

Full Series Modular Air-cooled Water Chiller (Heat Pump) Units

Total heat recovery model **EKAC230BR1SR**

Environment-friendly model R410A EKAC230BR1

Common model EKAC230B(R)



Specification Table (Total Heat Recovery Model)

Specifications (Partial) for Combined Units Taking EKAC230 as Basic Module

Model			EKAC230BR1SR	EKAC460BR1SR	EKAC690BR1SR	EKAC920BR1SR	EKAC1150BR1SR	EKAC1380BR1SR
Unit Combination		Master unit	EKAC230BR1SRM	EKAC230BR1SRM	EKAC230BR1SRM	EKAC230BR1SRM	EKAC230BR1SRM	EKAC230BR1SRM
		slave unit	_	EKAC230BR1SRS	2EKAC230BR1SRS	3EKAC230BR1SRS	4EKAC230BR1SRS	5EKAC230BR1SRS
Air conditioning mode	Nominal cooling capacity	kW	68	136	204	272	340	408
	Nominal heating capacity	kW	74	148	222	296	370	444
	Nominal cooling input power	kW	20.5	41	61.5	82	102.5	123
	Nominal heating input power	kW	21	42	63	84	105	126
	Water flow rate for nominal cooling capacity	m³/h	11.7	23.4	35.1	46.8	58.5	70.2
	Water flow rate for nominal heating capacity	m ³ /h	12.7	25.4	38.1	50.8	63.5	76.2
Hot water mode	Circular water flow	m³/h	14.1	28.2	42.3	56.4	70.5	84.6
	Nominal heating capacity	kW	82	164	246	328	410	492
	Total power of nominal heating capacity	kW	20.5	41	61.5	82	102.5	123
Cooling + Heat recovery mode	Nominal cooling capacity	kW	64.5	129	193.5	258	322.5	387
	Nominal heat ecovery capacity	kW	84	168	252	336	420	504
	Nominal input power	kW	19.5	39	58.5	78	97.5	117
	Water flow rate for hot water	m³/h	14.1	28.2	42.3	56.4	70.5	84.6
	Water flow rate for cooling capacity	m³/h	11.7	23.4	35.1	46.8	58.5	70.2
Power supply			380V/3N~/50Hz					
Flow control			Electronic expansion valve					
Refrigerant			R410A					
Heat exchanger type	Air conditioning side		braze-welded panel-type heat exchanger					
	Hot water side		High-efficiency bucket heat exchanger					
Compressor	Туре		Fully hermetic volute compressor					
	Lubricant		POE					
	Qty.	Set	2	4	6	8	10	12
Fan	Туре		High-efficiency low-noise axial fan					
	Qty.	Set	2	4	6	8	10	12
Water resistance	Air conditioning side	kPa	45	45	45	45	45	45
	Hot water side	kPa	75	75	75	75	75	75
Minimum diameter	Air conditioning side	inch	≤2	≤3	≤3	≤4	≤4	≤5
for water pipes	Hot water side	inch	≤2 1/2	≤3	≤4	≤4	≤5	≤5
Dimensions	LxH	mm	2012 x 1840					
	Width		880	2125	3370	4615	5860	7105
Power Cable specification	Section area of live line	mm ²	≤10	≤35	≤70	≤95	≤120	≤150
	Qty. of live lines		3					
	Section area of null line	mm²	≤4					
	Qty. of null lines		1					
	Section area of grounding line	mm ²	≤10	≤16	≤35	≤50	≤60	≤75
	Qty. of grounding lines					1		
Unit weight	Net weight	kg	600	1200	1800	2400	3000	3600
			620	1240	1860	2480	3100	

Note:

- Air conditioning mode: Test conditions for nominal cooling capacity: outlet water temperature 7°C; water flow: 0.172 m³/(h·kW); outdoor ambient temperature 35°C. Test conditions for nominal heating capacity: outlet water temperature: 45°C; water flow: 0.172 m³/(h·kW); temperature of outdoor dry/wet bulb: 7°C/6°C.
- Cooling + Heat recovery mode Test conditions for nominal cooling capacity: Hot water side: temperature of outlet water 45°C, water flow 0.215 m³/(h·kW); Air conditioning side: temperature of outlet water 7°C, water flow 0.172 m³/(h·kW);
- Hot water mode: Test conditions for nominal water flow: Ambient temp: 20/15°C; outlet water temp: 45°C; water flow of cooling + heat recovery mode.
- Water resistance at the air conditioner side includes water pressure drop of the unit and the attached Y-shaped filter.
- Water resistance at the hot water side includes water pressure drop of the unit and does not include the pressure drop at the Y-shaped filter and other components.
- Pipes outside the unit need to be customized and installed on site. The diameter of the pipes must meet design requirements. EK does not provide the pipes.
- Full heat recovery units and other units can be combined to form partial heat recovery modular system. Full heat recovery units can also be combined to form a total heat recovery system. Modular units can be formed using the 1~16 basic modules. The above table lists the parameters for common module combinations.
- For on-site electric wiring, see the name plate or installation menu of the unit.