	Pdh	7.9	kW	Tj = operating limit	COPd	1.78	-					
For air-to-water heat pumps: Tj = -15 $^\circ$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode	•	•		Supplementary heater		•	-					
Off mode	Poff	0.007	kW		P	1.6	1.1.1.1					
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	1.6	KVV					
Thermostat-off mode	Pto	0.025	kW	Time of an annula state		Els stris el	-					
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3350	m³/h					
Sound power level, indoors/outdoors	^L WA	64	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	^о не	5253	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:	1					-						
Declared load profile		-		Water heating energyefficiency	η _{wh}	-	%					
Daily electricity consumption	Q clec	-	kWh	Daily fuel consumption	Q fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	heat output Prated is equal to the desigr	n load for he	eating Pdes	ignh, and					

		Technic	cal pa	parameters								
Model(s):				HY/R290-100B/EN7BP								
Air-to-water heat pump:				YES								
Water-to-water heat pump:				NO								
Brine-to-water heat pump:		1		NO								
Low-temperature heat pump:				NO								
Equipped with a supplementary heater:				NO/YES								
Heat pump combination heater:			NO									
Declared climate condition:			COLDER									
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	8.7	kW	Seasonal space heating energy efficiency	ηs	119	%					
Declared capacity for heating for part load at indoor temp temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	5.5	kW	Tj = −7°C	COPd	2.58	-					
Tj = 2℃	Pdh	3.5	kW	Tj = 2℃	COPd	3.37	-					
Tj = 7°C	Pdh	2.2	kW	Tj = 7℃	COPd	5.80	-					
Tj = 12℃	Pdh	2.5	kW	Tj = 12℃	COPd	7.59	-					
Tj = bivalent temperature	Pdh	7.1	kW	Tj = bivalent temperature	COPd	1.96	-					
Tj = operating limit	Pdh	5.6	kW	Tj = operating limit	COPd	1.59	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other than active mode				Supplementary heater								
Off mode	Poff	0.007	kW	Deted best sutput (**)	P	2.0	L:\A/					
Standby mode	Psb	0.007	kW	Rated heat output (***)	Psup	3.0	KVV					
Thermostat-off mode	Pto	0.025	kW			Floatrical						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3350	m³/h					
Sound power level, indoors/outdoors	L _{WA}	64	dB	For water-or brine-to-water heat pumps:			. //					
Annual energy consumption	Q _{HE}	7011	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For neat pump combination heater:	1			.	n	1	<i>a:</i>					
Declared load profile		-		Water heating energyefficiency	' ^I wh	-	%					
Daily electricity consumption	Clec	-	kWh	Daily fuel consumption	fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
	1											
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	heat output Prated is equal to the desigr	load for he	eating Pdes	ignh, and					

	•	Technic	cal pa	arameters								
Model(s):			HY/R290-100B/EN7BP									
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/YES									
Heat pump combination heater:			NO									
Declared climate condition:			WARMER									
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	9.0	kW	Seasonal space heating energy efficiency	ηs	170	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	-	kW	Tj = −7°C	COPd	-	-					
Tj = 2℃	Pdh	5.9	kW	Tj = 2°C	COPd	2.33	-					
Tj = 7℃	Pdh	5.8	kW	Tj = 7℃	COPd	3.80	-					
Tj = 12℃	Pdh	3.2	kW	Tj = 12℃	COPd	6.82	-					
Tj = bivalent temperature	Pdh	5.8	kW	Tj = bivalent temperature	COPd	3.80	-					
Tj = operating limit	Pdh	5.9	kW	Tj = operating limit	COPd	2.33	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode	-	-		Supplementary heater			-					
Off mode	Poff	0.007	kW		D	2.1	1.147					
Standby mode	Psb	0.007	kW	Rated heat output (***)	Psup	3.1	KVV					
Thermostat-off mode	Pto	0.025	kW	Time of commission		Els stris el						
Crankcase heater mode	Pck	0.000	kW	l ype of energy input		Electrical						
	-	-										
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3350	m³/h					
Sound power level, indoors/outdoors	L _{WA}	64	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	о _{не}	2778	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:	1					1						
Declared load profile		-		Water heating energyefficiency	^η wh	-	%					
Daily electricity consumption	clec	-	kWh	Daily fuel consumption	Q fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	heat output Prated is equal to the design	load for he	ating Pdes	ignh, and					

	•	Technic	cal pa	arameters							
Model(s):			HY/R290-120B/EN7BP								
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/YES									
Heat pump combination heater:		NO									
Declared climate condition:		AVERAGE									
Parameters are declared for medium-temperatu	re applicatio	n.									
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	11.7	kW	Seasonal space heating energy efficiency	ηs	134	%				
Declared capacity for heating for part load at indoor tem tem	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor				
Tj = -7°C	Pdh	10.4	kW	Tj = −7°C	COPd	2.14	-				
Tj = 2℃	Pdh	6.5	kW	Tj = 2℃	COPd	3.40	-				
Tj = 7℃	Pdh	4.3	kW	Tj = 7℃	COPd	4.49	-				
Tj = 12°C	Pdh	2.6	kW	Tj = 12℃	COPd	4.96	-				
Tj = bivalent temperature	Pdh	10.4	kW	Tj = bivalent temperature	COPd	2.14	-				
Tj = operating limit	Pdh	8.8	kW	Tj = operating limit	COPd	1.90	-				
For air-to-water heat pumps: Tj = -15 $^\circ$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-				
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C				
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C				
Power consumption in modes other than active mode				Supplementary heater							
Off mode	Poff	0.007	kW	Poted heat output (**)	D	2.0	k\\/				
Standby mode	Psb	0.007	kW	Rated heat output ()	Psup	5.0	ĸvv				
Thermostat-off mode	Pto	0.027	kW			Floatrical					
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical					
Other items											
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h				
Sound power level, indoors/outdoors	L _{WA}	65	dB	For water-or brine-to-water heat pumps:							
Annual energy consumption	Q _{HE}	7082	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h				
For heat pump combination heater:											
Declared load profile		-		Water heating energyefficiency	٩ wh	-	%				
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q _{fuel}	-	kWh				
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ				
			<u> </u>	•		•					
Contact details											
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	I heat output Prated is equal to the desigr	load for he	eating Pdes	ignh, and				

		Technic	cal pa	arameters								
Model(s):				HY/R290-120B/EN7BP								
Air-to-water heat pump:			YES									
Water-to-water heat pump:		1	NO									
Brine-to-water heat pump:			NO									
Low-temperature heat pump:			NO									
Equipped with a supplementary heater:			NO/YES									
Heat pump combination heater:			NO									
Declared climate condition:			COLDER									
Parameters are declared for medium-temperatu	re applicatio	on.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	11.4	kW	Seasonal space heating energy efficiency	ηs	120	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	C and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	7.6	kW	Tj = -7℃	COPd	2.66	-					
Tj = 2℃	Pdh	4.3	kW	Tj = 2℃	COPd	3.68	-					
Tj = 7℃	Pdh	3.0	kW	Tj = 7℃	COPd	4.51	-					
Tj = 12℃	Pdh	3.4	kW	Tj = 12℃	COPd	6.34	-					
Tj = bivalent temperature	Pdh	9.3	kW	Tj = bivalent temperature	COPd	1.86	-					
Tj = operating limit	Pdh	6.8	kW	Tj = operating limit	COPd	1.32	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other than active mode	•			Supplementary heater		•						
Off mode	Poff	0.007	kW		5							
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	4.6	KVV					
Thermostat-off mode	Pto	0.027	kW	Type of operativity in ut		Flootrical						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items	-											
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	^L WA	65	dB	For water-or brine-to-water heat pumps:			2.0					
Annual energy consumption	^о не	9121	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:	1					1						
Declared load profile		-		Water heating energyefficiency	ⁿ wh	-	%					
Daily electricity consumption	Clec	-	kWh	Daily fuel consumption	fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
	1											
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	on heaters,	the rated	heat output Prated is equal to the desigr	n load for he	eating Pdes	ignh, and					

	•	Technic	cal pa	arameters							
Model(s):		Ι		HY/R290-120B/EN7BP							
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/YES								
Heat pump combination heater:				NO							
Declared climate condition:				WARMER							
Parameters are declared for medium-temperatur	re applicatio	n.									
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	ηs	156	%				
Declared capacity for heating for part load at indoor temp temperature Tj	berature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor				
Tj = −7°C	Pdh	-	kW	Tj = −7°C	COPd	-	-				
Tj = 2℃	Pdh	10.91	kW	Tj = 2℃	COPd	2.01	-				
Tj = 7℃	Pdh	8.15	kW	Tj = 7℃	COPd	3.71	-				
Tj = 12℃	Pdh	3.49	kW	Tj = 12℃	COPd	5.06	-				
Tj = bivalent temperature	Pdh	8.15	kW	Tj = bivalent temperature	COPd	3.71	-				
Tj = operating limit	Pdh	10.91	kW	Tj = operating limit	COPd	2.01	-				
For air-to-water heat pumps: Tj = -15 $^\circ$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-				
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C				
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	75	°C				
Power consumption in modes other than active mode				Supplementary heater							
Off mode	Poff	0.007	kW	Dated heat output (**)	D	1.0	L\\/				
Standby mode	Psb	0.007	kW		Psup	1.8	KVV				
Thermostat-off mode	Pto	0.027	kW			Electrical					
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Liectrical					
Other items											
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h				
Sound power level, indoors/outdoors	L _{WA}	65	dB	For water-or brine-to-water heat pumps:							
Annual energy consumption	Q _{HE}	4250	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h				
For heat pump combination heater:					n						
Declared load profile		-		Water heating energyefficiency	' ^l wh	-	%				
Daily electricity consumption	^U clec	-	kWh	Daily fuel consumption	^G fuel	-	kWh				
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ				
Contact details											
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	d heat output Prated is equal to the desigr	load for he	ating Pdes	ignh, and				

		Technic	cal pa	arameters								
Model(s):			HY/R290-160B/EN7BP									
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/YES									
Heat pump combination heater:		NO										
Declared climate condition:				AVERAGE								
Parameters are declared for medium-temperatu	ire applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	13.8	kW	Seasonal space heating energy efficiency	ηs	133	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	12.2	kW	Tj = -7℃	COPd	1.80	-					
Tj = 2℃	Pdh	7.4	kW	Tj = 2°C	COPd	3.38	-					
Ti = 7℃	Pdh	5.2	kW	Tj = 7°C	COPd	4.73	-					
Ti = 12℃	Pdh	4.4	kW	Ti = 12℃	COPd	6.62	-					
Tj = bivalent temperature	Pdh	12.2	kW	Tj = bivalent temperature	COPd	1.80	-					
Ti = operating limit	Pdh	12.1	kW	Tj = operating limit	COPd	1.58	-					
For air-to-water heat pumps: Tj = -15°C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15° C	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode	1			Supplementary heater		1	1					
Off mode	Poff	0.007	kW		_							
Standby mode	Psb	0.007	kW	Rated heat output (**)	Psup	1.7	kW					
Thermostat-off mode	Pto	0.027	kW				1					
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	L _{WA}	69	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	^о не	8343	kWh	exchanger	-	-	111-711					
For heat pump combination heater:												
Declared load profile		-		Water heating energyefficiency	٩ wh	-	%					
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters	the rated	heat output Prated is equal to the design	load for he	ating Pdes	ianh, and					
							, and					

($^{\circ}$) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the 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. ıg

		Technic	cal pa	arameters								
Model(s):				HY/R290-160B/EN7BP								
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/YES									
Heat pump combination heater:		NO										
Declared climate condition:			COLDER									
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	12.9	kW	Seasonal space heating energy efficiency	ηs	117	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7℃	Pdh	7.5	kW	Tj = -7℃	COPd	2.51	-					
Tj = 2℃	Pdh	4.6	kW	Tj = 2°C	COPd	3.64	-					
Tj = 7℃	Pdh	2.9	kW	Tj = 7℃	COPd	4.27	-					
Tj = 12℃	Pdh	4.1	kW	Tj = 12℃	COPd	7.09	-					
Tj = bivalent temperature	Pdh	10.5	kW	Tj = bivalent temperature	COPd	1.65	-					
Tj = operating limit	Pdh	9.0	kW	Tj = operating limit	COPd	1.45	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	COPd	-	-					
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other than active mode				Supplementary heater								
Off mode	Poff	0.007	kW	Poted heat output (**)	Paur	3.0	k\\/					
Standby mode	Psb	0.007	kW		r sup	3.9	KVV					
Thermostat-off mode	Pto	0.027	kW	Type of energy input		Electrical						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Liectrical						
Other items	-											
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	L _{WA}	69	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	^о не	10636	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat nump combination heater												
Declared load profile		-		Water heating energy efficiency	η _{uth}	_	%					
	Q		kWh		Q _{fuel}		kWh					
	AFC		kWh	Annual fuel consumption	AFC		GL					
		1			/	<u> </u>						
Contact details												
(*) For heat pump space heaters and heat pumr	combinatio	on heaters	the rated	heat output Prated is equal to the design	load for he	ating Pdes	ianh, and					
N /							.g, aa					

		Technic	cal pa	arameters								
Model(s):				HY/R290-160B/EN7BP								
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/YES									
Heat pump combination heater:			NO									
Declared climate condition:				WARMER								
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	15.9	kW	Seasonal space heating energy efficiency	ηs	155	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	-	kW	Tj = -7℃	COPd	-	-					
Tj = 2℃	Pdh	9.7	kW		COPd	2.12	-					
Tj = 7℃	Pdh	10.2	kW		COPd	3.59	-					
Tj = 12℃	Pdh	4.7	kW	Tj = 12℃	COPd	5.86	-					
Tj = bivalent temperature	Pdh	10.2	kW		COPd	3.59	-					
Ti = operating limit	Pdh	9.7	kW	Tj = operating limit	COPd	2.12	-					
For air-to-water heat pumps: Tj = -15° C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	COPd	-	-					
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	65	°C					
Power consumption in modes other than active mode	•	•		Supplementary heater		-						
Off mode	Poff	0.007	kW			2.0						
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	2.9	KVV					
Thermostat-off mode	Pto	0.027	kW	Time of an annula state		Els stris el						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	L _{WA}	69	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	о _{не}	5362	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:	1					1						
Declared load profile		-		Water heating energyefficiency	ⁿ wh	-	%					
Daily electricity consumption	u _{clec}	-	kWh	Daily fuel consumption	ufuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
	1											
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters.	the rated	heat output Prated is equal to the design	load for he	eating Pdes	ianh. and					

(*) 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.

		Technic	cal pa	arameters								
Model(s):				HY/R290-100B/EN7BP-3	3							
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/YES									
Heat pump combination heater:			NO									
Declared climate condition:				AVERAGE								
Parameters are declared for medium-temperature	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	9.1	kW	Seasonal space heating energy efficiency	ηs	140	%					
Declared capacity for heating for part load at indoor temp temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	8.1	kW	Tj = -7℃	COPd	2.07	-					
Tj = 2℃	Pdh	5.2	kW	Tj = 2℃	COPd	3.40	-					
Tj = 7℃	Pdh	3.3	kW	Tj = 7℃	COPd	5.04	-					
Tj = 12℃	Pdh	3.3	kW	Tj = 12℃	COPd	7.46	-					
Tj = bivalent temperature	Pdh	8.1	kW	Tj = bivalent temperature	COPd	2.07	-					
Tj = operating limit	Pdh	7.4	kW	Tj = operating limit	COPd	1.92	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode		•		Supplementary heater								
Off mode	Poff	0.007	kW									
Standby mode	Psb	0.007	kW	Rated heat output (**)	Psup	1.7	KVV					
Thermostat-off mode	Pto	0.025	kW									
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3350	m³/h					
Sound power level, indoors/outdoors	L _{WA}	64	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	Q _{HE}	5257	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:				· · · · · · · · · · · · · · · · · · ·		1						
Declared load profile		-		Water heating energyefficiency	^η wh	-	%					
Daily electricity consumption	Q clec	-	kWh	Daily fuel consumption	Q fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
	T											
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	d heat output Prated is equal to the desigr	load for he	eating Pdes	ignh, and					

	•	Technic	cal pa	arameters								
Model(s):			HY/R290-100B/EN7BP-3									
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/YES									
Heat pump combination heater:		NO										
Declared climate condition:				COLDER								
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	8.7	kW	Seasonal space heating energy efficiency	ηs	119	%					
Declared capacity for heating for part load at indoor temp temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	5.5	kW	Tj = -7℃	COPd	2.58	-					
Tj = 2℃	Pdh	3.5	kW	Tj = 2℃	COPd	3.37	-					
Tj = 7℃	Pdh	2.2	kW	Tj = 7℃	COPd	5.80	-					
Tj = 12℃	Pdh	2.5	kW	Tj = 12℃	COPd	7.59	-					
Tj = bivalent temperature	Pdh	7.1	kW	Tj = bivalent temperature	COPd	1.96	-					
Tj = operating limit	Pdh	5.6	kW	Tj = operating limit	COPd	1.59	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C					
Power consumption in modes other than active mode	-	-		Supplementary heater		-						
Off mode	Poff	0.007	kW		P	2.0	1.3.47					
Standby mode	Psb	0.007	kW	Rated heat output (***)	Psup	3.0	KVV					
Thermostat-off mode	Pto	0.025	kW	Time of an annulation of		El a atria al						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3350	m³/h					
Sound power level, indoors/outdoors	L _{WA}	64	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	Q _{HE}	7011	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:												
Declared load profile		-		Water heating energyefficiency	^ŋ wh	-	%					
Daily electricity consumption	Q clec	-	kWh	Daily fuel consumption	Q fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	heat output Prated is equal to the desigr	load for he	eating Pdes	ignh, and					

		Technic	cal pa	arameters							
Model(s):				HY/R290-100B/EN7BP-3	3						
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/YES								
Heat pump combination heater:				NO							
Declared climate condition:				WARMER							
Parameters are declared for medium-temperatu	re applicatio	n.									
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	9.0	kW	Seasonal space heating energy efficiency	ηs	170	%				
Declared capacity for heating for part load at indoor temp temperature Tj	erature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor				
Tj = -7°C	Pdh	-	kW	Tj = −7°C	COPd	-	-				
Tj = 2℃	Pdh	5.9	kW	Tj = 2℃	COPd	2.33	-				
Tj = 7°C	Pdh	5.8	kW	Tj = 7℃	COPd	3.80	-				
Tj = 12℃	Pdh	3.2	kW	Tj = 12℃	COPd	6.82	-				
Tj = bivalent temperature	Pdh	5.8	kW	Tj = bivalent temperature	COPd	3.80	-				
Tj = operating limit	Pdh	5.9	kW	Tj = operating limit	COPd	2.33	-				
For air-to-water heat pumps: Tj = -15 $^\circ$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-				
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C				
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	65	°C				
Power consumption in modes other than active mode	-	-		Supplementary heater							
Off mode	Poff	0.007	kW								
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	3.1	KVV				
Thermostat-off mode	Pto	0.025	kW			Floatrical					
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical					
Other items	-										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	3350	m³/h				
Sound power level, indoors/outdoors	L _{WA}	64	dB	For water-or brine-to-water heat pumps:			2.0				
Annual energy consumption	Q _{HE}	2778	kWh	Rated brine of water flow rate, outdoor heat exchanger	-	-	m³/n				
For heat pump combination heater:											
Declared load profile		-		Water heating energyefficiency	^η wh	-	%				
Daily electricity consumption	Clec	-	kWh	Daily fuel consumption	fuel	-	kWh				
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ				
	I										
Contact details											
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	I heat output Prated is equal to the desigr	load for he	eating Pdes	ignh, and				

		Technic	cal pa	arameters								
Model(s):				HY/R290-120B/EN7BP-3								
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/YES									
Heat pump combination heater:		NO										
Declared climate condition:			AVERAGE									
Parameters are declared for medium-temperatu	re applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	11.6	kW	Seasonal space heating energy efficiency	ηs	132	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy ratio	o for part loa	d at indoor					
Tj = -7°C	Pdh	10.3	kW	Tj = -7℃	COPd	1.96	-					
Tj = 2°C	Pdh	6.4	kW	Tj = 2℃	COPd	3.37	-					
Tj = 7℃	Pdh	4.3	kW	Tj = 7℃	COPd	4.54	-					
Tj = 12℃	Pdh	2.8	kW	Tj = 12℃	COPd	5.58	-					
Tj = bivalent temperature	Pdh	10.3	kW	Tj = bivalent temperature	COPd	1.96	-					
Tj = operating limit	Pdh	8.9	kW	Tj = operating limit	COPd	1.83	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode	-	-		Supplementary heater			-					
Off mode	Poff	0.007	kW									
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	2.8	KVV					
Thermostat-off mode	Pto	0.027	kW	Time of an annula state		Ele etcie el	-					
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	L _{WA}	65	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	Q _{HE}	7090	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:												
Declared load profile		-		Water heating energyefficiency	^ŋ wh	-	%					
Daily electricity consumption	Qclec	-	kWh	Daily fuel consumption	Q fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
	T											
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	heat output Prated is equal to the design	load for he	ating Pdes	ignh, and					

(*) For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh 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.

		Technic	cal pa	arameters						
Model(s):				HY/R290-120B/EN7BP-3	3					
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/YES							
Heat pump combination heater:				NO						
Declared climate condition:				COLDER						
Parameters are declared for medium-temperatu	ire applicatio	on.								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	11.4	kW	Seasonal space heating energy efficiency	ηs	120	%			
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor			
Tj = -7°C	Pdh	7.6	kW	Tj = -7°C	COPd	2.66	-			
Tj = 2°C	Pdh	4.3	kW	Tj = 2℃	COPd	3.68	-			
Tj = 7℃	Pdh	3.0	kW	Tj = 7℃	COPd	4.51	-			
Tj = 12°C	Pdh	3.4	kW	Tj = 12℃	COPd	6.34	-			
Tj = bivalent temperature	Pdh	9.3	kW	Tj = bivalent temperature	COPd	1.86	-			
Tj = operating limit	Pdh	6.8	kW	Tj = operating limit	COPd	1.32	-			
For air-to-water heat pumps: Tj = -15° C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15° C	COPd	-	-			
Bivalent temperature	Tbiv	-15	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C			
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-			
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes other than active mode	•	4		Supplementary heater						
Off mode	Poff	0.007	kW							
Standby mode	Psb	0.007	kW	Rated heat output (**)	Psup	4.6	KVV			
Thermostat-off mode	Pto	0.027	kW				•			
Crankcase heater mode	Pck	0.000	kW	l ype of energy input		Electrical				
	•	4								
Other items										
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h			
Sound power level, indoors/outdoors	L _{WA}	65	dB	For water-or brine-to-water heat pumps:						
Annual energy consumption	^Q НЕ	9121	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h			
For heat pump combination heater:	1					1				
Declared load profile	-	-		Water heating energyefficiency	ⁿ wh	-	%			
Daily electricity consumption	Clec	-	kWh	Daily fuel consumption	fuel	-	kWh			
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ			
Contact details										
(*) For heat pump space heaters and heat pum	p combinatio	on heaters,	the rated	d heat output Prated is equal to the desigr	load for he	eating Pdes	signh, and			

	•	Fechnic	cal pa	arameters								
Model(s):			HY/R290-120B/EN7BP-3									
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/YES								
Heat pump combination heater:			NO									
Declared climate condition:				WARMER								
Parameters are declared for medium-temperatur	e applicatio	n.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	12.7	kW	Seasonal space heating energy efficiency	ηs	156	%					
Declared capacity for heating for part load at indoor temp temperature Tj	erature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = −7°C	Pdh	-	kW	Tj = −7°C	COPd	-	-					
Tj = 2°C	Pdh	10.91	kW	Tj = 2°C	COPd	2.01	-					
Tj = 7°C	Pdh	8.15	kW	Tj = 7°C	COPd	3.71	-					
Tj = 12°C	Pdh	3.49	kW	Tj = 12°C	COPd	5.06	-					
Tj = bivalent temperature	Pdh	8.15	kW	Tj = bivalent temperature	COPd	3.71	-					
Tj = operating limit	Pdh	10.91	kW	Tj = operating limit	COPd	2.01	-					
For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	Pdh	-	kW For air-to-water heat pumps: Tj = -15° C		COPd	-	-					
Bivalent temperature	Tbiv	7	7 °C For air-to-water heat pumps: Operation limit temperature		TOL	2	°C					
Cycling interval capacity for heating	Pcych	-	- kW Cycling interval efficiency			-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode				Supplementary heater								
Off mode	Poff	0.007	kW	Poted heat output (**)	D	17	k\\/					
Standby mode	Psb	0.007	kW		r sup	1.7	K V V					
Thermostat-off mode	Pto	0.027	kW			Electrical						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items												
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	L _{WA}	65	dB	For water-or brine-to-water heat pumps:								
Annual energy consumption	Q _{HE}	4250	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h					
For heat pump combination heater:												
Declared load profile		-		Water heating energyefficiency	"wh	-	%					
Daily electricity consumption	Clec	-	kWh	Daily fuel consumption	fuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the ratec	heat output Prated is equal to the design	load for he	ating Pdes	ignh, and					

		Technic	cal pa	arameters							
Model(s):				HY/R290-160B/EN7BP-3	3						
Air-to-water heat pump:				YES							
Water-to-water heat pump:		1		NO							
Brine-to-water heat pump:				NO							
Low-temperature heat pump:		1		NO			-				
Equipped with a supplementary heater:		1		NO/YES							
Heat pump combination heater:		1	NO								
Declared climate condition:		1		AVERAGE			-				
Parameters are declared for medium-temperatur	re applicatio	n.					-				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit				
Rated heat output (*)	Prated	13.8	kW	Seasonal space heating energy efficiency	ηs	131	%				
Declared capacity for heating for part load at indoor temp temperature Tj	erature 20 °C	and outdoor	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor				
Tj = -7°C	Pdh	12.2	kW	Tj = -7℃	COPd	1.70	-				
Tj = 2℃	Pdh	7.4	kW	Tj = 2℃	COPd	3.34	-				
Tj = 7℃	Pdh	5.5	kW	Tj = 7℃	COPd	4.77	-				
Tj = 12℃	Pdh	4.5	kW	W Tj = 12℃ COPd 6.70							
Tj = bivalent temperature	Pdh	12.2	kW	Tj = bivalent temperature	COPd	1.70	-				
Tj = operating limit	Pdh	12.0	kW	Tj = operating limit	COPd	1.55	-				
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	kW For air-to-water heat pumps: Tj = -15℃		-	-				
Bivalent temperature	Tbiv	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C				
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-				
Degradation co-efficient (**)	Cdh	0.99		Heating water operating limit temperature	WTOL	75	°C				
Power consumption in modes other than active mode	<u>.</u>			Supplementary heater							
Off mode	Poff	0.007	kW		_						
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	1.8	KVV				
Thermostat-off mode	Pto	0.027	kW	T							
Crankcase heater mode	Pck	0.000	kW	l ype of energy input		Electrical					
	•	•		- ·							
Other items											
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h				
Sound power level, indoors/outdoors	L _{WA}	69	dB	For water-or brine-to-water heat pumps:			. 0				
Annual energy consumption	Q _{HE}	8507	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/h				
For heat pump combination heater:											
Declared load profile		-		Water heating energyefficiency	η _{wh}	-	%				
Daily electricity consumption	a clec - kWh Daily fuel consumption a kWh						kWh				
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ				
Contact details											
(*) For heat numb space beaters and best numb	combinatio	n heaters	the rates	heat output Prated is agual to the design	load for br	ating Ddoo	ianh and				
the rated heat output of a supplementary heater	Psup is equ	ial to the su	uppleme	ntary capacity for heating sup(Tj).		aniy Fues	igini, and				

(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

	•	Technic	cal pa	arameters					
Model(s):				HY/R290-160B/EN7BP-3	3				
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/YES					
Heat pump combination heater:				NO					
Declared climate condition:				COLDER					
Parameters are declared for medium-temperatu	re applicatio	on.							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	12.9	kW	Seasonal space heating energy efficiency	ηs	117	%		
Declared capacity for heating for part load at indoor temp temperature Tj	perature 20 °C	and outdoo	o for part loa	d at indoor					
Tj = -7°C	Pdh	7.5	kW	Tj = −7°C	COPd	2.51	-		
Tj = 2℃	Pdh	4.6	kW	Tj = 2°C	COPd	3.64	-		
Tj = 7℃	Pdh	2.9	kW	Tj = 7℃	COPd	4.27	-		
Tj = 12℃	Pdh	4.1	kW	Tj = 12°C	COPd	7.09	-		
Tj = bivalent temperature	Pdh	10.5	kW	Tj = bivalent temperature	COPd	1.65	-		
Tj = operating limit	Pdh	9.0	kW	Tj = operating limit	COPd	1.45	-		
For air-to-water heat pumps: Tj = -15 $^\circ\!\!\mathrm{C}$	Pdh	-	- kW For air-to-water heat pumps: Tj = -15°C		COPd	-	-		
Bivalent temperature	Tbiv	-15	-15 °C For air-to-water heat pumps: Operation limit temperature		TOL	-22	°C		
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-		
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	60	°C		
Power consumption in modes other than active mode				Supplementary heater					
Off mode	Poff	0.007	kW		D	2.0	1.1.47		
Standby mode	Psb	0.007	kW	Rated heat output (^^)	Psup	3.9	KVV		
Thermostat-off mode	Pto	0.027	kW	Tume of operativity		Flootrical			
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical			
Other items									
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h		
Sound power level, indoors/outdoors	L _{WA}	69	dB	For water-or brine-to-water heat pumps:					
Annual energy consumption	^о не	10636	kWh	Rated brine or water flow rate, outdoor heat exchanger	-	-	m³/n		
For heat pump combination heater:									
Declared load profile		-		Water heating energyefficiency	ⁿ wh	-	%		
Daily electricity consumption	Q _{clec}	-	kWh	Daily fuel consumption	Q fuel	-	kWh		
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ		
	•	•	· · ·	- ·		•			
Contact details									
(*) For heat pump space heaters and heat pump	combinatio	on heaters,	the rated	I heat output Prated is equal to the desigr	load for he	ating Pdes	ignh, and		

		Technic	cal pa	arameters								
Model(s):				HY/R290-160B/EN7BP-3	3							
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/YES									
Heat pump combination heater:				NO								
Declared climate condition:				WARMER								
Parameters are declared for medium-temperatu	re applicatio	on.										
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated heat output (*)	Prated	15.9	kW	Seasonal space heating energy efficiency	ηs	155	%					
Declared capacity for heating for part load at indoor tem temperature Tj	perature 20 °C	and outdoo	r	Declared coefficient of performance or prima temperature 20 °C and outdoor temperature	ry energy rati Tj	o for part loa	d at indoor					
Tj = -7°C	Pdh	-	kW	Tj = -7℃	COPd	-	-					
Tj = 2℃	Pdh	9.7	kW	Tj = 2℃	COPd	2.12	-					
Tj = 7℃	Pdh	10.2	kW	Tj = 7℃	COPd	3.59	-					
Tj = 12℃	Pdh	4.7	kW	Tj = 12℃	COPd	5.86	-					
Tj = bivalent temperature	Pdh	10.2	kW	Tj = bivalent temperature	COPd	3.59	-					
Tj = operating limit	Pdh	9.7	kW	Tj = operating limit	COPd	2.12	-					
For air-to-water heat pumps: Tj = -15 $^{\circ}$ C	Pdh	-	kW	For air-to-water heat pumps: Tj = -15 $^\circ\!\mathrm{C}$	COPd	-	-					
Bivalent temperature	Tbiv	7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C					
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-					
Degradation co-efficient (**)	Cdh	0.90		Heating water operating limit temperature	WTOL	75	°C					
Power consumption in modes other than active mode				Supplementary heater								
Off mode	Poff	0.007	kW	Deted heat output (**)	D	6.2	L\\/					
Standby mode	Psb	0.007	kW	Rated heat output ()	Psup	0.2	ĸvv					
Thermostat-off mode	Pto	0.027	kW	Type of energy input		Floatrical						
Crankcase heater mode	Pck	0.000	kW	Type of energy input		Electrical						
Other items	-					-						
Capacity control		variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4050	m³/h					
Sound power level, indoors/outdoors	^L WA	69	dB	For water-or brine-to-water heat pumps:			m3/b					
Annual energy consumption	Q _{HE}	5362	kWh	exchanger	-	-	m³/n					
For heat pump combination heater:												
Declared load profile		-		Water heating energyefficiency	ⁿ wh	-	%					
Daily electricity consumption	Clec	-	kWh	Daily fuel consumption	qfuel	-	kWh					
Annual electricity consumption	AEC	-	kWh	Annual fuel consumption	AFC	-	GJ					
Contact details												
(*) For heat pump space heaters and heat pump	combinatio	n heaters,	the rated	d heat output Prated is equal to the desigr	load for he	eating Pdes	ignh, and					

	In	forma	tion re	quireme	nts				
Model(s):			HY/R290-70B/EN7BP						
Outdoor side heat exchanger	of chiller:		Air to water						
Indoor side heat exchanger ch	niller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric moto	r					
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated cooling capacity	Prated,c	7.0	kW	Seasonal space cooling energy efficiency	η _{s,c}	287	%		
Declared cooling capacity for Tj	part load at g	iven outdoor to	emperature	Declared energy e temperature Tj	fficiency ratio fo	or part load at	given outdoor		
Tj=+35℃	P _{dc}	7.0	kW	Tj=+35℃	EER₫	4.19	-		
Tj=+30℃	P _{dc}	5.2	kW	Tj=+30℃	EER₫	6.06	-		
Tj=+25℃	P _{dc}	3.4	kW	Tj=+25℃	EER₫	8.88	-		
Tj=+20℃	P _{dc}	2.0	kW	Tj=+20℃	EERd	9.99	-		
Degradationco-efficient for chillers(*)	с _{dc}	0.9	-						
	Po	ower consump	tion in modes	other than "active mo	ode"				
Off mode	POFF	0.007	kW	Crankcase heater mode	Рск	0.000	kW		
Thermosat-off mode	Р _{ТО}	0.021	kW	Standby mode	PSB	0.007	kW		
	-		Other ite	ems			-		
Capacity control		variable		For air-to-water comfort chillers:		2650			
Soundpowerlevel, indoors /outdoors	^L WA	62	dB	air flow rate, outdoor measured	-	2650	m³/n		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water					
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	chillers:Ratedbrin eor water flow rate, outdoor side heat exchanger	-	-	m³/h		
Standard rating conditions use	ed	Low tempera	ture applicatio	on					
Contact details									
(*) If Cdc is not determined by	measuremer	t then the defa	ault degradatio	on coefficient of chille	rs shall be 0.9.				

	In	forma	tion re	equiremer	nts				
Model(s):			HY/R290-70	B/EN7BP					
Outdoor side heat exchanger	of chiller:		Air to water						
Indoor side heat exchanger cl	niller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric motor						
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated cooling capacity	P rated,c	7.0	kW	Seasonal space cooling energy efficiency	η s,c	209	%		
Declared cooling capacity for Tj	part load at g	jiven outdoor t	emperature	Declared energy e temperature Tj	fficiency ratio fo	or part load at	given outdoor		
Tj=+35℃	Pdc	7.0	kW	Tj=+35℃	EER₫	2.88	-		
Tj=+30℃	Pdc	5.2	kW	Tj=+30℃	EER₫	4.32	-		
Tj=+25℃	Pdc	3.3	kW	Tj=+25℃	EER₫	6.06	-		
Tj=+20℃	Pdc	1.7	kW	Tj=+20℃	EER₫	8.18	-		
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-						
	P	ower consump	tion in modes	other than "active mo	ode"				
Off mode	POFF	0.007	kW	Crankcase heater mode	Рск	0.000	kW		
Thermosat-off mode	Р _{ТО}	0.021	kW	Standby mode	PSB	0.007	kW		
			Other ite	ems					
Capacity control		variable		For air-to-water comfort chillers:			- 0		
Soundpowerlevel, indoors /outdoors	^L WA	62	dB	air flow rate, outdoor measured	-	2650	m³/h		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water					
GWP of the refrigerant	-	3	kg CO₂ eq (100years)	chillers:Ratedbrin eor water flow rate, outdoor side heat exchanger	-	-	m³/h		
Standard rating conditions use	ed	Medium temp	perature appli	cation					
Contact details									
(*) If Cdc is not determined by	measuremer	nt then the defa	ault degradati	on coefficient of chille	rs shall be 0.9.				

	In	forma	tion re	quiremer	nts				
Model(s):			HY/R290-100B/EN7BP						
Outdoor side heat exchanger	of chiller:		Air to water						
Indoor side heat exchanger cl	hiller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric motor						
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated cooling capacity	P rated,c	9.5	kW	Seasonal space cooling energy efficiency	η _{s,c}	244	%		
Declared cooling capacity for Tj	part load at g	iven outdoor t	emperature	Declared energy ef temperature Tj	ficiency ratio f	or part load at (given outdoor		
Tj=+35℃	Pdc	9.5	kW	Tj=+35℃	EER₫	3.99	-		
Tj=+30℃	P _{dc}	7.3	kW	Tj=+30℃	EER₫	5.31	-		
Tj=+25℃	Pdc	4.6	kW	Tj=+25℃	EER₫	6.99	-		
Tj=+20℃	P _{dc}	3.2	kW	Tj =+20 ℃	EERd	8.15	-		
Degradationco-efficient for chillers(*)	с _{dc}	0.9	-						
	P	ower consump	tion in modes	other than "active mo	de"	•			
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW		
Thermosat-off mode	Рто	0.025	kW	Standby mode	PSB	0.007	kW		
	•		Other ite	ems		•			
Capacity control		variable		For air-to-water comfort chillers:			- //		
Soundpowerlevel, indoors /outdoors	^L WA	64	dB	air flow rate, outdoor measured	-	3350	m³/h		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water					
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	chillers:Ratedbrin eor water flow rate, outdoor side heat exchanger	-	-	m³/h		
Standard rating conditions us	ed	Low tempera	ture applicatio	on					
Contact details									
(*) If Cdc is not determined by	measuremer	nt then the defa	ault degradatio	on coefficient of chiller	s shall be 0.9.				

	In	forma	tion re	quiremer	nts				
Model(s):			HY/R290-10	0B/EN7BP					
Outdoor side heat exchanger	of chiller:		Air to water						
Indoor side heat exchanger cl	niller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric motor						
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated cooling capacity	P _{rated,c}	9.5	kW	Seasonal space cooling energy efficiency	η _{s,c}	189	%		
Declared cooling capacity for Tj	part load at g	iven outdoor t	emperature	Declared energy et temperature Tj	fficiency ratio fo	or part load at	given outdoor		
Tj=+35℃	P _{dc}	9.5	kW	Tj=+35℃	EERd	2.55	-		
Tj=+30℃	P _{dc}	7.2	kW	Tj=+30℃	EER₫	3.74	-		
Tj=+25℃	P _{dc}	4.6	kW	Tj=+25℃	EER₫	5.31	-		
Tj=+20°C	Pdc	2.9	kW	Tj=+20℃	EERd	8.09	-		
		•							
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-						
	Po	ower consump	tion in modes	other than "active mo	de"	•			
Off mode	POFF	0.007	kW	Crankcase heater mode	Рск	0.000	kW		
Thermosat-off mode	Р _{ТО}	0.025	kW	Standby mode	PSB	0.007	kW		
	•	•	Other ite	ems		•			
Capacity control		variable		For air-to-water comfort chillers:					
Soundpowerlevel, indoors /outdoors	^L WA	64	dB	air flow rate, outdoor measured	-	3350	m³/h		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water					
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	chillers:Ratedbrin eor water flow rate, outdoor side heat exchanger	-	-	m³/h		
Standard rating conditions us	ed	Medium temp	perature applie	cation					
Contact details									
(*) If Cdc is not determined by	measuremer	nt then the defa	ault degradatio	on coefficient of chille	rs shall be 0.9.				

	In	forma	tion re	equiremer	nts					
Model(s):			HY/R290-12	0B/EN7BP						
Outdoor side heat exchanger	of chiller:		Air to water	Air to water						
Indoor side heat exchanger c	hiller:		Water							
Туре:			Compressor	driven vapour compre	ession					
Driver of compressor:			Electric moto	Dr						
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit			
Rated cooling capacity	Prated,c	12.3	kW	Seasonal space cooling energy efficiency	n _{s,c}	317	%			
Declared cooling capacity for Tj	part load at g	iven outdoor t	emperature	Declared energy et temperature Tj	fficiency ratio f	or part load at g	given outdoor			
Tj=+35℃	P _{dc}	12.3	kW	Tj=+35℃	EERd	4.58	-			
Tj=+30℃	P _{dc}	8.9	kW	Tj=+30℃	EERd	6.66	-			
Tj=+25℃	Pdc	5.7	kW	Tj=+25℃	EERd	9.21	-			
Tj=+20℃	Pdc	4.5	kW	Tj=+20℃	EERd	11.35	-			
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-							
	P	ower consump	otion in modes	other than "active mo	de"					
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW			
Thermosat-off mode	Рто	0.027	kW	Standby mode	PSB	0.007	kW			
			Other ite	ems						
Capacity control		variable		For air-to-water comfort chillers:		4050	m³/b			
Soundpowerlevel, indoors /outdoors	^L WA	65	dB	outdoor measured	-	4050	111711			
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water chillers:Ratedbrin						
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger	-	-	m³/n			
Standard rating conditions us	ed	Low tempera	ature application	on		-	-			
Contact details										
(*) If Cdc is not determined by	measuremer	t then the def	ault degradatio	on coefficient of chiller	rs shall be 0.9.					

	In	forma	tion re	quiremer	nts					
Model(s):			HY/R290-12	0B/EN7BP						
Outdoor side heat exchanger	of chiller:		Air to water							
Indoor side heat exchanger c	hiller:		Water	Water						
Туре:			Compressor	Compressor driven vapour compression						
Driver of compressor:			Electric motor							
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit			
Rated cooling capacity	P _{rated,c}	12.2	kW	Seasonal space cooling energy efficiency	η _{s,c}	209	%			
Declared cooling capacity for Tj	part load at g	jiven outdoor	temperature	Declared energy ef temperature Tj	ficiency ratio f	or part load at g	given outdoor			
Tj=+35℃	Pdc	12.2	kW	Tj=+35℃	EER₫	2.88	-			
Tj=+30℃	Pdc	9.0	kW	Tj=+30℃	EER₫	3.77	-			
Tj=+25℃	P _{dc}	6.0	kW	Tj=+25℃	EERd	6.05	-			
Tj=+20℃	Pdc	3.6	kW	Tj=+20℃	EERd	9.16	-			
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-							
	P	ower consum	otion in modes	other than "active mo	de"					
Off mode	POFF	0.007	kW	Crankcase heater mode	^Р ск	0.000	kW			
Thermosat-off mode	Рто	0.027	kW	Standby mode	PSB	0.007	kW			
	-	-	Other ite	ems		-				
Capacity control		variable		For air-to-water comfort chillers:						
Soundpowerlevel, indoors /outdoors	^L wa	65	dB	air flow rate, outdoor measured	-	4050	m³/h			
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water						
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger	-	-	m³/h			
Standard rating conditions us	ed	Medium tem	perature appli	cation			· · · · · · · · · · · · · · · · · · ·			
Contact details										
(*) If Cdc is not determined by	measuremer	nt then the def	ault degradatio	on coefficient of chiller	s shall be 0.9.					

	In	forma	tion re	quiremer	nts				
Model(s):			HY/R290-160	0B/EN7BP					
Outdoor side heat exchanger	of chiller:		Air to water						
Indoor side heat exchanger c	hiller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated cooling capacity	P _{rated,c}	16.1	kW	Seasonal space cooling energy efficiency	٩ _{s,c}	318	%		
Declared cooling capacity for Tj	part load at g	iven outdoor t	emperature	Declared energy ef temperature Tj	ficiency ratio fo	or part load at g	given outdoor		
Tj=+35℃	Pdc	16.1	kW	Tj=+35℃	EER₫	4.14	-		
Tj=+30℃	Pdc	11.8	kW	Tj=+30℃	EER₫	6.33	-		
Tj=+25℃	Pdc	7.6	kW	Tj=+25℃	EERd	9.59	-		
Tj=+20 ℃	Pdc	5.9	kW	Tj=+20℃	EERd	11.66	-		
Degradationco-efficient for	C C		1	1					
chillers(*)	dc	0.9	-						
	Po	ower consump	otion in modes	other than "active mo	de"				
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW		
Thermosat-off mode	Р _{ТО}	0.027	kW	Standby mode	PSB	0.007	kW		
			Other ite	ems					
Capacity control		variable		For air-to-water comfort chillers:					
Soundpowerlevel, indoors /outdoors	Lwa	69	dB	air flow rate, outdoor measured	-	4050	m³/h		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water chillers:Ratedbrin					
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger	-	-	m³/h		
Standard rating conditions us	ed	Low tempera	ture applicatio	on .		•			
Contact details									
(*) If Cdc is not determined by	measuremer	nt then the def	ault degradatio	on coefficient of chiller	s shall be 0.9.				

	In	forma	tion re	quireme	nts				
Model(s):			HY/R290-160)B/EN7BP					
Outdoor side heat exchanger	of chiller:		Air to water						
Indoor side heat exchanger cl	hiller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric motor						
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit		
Rated cooling capacity	P rated,c	16.1	kW	Seasonal space cooling energy efficiency	η s,c	207	%		
Declared cooling capacity for Tj	part load at g	iven outdoor to	emperature	Declared energy e temperature Tj	fficiency ratio fo	or part load at g	given outdoor		
Tj=+35℃	P _{dc}	16.1	kW	Tj=+35℃	EER₫	2.51	-		
Tj=+30℃	P _{dc}	12.3	kW	Tj=+30℃	EER₫	3.86	-		
Tj=+25℃	Pdc	7.6	kW	Tj=+25℃	EER₫	6.12	-		
Tj=+20℃	Pdc	4.2	kW	Tj=+20℃	EERd	8.88	-		
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-						
	Po	wer consump	tion in modes	other than "active mo	ode"				
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW		
Thermosat-off mode	^Р то	0.027	kW	Standby mode	PSB	0.007	kW		
			Other ite	ems					
Capacity control		variable		For air-to-water comfort chillers:			- 0		
Soundpowerlevel, indoors /outdoors	L _{WA}	69	dB	air flow rate, outdoor measured	-	4050	m³∕h		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water chillers:Ratedbrin	_	_	m³/h		
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger	-	-	111711		
Standard rating conditions us	ed	Medium temp	perature applic	cation					
Contact details									
(*) If Cdc is not determined by	measuremen	t then the defa	ault degradatic	on coefficient of chille	rs shall be 0.9.				

	In	forma	tion re	equiremer	nts					
Model(s): HY/F		HY/R290-10								
Outdoor side heat exchanger of chiller:			Air to water	Air to water						
Indoor side heat exchanger c	hiller:		Water							
Туре:			Compressor	driven vapour compre	ession					
Driver of compressor:			Electric moto	pr						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated cooling capacity	P _{rated,c}	9.5	kW Seasonal space cooling energy ⁿ s,c 244 %				%			
Declared cooling capacity for Tj	part load at g	jiven outdoor t	emperature	Declared energy ef temperature Tj	ficiency ratio fo	or part load at g	given outdoor			
Tj=+35℃	Pdc	9.5	kW	Tj=+35℃	EERd	3.99	-			
Tj=+30℃	P _{dc}	7.3	kW	Tj=+30℃	EERd	5.31	-			
Tj=+25℃	P _{dc}	4.6	kW	Tj=+25℃	EERd	6.99	-			
Tj=+20℃	Pdc	3.2	kW	Tj=+20℃	EERd	8.15	-			
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-							
	P	ower consump	otion in modes	other than "active mo	de"					
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW			
Thermosat-off mode	Р _{ТО}	0.025	kW	Standby mode	PSB	0.007	kW			
	•	•	Other ite	ems		•				
Capacity control		variable		For air-to-water comfort chillers:						
Soundpowerlevel, indoors /outdoors	Lwa	64	dB	air flow rate, outdoor measured	-	3350	m³/h			
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water	-					
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger		-	m³/h			
Standard rating conditions us	ed	Low tempera	ature application	on						
Contact details										
(*) If Cdc is not determined by	measuremer	nt then the def	ault degradatio	on coefficient of chiller	s shall be 0.9.					

	In	forma	tion re	quiremer	nts			
Model(s): HY/R2		HY/R290-100	 Y/R290-100B/EN7BP-3					
Outdoor side heat exchanger of chiller:		Air to water						
Indoor side heat exchanger ch	niller:		Water					
Туре:			Compressor	driven vapour compre	ession			
Driver of compressor:			Electric moto	r				
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated cooling capacity	P rated,c	9.5	kW cooling energy ⁿ s,c 189 %					
Declared cooling capacity for Tj	part load at g	jiven outdoor t	emperature	Declared energy et temperature Tj	fficiency ratio fo	or part load at	given outdoor	
Tj=+35℃	Pdc	9.5	kW Tj=+35℃		EER₫	2.55	-	
Tj=+30℃	Pdc	7.2	kW	Tj=+30℃	EER₫	3.74	-	
Tj=+25℃	Pdc	4.6	kW	Tj=+25℃	EER₫	5.31	-	
Tj=+20℃	Pdc	2.9	kW	Tj=+20℃	EERd	8.09	-	
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-					
	P	ower consump	otion in modes	other than "active mo	de"			
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW	
Thermosat-off mode	Р _{ТО}	0.025	kW	Standby mode	PSB	0.007	kW	
		•	Other ite	ems		•		
Capacity control		variable		For air-to-water comfort chillers:				
Soundpowerlevel, indoors /outdoors	Lwa	64	dB	air flow rate, outdoor measured	-	3350	m³/h	
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water chillers:Ratedbrin	-	_	m³/h	
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger			11711	
Standard rating conditions use	ed	Medium tem	perature applic	cation				
Contact details								
(*) If Cdc is not determined by	measuremer	nt then the defa	ault degradatio	on coefficient of chiller	rs shall be 0.9.			

	In	forma	tion re	quiremer	nts			
Model(s):		HY/R290-120B/EN7BP-3						
Outdoor side heat exchanger of chiller:		Air to water						
Indoor side heat exchanger cl	hiller:		Water					
Туре:			Compressor	driven vapour compre	ession			
Driver of compressor:			Electric moto	pr				
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated cooling capacity	P rated,c	12.3	kW Seasonal space cooling energy ⁿ s,c 317 %					
Declared cooling capacity for Tj	part load at g	jiven outdoor t	emperature	Declared energy et temperature Tj	fficiency ratio fo	or part load at g	given outdoor	
Tj=+35℃	P _{dc}	12.3	kW Tj=+35℃		EERd	4.58	-	
Tj=+30℃	Pdc	8.9	kW	Tj=+30℃	EERd	6.66	-	
Tj=+25℃	P _{dc}	5.7	kW	Tj=+25℃	EERd	9.21	-	
Tj=+20℃	Pdc	4.5	kW	Tj=+20℃	EERd	11.35	-	
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-					
	P	ower consump	tion in modes	other than "active mo	de"	•		
Off mode	POFF	0.007	kW	kW Crankcase heater mode		0.000	kW	
Thermosat-off mode	Р _{ТО}	0.027	kW	Standby mode	PSB	0.007	kW	
	•		Other ite	ems		•		
Capacity control		variable		For air-to-water comfort chillers:				
Soundpowerlevel, indoors /outdoors	^L WA	65	dB	air flow rate, outdoor measured	-	4050	m³/h	
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water	-		m³/h	
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger		-		
Standard rating conditions us	ed	Low tempera	ture applicatio	on				
Contact details								
(*) If Cdc is not determined by	measuremer	nt then the defa	ault degradatio	on coefficient of chiller	rs shall be 0.9.			

	In	forma	tion re	equireme	nts				
Model(s):		HY/R290-120B/EN7BP-3							
Outdoor side heat exchanger of chiller:			Air to water						
Indoor side heat exchanger cl	hiller:		Water						
Туре:			Compressor	driven vapour compre	ession				
Driver of compressor:			Electric moto	Dr					
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit		
Rated cooling capacity	P _{rated,c}	12.2	kW Seasonal space cooling energy ⁿ s,c 209				%		
Declared cooling capacity for Tj	part load at g	iven outdoor to	emperature	Declared energy e temperature Tj	fficiency ratio fo	or part load at g	given outdoor		
Tj=+35℃	Pdc	12.2	kW	Tj=+35℃	EER₫	2.88	-		
Tj=+30℃	P _{dc}	9.0	kW	Tj=+30℃	EER₫	3.77	-		
Tj=+25℃	Pdc	6.0	kW	Tj=+25℃	EER₫	6.05	-		
Tj=+20℃	Pdc	3.6	kW	Tj=+20℃	EERd	9.16	-		
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-						
	Po	ower consump	tion in modes	other than "active mo	ode"				
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW		
Thermosat-off mode	Р _{ТО}	0.027	kW	Standby mode	PSB	0.007	kW		
	-	-	Other ite	ems					
Capacity control		variable	For air-to-water comfort chillers:						
Soundpowerlevel, indoors /outdoors	L _{WA}	65	dB	air flow rate, outdoor measured	-	4050	m³/h		
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water chillers:Ratedbrin					
GWP of the refrigerant	-	3	kg CO₂ eq (100years)	kg CO _{2 eq} rate, outdoor side (100years) heat exchanger		-	man		
Standard rating conditions us	ed	Medium temp	perature appli	cation					
Contact details									
(*) If Cdc is not determined by	measuremen	t then the defa	ault degradatio	on coefficient of chille	rs shall be 0.9.				

	In	forma	tion re	quiremer	nts			
Model(s): HY/R2		HY/R290-16	0B/EN7BP-3					
Outdoor side heat exchanger of chiller:		Air to water						
Indoor side heat exchanger ch	niller:		Water					
Туре:			Compressor	driven vapour compre	ession			
Driver of compressor:	river of compressor:		Electric moto	pr				
ltem	Symbol	Value	Unit	ltem	Symbol	Value	Unit	
Rated cooling capacity	P rated,c	16.1	kW	kW cooling energy efficiency		318	%	
Declared cooling capacity for Tj	part load at g	iven outdoor t	emperature	Declared energy ef temperature Tj	ficiency ratio fo	or part load at g	given outdoor	
Tj=+35℃	Pdc	16.1	kW	Tj=+35℃	EERd	4.14	-	
Tj=+30℃	P _{dc}	11.8	kW	Tj=+30℃	EER₀	6.33	-	
Tj=+25℃	P _{dc}	7.6	kW	Tj=+25℃	EER₀	9.59	-	
Tj=+20℃	Pdc	5.9	kW	Tj=+20℃	EERd	11.66	-	
Degradationes officient for								
chillers(*)	C _{dc}	0.9	-					
	Po	ower consump	tion in modes	other than "active mo	de"			
Off mode	POFF	0.007	kW	Crankcase heater mode	Р _{СК}	0.000	kW	
Thermosat-off mode	Рто	0.027	kW	Standby mode	PSB	0.007	kW	
	•	•	Other ite	ems		•		
Capacity control		voriable		For air-to-water				
Soundpowerlevel, indoors	L _{WA}	69	dB	comfort chillers: air flow rate, outdoor	-	4050	m³/h	
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	measured For water / brine- to-water chillers:Ratedbrin eor water flow rate, outdoor side heat exchanger			m³/h	
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)		-	-		
Standard rating conditions use	ed	Low tempera	ture applicatio	on I			l	
Contact details								
(*) If Cdc is not determined by	measuremen	t then the defa	ault degradatio	on coefficient of chiller	s shall be 0.9.			

	In	forma	tion re	quiremer	nts			
Model(s):		HY/R290-160B/EN7BP-3						
Outdoor side heat exchanger of chiller:		Air to water						
Indoor side heat exchanger ch	niller:		Water					
Туре:			Compressor	driven vapour compre	ession			
Driver of compressor:			Electric moto	pr				
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated cooling capacity	P rated,c	16.1	kW Seasonal space cooling energy ⁿ _{s,c} 207				%	
Declared cooling capacity for Tj	part load at g	iven outdoor t	emperature	Declared energy et temperature Tj	fficiency ratio fo	or part load at g	given outdoor	
Tj=+35℃	P _{dc}	16.1	kW	Tj=+35℃	EER₫	2.51	-	
Tj=+30℃	Pdc	12.3	kW	Tj=+30℃	EER₫	3.86	-	
Tj=+25℃	Pdc	7.6	kW	Tj=+25℃	EERd	6.12	-	
Tj=+20℃	Pdc	4.2	kW	Tj=+20℃	EERd	8.88	-	
Degradationco-efficient for chillers(*)	C _{dc}	0.9	-					
	Po	ower consump	tion in modes	other than "active mo	ode"			
Off mode	POFF	0.007	kW Crankcase heater P _{CK} 0.000		0.000	kW		
Thermosat-off mode	Рто	0.027	kW	Standby mode	PSB	0.007	kW	
	•	•	Other ite	ems				
Capacity control		variable	For air-to-water comfort chillers:					
Soundpowerlevel, indoors /outdoors	L _{WA}	69	dB	air flow rate, outdoor measured	-	4050	m³/h	
Emissions of nitrogen oxides(ifapplicable)	NOx	-	mg/kWh input GCV	For water / brine- to-water chillers:Ratedbrin			m³/h	
GWP of the refrigerant	-	3	kg CO _{2 eq} (100years)	eor water flow rate, outdoor side heat exchanger	-	-		
Standard rating conditions use	ed	Medium temp	perature applie	cation				
Contact details								
(*) If Cdc is not determined by	measuremer	nt then the defa	ault degradatio	on coefficient of chiller	rs shall be 0.9.			

Condition (°C)	Model	Capacity (kW)	Power input(kW)	EER/COP
	HY/R290-70B/EN7BP	7.0	2.44	2.88
	HY/R290-100B/EN7BP	9.5	3.73	2.55
	HY/R290-120B/EN7BP	12.2	4.24	2.88
Ambient Temperature: 35/24 Water Temperature: 12/7	HY/R290-160B/EN7BP	16.1	6.41	2.51
	HY/R290-100B/EN7BP-3	9.5	3.73	2.55
	HY/R290-120B/EN7BP-3	12.2	4.24	2.88
	HY/R290-160B/EN7BP-3	16.1	6.41	2.51
	HY/R290-70B/EN7BP	7.0	1.67	4.19
	HY/R290-100B/EN7BP	9.5	2.38	3.99
	HY/R290-120B/EN7BP	12.3	2.68	4.58
Ambient Temperature: 35/24 Water Temperature: 23/18	HY/R290-160B/EN7BP	16.1	3.88	4.14
	HY/R290-100B/EN7BP-3	9.5	2.38	3.99
	HY/R290-120B/EN7BP-3	12.3	2.68	4.58
	HY/R290-160B/EN7BP-3	16.1	3.88	4.14
	HY/R290-70B/EN7BP	7.0	1.58	4.45
	HY/R290-100B/EN7BP	9.5	2.14	4.43
	HY/R290-120B/EN/BP	12.0	2.66	4.52
Ambient Temperature: 7/6 Water Temperature: 30/35	HY/R290-160B/EN7BP	15.4	3.67	4.20
	HY/R290-100B/EN7BP-3	9.5	2.14	4.43
	HY/R290-120B/EN7BP-3	12.0	2.66	4.52
	HY/R290-160B/EN/BP-3	15.4	3.67	4.20
	HY/R290-70B/EN7BP	7.0	2.40	2.93
	HY/R290-100B/EN7BP	9.0	3.16	2.86
	HY/R290-120B/EN7BP	11.2	3.82	2.92
Ampient Temperature: 2/1 Water Temperature: 30/35	HY/R290-160B/EN7BP	16.0	6.34	2.52
	HY/R290-100B/EN7BP-3	9.0	3.16	2.86
	HY/R290-120B/EN7BP-3	11.2	3.82	2.92
	HY/R290-160B/EN7BP-3	16.0	6.34	2.52
	HY/R290-70B/EN7BP	0.2	2.31	2.68
	HY/R290-100B/EN7BP	1.1	3.32	2.32
	HY/R290-120B/EN7BP	10.2	4.05	2.52
Ambient Temperature: -//-8 Water Temperature: 30/35	HY/R290-160B/EN7BP	13.0	6.17	2.11
	HY/R290-100B/EN7BP-3	1.1	3.32	2.32
	HY/R290-120B/EN7BP-3	10.2	4.05	2.52
	HY/R290-160B/EN7BP-3	13.0	6.17	2.11
	HY/R290-70B/EN7BP	7.0	2.11	3.32
	HY/R290-100B/EN7BP	9.5	2.80	3.31
Ambient Temperature: 7/6 Mater Temperature: 40/45	HY/R290-120B/EN7BP	12.0	3.59	3.33
Ambient remperature. 1/0 Water remperature. 40/43	HY/R290-160B/EN7BP	0.5	4.02	3.13
	HY/R290-100B/EN/BP-3	9.5	2.00	3.31
	HY/R290-120B/EN7BP-3	12.0	3.59	3.30
	HY/R290-160B/EN/BP-3	7.1	4.02	2.62
	HY/R290-70B/EN/BP	0.0	2.70	2.03
	HY/R290-100B/EN/BP	0.0	3.05	2.41
Ambient Temperature: 2/1 Water Temperature: 40/45	HY/R290-120B/EN7BP	15.5	4.39	2.45
Ambient remperature. 2/1 Water remperature. 40/43	HY/R290-160B/EN7BP	0.0	2.65	2.21
	HY/R290-100B/EN7BP-3	11.2	4.59	2.41
	HY/R290-120B/EN7BP-3	15.5	7.01	2.45
	HY/R290-160B/EN/BP-3	15.5	2.30	2.21
		7.6	2.39 3.60	2.51
		10.7	5.00	2.11
Ambient Temperature: -7/-8 Water Temperature: 40/45		13.1	6 79	1 02
ansion remperaturen-o water remperature. 40/45		76	3.60	2 11
	UV/2200 1200/EN700 2	10.7	5.00	2.11
		13.1	6 79	1 02
		7.0	2.64	2.65
		95	3.64	2.00
		12 0	4 38	2.01
Ambient Temperature: 7/6 Water Temperature: 47/55		15.0	5.0/	2.14
	HY/R290_100B/EN/7BD_2	9.6	3.66	2.55
	HV/R200_120R/EN7DF 2	12.0	4.38	2.01
	UV/D200 160D/EN7DD 2	16.7	6.58	2.14
	HV/R200_70R/EN/RP-3	69	2.89	2.55
	HY/R290_1008/EN/78P	8.3	4 15	2.00
	HY/R290_120B/EN/7BP	11.3	5 15	2.00
Ambient Temperature: 2/1 Water Temperature: 47/55	HY/R290_1608/EN/78P	12.8	7 17	1 79
Temperature. 2/1 Water remperature. 47/00	HV/R200_100B/EN7DP 2	83	4 15	2 00
		11 2	5 15	2.00
		11.3	J. 10 7 17	1 70
		5.0	2.62	1.19
		J.9 7 g	2.02 / 11	1.00
		1.0 Q Q	+. i i 5.25	1.90
Ambient Temperature: -7/-8 Water Temperature: 47/55		10.0	7 1/	1.00
ampione remperature//-o water remperature. 4//35		7 0	1.14 A 11	1.70
	HT/K290-100B/EN/BP-3	1.8	4.11	1.90
	HT/R290-120B/EN/BP-3	9.9	J.∠J	1.88
		12.1		

NOTE

NOTE

HYUNDAI

AIR CONDITIONING SYSTEMS AIR-TO-WATER HEAT PUMP - MONOBLOCK

Please check the applicable models, F-GAS and manufacturer information from the "Owner's Manual - Product Fiche" in the packaging of the outdoor unit. (European Union products only).

Imported/distributed by Metalica S.A Add: 12klm Old National Road Thessaloniki – Kilkis 57008 Ionia Greece Tel: +30 2310782962 Licensed by Hyundai Corporation Holdings, Korea



作图日期2024.04.22

902000100419

CPXXK-ZX-KS-W/N7BP-DPTY-01

本文件黑白印刷。

注意:本页不用印刷,仅对印刷颜色做要求。