

Nominal Capacity and Nominal Input					ZHBW166A1 [HM161MR U34]
-	-	Outdoor Temp. (°C) DB / WB	Leaving Water Temp. (°C)	-	
Capacity	Cooling	35 / 24	18	kW	16.00
			7	kW	16.00
	Heating	7 / 6	35	kW	16.00
			55	kW	12.00
		2 / 1	35	kW	13.80
Power Input	Cooling	35 / 24	18	kW	4.00
			7	kW	5.16
	Heating	7 / 6	35	kW	3.40
			55	kW	4.29
		2 / 1	35	kW	3.83
EER	Cooling	35 / 24	18	W/W	4.00
			7	W/W	3.10
COP	Heating	7 / 6	35	W/W	4.70
			55	W/W	2.80
		2 / 1	35	W/W	3.60
SCOP (Low temp. Average Climate)*					4.53
SCOP ((Medium temp. Average Climate)*					3.45
Rated Water Flow Rate (at LWT 35 °C)				LPM	46.0

Electrical Specifications			ZHBW166A1 [HM161MR U34]
Power Supply		V, Ø, Hz	220-240, 1, 50
Peak Control Running Current		A	25.0
Rated Running Current	Cooling	A	17.7
	Heating	A	15.1
Circuit breaker		A	40
Wiring Connections	Power Supply Cable (included Earth, H07RN-F)	mm <sup>2</sup> x cores	6.0 x 3C

Technical Specifications				ZHBW166A1 [HM161MR U34]
Sound Power Level	Heating	Day Max.	dB(A)	66
		Rated	dB(A)	61
		Low noise	dB(A)	57
Dimensions	Unit	W × H × D	mm	1,239 × 1,380 × 330
	Packed Unit	W × H × D	mm	1,364 × 1,532 × 461
Weight	Unit		kg	118.6
	Packed Unit		kg	133.6
Exterior	Color		-	Warm Gray
	RAL Code		-	RAL 7044

Technical Specifications (Water side)				ZHBW126A1 [HM121MR U34]	ZHBW146A1 [HM141MR U34]	ZHBW166A1 [HM161MR U34]
Operation Range (Leaving Water Temp.)	Cooling	Min. ~ Max.	°C	5 ~ 27	5 ~ 27	5 ~ 27
	Heating	Min. ~ Max.	°C	15 ~ 65	15 ~ 65	15 ~ 65
	DHW *	Min. ~ Max.	°C	15 ~ 80	15 ~ 80	15 ~ 80
Water Pump	Type	Canned type for hot water circulation				
	Model	UPML 20-105 CHBL				
	Motor Type	BLDC				
	Steps of Pumping Performance	Variable speed 10% to 100%				
	Power input	Min. / Rated	W	3.5 / 140	3.5 / 140	3.5 / 140
	Water Flow Rate	Min. / Rated	ℓ/min	5.0 / 46.0	5.0 / 46.0	5.0 / 46.0
Heat Exchanger	Type	Brazen Plate HEX				
	Quantity	1				
	Number of Plate	EA 76				
	Water Volume	ℓ 1.0				
	Water Flow Rate	Min. / Rated	ℓ/min	13 ~ 70	13 ~ 70	13 ~ 70
Expansion Vessel	Volume	Max.	ℓ	8	8	8
	Water pressure	Max.	bar	3	3	3
		Pre-charged	bar	1	1	1
Flow Sensor	Model	SIKA VVXC9SNBUC00252P				
	Measuring range	Min. ~ Max.	ℓ/min	5~80	5~80	5~80
	Flow (Trigger point)	Min.	ℓ/min	15	15	15
Water Pressure sensor	Model	Sensata OFM(2HMP)				
	Measuring range	Min. ~ Max.	bar(G)	0~20	0~20	0~20
Piping Connections	Inlet	inch Male PT 1" according to ISO 7-1 (tapered pipe threads)				
	Outlet	inch Male PT 1" according to ISO 7-1 (tapered pipe threads)				
Strainer	Mesh size	- 30 mesh				
	Max. particle size	mm 0.6				
	Material	- Stainless Steel				
Relief Valve	Pressure Limit	Upper Limit	bar	3.0	3.0	3.0
Devices for Water Circuit				- Relief valve / Flow Sensor		
				- Drain hose		
				- Pressure Sensor / Air vent		

Technical Specifications (Refrigerant side)				ZHBW126A1 [HM121MR U34]	ZHBW146A1 [HM141MR U34]	ZHBW166A1 [HM161MR U34]
Operation Range (Outdoor Temp.)	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 Sealed Scroll				
	Model	Model × No.	RJB036MAA × 1			
	Motor Type	- BLDC				
	Displacement	cm <sup>3</sup> /Rev.	31.6	31.6	31.6	
Refrigerant	Type	- R32				
	GWP (Global Warming Potential)	- 675.0				
	Precharged Amount	g	2,000	2,000	2,000	
	t-CO2 eq.	-	1.350	1.350	1.350	
Refrigerant Oil	Control	- Electronic Expansion Valve				
	Type	- FW68D				
	Charged Volume	cc × No.	1,100	1,100	1,100	
Heat Exchanger	Type	- Fin & Tube				
	Quantity	2				
	Specification	Row	EA	32	32	32
		Column	EA	2	2	2
FPI		EA	18	18	18	
Fan	Type	- Propeller				
	Air Flow Rate	Rated	m <sup>3</sup> /min × No.	60.0 × 2	60.0 × 2	60.0 × 2
Fan Motor	Type	- BLDC				
	Output	W × No.	124 × 2	124 × 2	124 × 2	

### 3. Dimensions

◆ ZHBW126A1 [HM121MR U34] / ZHBW146A1 [HM141MR U34] / ZHBW166A1 [HM161MR U34] / ZHBW128A1 [HM123MR U34] / ZHBW148A1 [HM143MR U34] / ZHBW168A1 [HM163MR U34]

