

Nominal Capacity and Nominal Input					ZHBW128A0 [HM123M.U33]	ZHBW148A0 [HM143M.U33]	ZHBW168A0 [HM163M.U33]	
Condition	Outdoor Temp ( °C) DB / WB	Leaving Waer Temp ( °C)	-					
Capacity	Cooling	35 / 24	18	kW	12,00	14,00	16,00	
		35 / 24	7	kW	12,00	14,00	16,00	
	Heating	7 / 6	35	kW	12,00	14,00	16,00	
		7 / 6	55	kW	12,00	12,00	12,00	
		2 / 1	35	kW	11,00	12,00	13,80	
Power Input	Cooling	35 / 24	18	kW	2,61	3,26	4,00	
		35 / 24	7	kW	4,44	5,38	6,40	
	Heating	7 / 6	35	kW	2,61	3,11	3,64	
		7 / 6	55	kW	4,29	4,29	4,29	
		2 / 1	35	kW	3,13	3,42	3,94	
EER	Cooling	35 / 24	18	W/W	4,60	4,30	4,00	
		35 / 24	7	W/W	2,70	2,60	2,50	
COP	Heating	7 / 6	35	W/W	4,60	4,50	4,40	
		7 / 6	55	W/W	2,80	2,80	2,80	
		2 / 1	35	W/W	3,52	3,51	3,50	
SCOP (Low temp. Average)					4,45	4,45	4,45	
SCOP (High temp. Average)					3,18	3,18	3,18	
<b>Technical Specifications</b>					<b>ZHBW128A0 [HM123M.U33]</b>	<b>ZHBW148A0 [HM143M.U33]</b>	<b>ZHBW168A0 [HM163M.U33]</b>	
Water Side	Operation Range (Leaving Water Temperature)	Cooling	Min. ~ Max.	°C DB	5 ~ 27	5 ~ 27	5 ~ 27	
		Heating	Min. ~ Max.	°C DB	15 ~ 65	15 ~ 65	15 ~ 65	
		DHW	Min. ~ Max.	°C DB	15 ~ 80	15 ~ 80	15 ~ 80	
	Water Pump	Type			-	Canned type for hot water circulation	Canned type for hot water circulation	Canned type for hot water circulation
		Model			-	UPML GEO 20-105 CHBL	UPML GEO 20-105 CHBL	UPML GEO 20-105 CHBL
		Motor Type			-	BLDC	BLDC	BLDC
		Steps of Pumping speed			-	Variable speed 10% to 100%	Variable speed 10% to 100%	Variable speed 10% to 100%
		Power input	Min. / Rated	W		14 / 140	14 / 140	14 / 140
	Heat Exchanger	Water Flow Rate	Min. / Rated	l/min		5.0 / 46.0	5.0 / 46.0	5.0 / 46.0
		Type			-	Brazed Plate HEX	Brazed Plate HEX	Brazed Plate HEX
		Quantity			-	1	1	1
		Number of Plate			EA	76	76	76
		Water Volume			l	3	3	3
	Expansion Vessel	Water Flow Rate	Min. ~ Max.	l/min		13 ~ 70	13 ~ 70	13 ~ 70
		Volume	Max.	l		8	8	8
		Water pressure	Max.	bar		3	3	3
	Piping Connections	Water pressure	Pre-charged	bar		1	1	1
		Inlet			mm	Male PT 25(1)	Male PT 25(1)	Male PT 25(1)
	Strainer	Outlet			mm	Male PT 25(1)	Male PT 25(1)	Male PT 25(1)
		Mesh size			-	28 mesh	28 mesh	28 mesh
Safety Valve	Material			-	Stainless Steel	Stainless Steel	Stainless Steel	
	Pressure Limit	Upper Limit	bar		3,0	3,0	3,0	
Devices for Water Circuit			-		Relief valve / Flow Switch	Relief valve / Flow Switch	Relief valve / Flow Switch	
			-		Drain hose / Shut Off Valve	Drain hose / Shut Off Valve	Drain hose / Shut Off Valve	
			-		Pressure gauge / Air vent	Pressure gauge / Air vent	Pressure gauge / Air vent	
Refrigerant Side	Operation Range (Outdoor Temperature)	Cooling	Min. ~ Max.	°C DB	5 ~ 48	5 ~ 48	5 ~ 48	
		Heating	Min. ~ Max.	°C DB	-25 ~ 35	-25 ~ 35	-25 ~ 35	
	Compressor	Type			-	Hermetic Motor Compressor	Hermetic Motor Compressor	Hermetic Motor Compressor
		Model			Model × No.	RJB036MAA × 1	RJB036MAA × 1	RJB036MAA × 1
		Motor Type			-	Scroll	Scroll	Scroll
	Refrigerant	Displacement			cm3/Rev.	31,6	31,6	31,6
		Type			-	R32	R32	R32
		GWP (Global Warming Potential)			-	675,0	675,0	675,0
		Precharged Amount			g	2.400	2.400	2.400
		t-CO2 eq.			-	1,620	1,620	1,620
	Refrigerant Oil	Control			-	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
		Type			-	FW68D	FW68D	FW68D
		Charged Volume			cc × No.	1.000	1.000	1.000
	Fan	Type			-	Propeller	Propeller	Propeller
		Air Flow Rate	Rated	m3/min × No.		60.0 × 2	60.0 × 2	60.0 × 2
	Fan Motor	Type			-	BLDC	BLDC	BLDC
		Output			W × No.	124 × 2	124 × 2	124 × 2
	<b>Electrical Specifications</b>					<b>ZHBW128A0 [HM123M.U33]</b>	<b>ZHBW148A0 [HM143M.U33]</b>	<b>ZHBW168A0 [HM163M.U33]</b>
	Power Supply				V, Ø, Hz	380-415, 3, 50	380-415, 3, 50	380-415, 3, 50
	Circuit Breaker				A	25	25	25
Maximum Running Current	Cooling			A	18,0	18,0	18,0	
	Heating			A	18,0	18,0	18,0	
Wiring Connections	Power Supply Cable (included Earth)			No × mm2	5 × 4.0 (H07RN-F)	5 × 4.0 (H07RN-F)	5 × 4.0 (H07RN-F)	
<b>Technical Specifications</b>					<b>ZHBW128A0 [HM123M.U33]</b>	<b>ZHBW148A0 [HM143M.U33]</b>	<b>ZHBW168A0 [HM163M.U33]</b>	
Sound Power Level	Heating	Max.	dB(A)		63	63	63	
Dimensions	Unit	W × H × D	mm		1,239 × 1,450 × 390	1,239 × 1,450 × 390	1,239 × 1,450 × 390	
	Packed Unit	W × H × D	mm		1,364 × 1,602 × 461	1,364 × 1,602 × 461	1,364 × 1,602 × 461	
Weight	Unit			kg	130,0	130,0	130,0	
	Packed Unit			kg	145,0	145,0	145,0	