

IDROBLOC

Independent air conditioning system
With capacity from 3.5 to 6.7 kW

R407C



IDROBLOC®
IDROBLOC H®

IDROBLOC® is a low-consumption water chiller assembly designed for outdoor installation, sized to provide a water flow sufficient to run a relatively high number of terminal units. The thermal head of water to the evaporator can be contained to 2.5°C; in practical terms, this means that the system can run fancoils in all rooms, though only operating the ones located in rooms that are occupied. The user can select which of the fancoils installed are to be activated, simply by turning individual units on or off, without ever having to adjust the water distribution circuit.

IDROBLOC® may be installed on the ground or wall-mounted. With a size similar to that of regular outdoor water boilers, the IDROBLOC® is perfectly suited for new or restructured domestic applications.



IDROBLOC C®

Features

- Unit for roof-hanging or floor-standing installation with brackets supplied (only for IDROBLOC and IDROBLOC H)
- All versions are supplied for use with R407C
- Cooling only and heat pump version
- Compact dimensions
- Axial-blow propeller fan, and, in the IDROBLOC C version, centrifugal fan with duct-connectible air blow.
- Helical fan unit with axial delivery
- Evaporator dimensioned for working with $\Delta t = 2.5\text{ °C}$
- Antifreeze electric heater for the storage tank (RA accessory for IDROBLOC C)
- Hydraulic circuit complete with pump, expansion tank, storage tank, water filter, flow switch and safety valve
- Adjustment and control fully electronic with microprocessor card
- Pre-arrangement for coupling with boiler, with immediate seasonal switching
- Possibility of powering the fan coils of all the environments, keeping in operation only those relative to rooms that are occupied
- Electric power used within the standard domestic availability limits
- Extreme simplicity of installation

Accessories

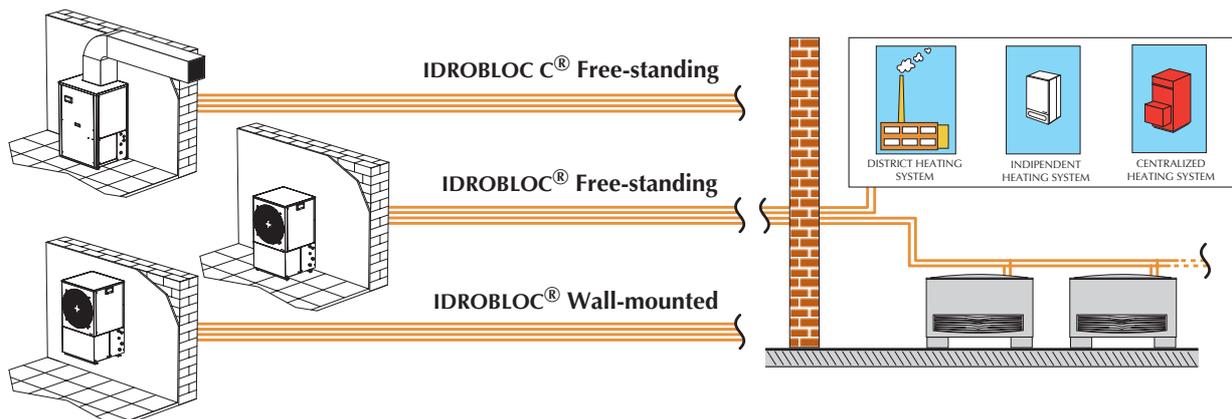
- **DCPX:** (only for IDROBLOC) Low temperature device for correct cooling mode operation with ambient temperatures from less than 20 °C down to - 10 °C.
- **PR1:** Simplified remote control panel. All main functions of the unit, alarms included, are possible. It can be used with a shielded cable at a distance of 30 m.
- **PRD:** 'Intelligent' remote control panel with the same functions as the on-board panel. It can be used with a shielded cable at a distance of 150 m.
- **RA:** (only for IDROBLOC C) Electric heater for storage tank. Prevents water from freezing in the storage tank during pauses in winter.
- **SDP:** Electronic card for using PR1 accessory up to a distance of 150 m.
- **VT:** Anti-vibration mounts.

Compatibility of accessories

IDROBLOC	DCPX 42	PR 1	PRD	VT 7	SDP	RA
3 - 5	✓	✓	✓	✓	✓	
3 H - 5 H		✓	✓	✓	✓	
5 C		✓	✓	✓	✓	✓

Installation

IDROBLOC® is quick and simple to install: simply position the unit, then make all water and electrical connections. The unit can be connected to any type of heating assembly: autonomous or centralised boiler, or district (remote) heating systems.



Technical data

IDROBLOC		3	3 H	5	5 H	5 C
Cooling capacity	kW	3.5	3.2	6.7	6.7	6,8
Total input power*	kW	1.5	1.5	2.8	2.9	3,25
Input current*	A	7.3	7.3	13.2	13.8	14,8
Evaporator water flow rate	l/h (nominal)	600	550	1150	1150	1170
	l/h (max.)	2000	2000	2000	2000	2000
Effective head	kPa (nominal)	69	69	58	58	58
	kPa (max.)	32	59	26	26	28
Heating capacity	kW	-	3.85	-	7.8	-
Total input power*	kW	-	1.45	-	3.1	-
Input current*	A	-	7.2	-	14.7	-
Evaporator water flow rate	l/h (nominal)	-	660	-	1340	-
	l/h (max.)	-	2000	-	2000	-
Effective head	kPa (nominal)	-	67	-	56	-
	kPa (max.)	-	55	-	26	-
♪ Sound pressure	dB (A)	33.5	33.5	39	39	42
Total air flow rate	m³/h	1200	1200	2300	2300	2500**
Compressors	n.	1	1	1	1	1
	type	Rotary	Rotary	Scroll	Scroll	Scroll
Peak current (compressor)	A	33.5	33.5	75	75	75
Storage tank capacity	l	25	25	25	25	17
Expansion tank capacity	l	1	1	2	2	2
Pump speed	n.	3	3	3	3	3
Water connections (female Gas)	ø (installation)	3/4"	3/4"	3/4"	3/4"	3/4"
	ø (heating)	1/2"	1/2"	1/2"	1/2"	1/2"

Power supply = 1~ 230V 50Hz.

Performance values refer to the following conditions:

♪ Sound pressure measured in free field conditions at distance of 10 m and direction factor = 2.

■ Cooling:

- water outlet temperature 7 °C;
- ambient air temperature 35 °C;
- Δt = 5 °C.

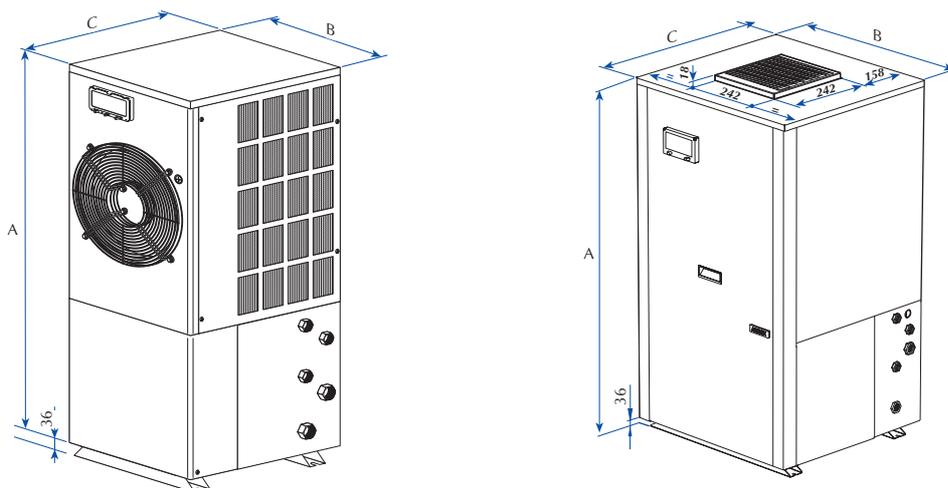
■ Heating:

- water outlet temperature 50 °C;
- ambient air temperature 7 °C D.B., 6 °C W.B.;
- Δt = 5 °C.

* = included the absorption of the circulation pump.

** = with a - 900mm duct, without protection grills.

Dimensions (mm)



IDROBLOC		3	3 H	5	5 H	5 C
Height	A	990	990	1063	1063	1118
Width	B	450	450	606	606	606
Depth	C	450	450	563	563	572
Weight	Kg	79	80	116	119	128

The technical data in this document are not binding.
Aermec S.p.A. reserves the right to make whatever modifications it deems necessary to improve the product at any time.

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