

AIR-TO-WATER INVERTER HEAT PUMPS

RTC 6i, 13e

Single-phase air-to-water heat pumps permitting reversible cooling mode.

They extract heat from the ambient air even if the temperature drops to -25°C . The maximum flow temperature is 55°C .

The advantage of inverter heat pumps is the adjustment of the power to the actual requirements of the house with regard to space heating, DHW heating or space cooling through a suitable cooling system, e.g. ceiling, wall or floor heating / cooling, or ventilation. Thus, it is possible to operate the heat pump without a thermal store, unless it is required, for example, due to insufficient heat storage for defrosting or in combination with other renewable energy sources.

Another advantage is the low starting current, so that the heat pump can be installed even in areas where there is a connection problem (more remote areas, end-points in municipalities, etc.).

The single-phase design can serve well in combination with the use of solar energy to power a heat pump. The PV panels are able to operate the heat pump efficiently in summer for DHW heating or cooling. Thanks to their single-phase design and reasonable output from approx. 2-3 kWp they can be reasonably priced.

- Cooling mode possible
- SCOP up to 4.71
- Energy Efficiency Class W. Controller A+++
- To be combined w. single-phase PV systems



**Energy Efficiency Class for the set with controller under average climate conditions for low-temperature application*

TECHNICAL DATA

			RTC 6i	RTC 13e	
Heat output		[kW]	1-6	3-12	
Seasonal coefficient of performance SCOP		[-]	4.47	4.71	
Air/water temperature in $^{\circ}\text{C}$	A7/W35 low rpm	Heat output	[kW]	1.6	5.47
		Power input	[kW]	0.5	1.10
		COP	[-]	3.2	4.97
	A2/W35 medium rpm	Heat output	[kW]	3.15	5.96
		Power input	[kW]	0.75	1.46
		COP	[-]	4.2	4.08
	A-7/W35 high rpm	Heat output	[kW]	4.03	7.64
		Power input	[kW]	1.32	2.46
		COP	[-]	3.05	3.11
Dimensions and weight	Width	[mm]	924	1160	
	Height	[mm]	917	1024	
	Depth	[mm]	350	503	
	Weight	[kg]	76	98	
Sound power level		[dB(A)]	57	52	
Sound pressure level at distance of:	5 m	[dB(A)]	35	30	
	10 m	[dB(A)]	29	24	
Code		[-]	17735	19437	

RTC heat pumps are supplied without circulation pumps. They shall be installed exclusively either with CSE IR pump stations (see page 24) or with indoor units (see pages 18-23).