

# HUB RADIATOR FULL

Patented high-efficiency heat pump to direct exchange coolant / water to produce hot water and heating, for small users



## Technical and construction features

HUB RADIATOR FULL is an integrated heating Open Cup system. It consists of an external Moto-evaporating or recessed (Booster) in heat pump that insures both the heating and the production of hot water in a hygienically controlled mode through a separate exchanger immersed directly into the internal tank.

HR FULL can also operate without a pump, to be installed on classic radiators in a radius of about 1.5 meters from the tank.

HR FULL consists of three main elements: **A - B - C**

**A** Radiator technique water storage with direct exchangers copper refrigerant / water and solar thermal or biomass supplied as an option on request.

**B** Unit Moto-evaporating external (Booster) Low Power energy, extremely quiet complete with a special electronic controller that in the winter defrosting phase uses the accumulated heat of 58 ° C in the buffer hot tank to produce de-frost quickly and safely.

**C** Pump electronic inverters for high efficiency distribution of conventional terminals (radiators) or plant radiant floor (in this case can be requested as accessory a thermostatic mixing valve) or with

FJI fan (supplied as an accessory) installed on the wall, which ensure temperature uniformity, constant filtration air and low operating noise.

This new system makes it possible to avoid the installation of intermediate exchangers, pumps of the primary circuit, glycol antifreeze and securities required to avoid overheating and excessive pressure of the technique water



MADE IN ITALY  
PATENT



RENEWABLE  
ENERGY



TAXES  
REDUCING



ENERGY  
SAVING



HIGH  
EFFICIENCY



ECOLOGIC  
GAS



PHOTOVOLTAIC  
COMBINATION



DHW WITHOUT  
LEGIONELLA



HEATING 60 °C



COMPACT  
DIMENSION

Model	Code	€
HUB RADIATOR FULL 3.0/125	76112528	4.400,00
HUB RADIATOR FULL 3.0/300	76130028	4.800,00
HUB RADIATOR FULL 3.0/125 O.U.recessed	76112530	7.000,00
HUB RADIATOR FULL 3.0/300 O.U.recessed	76130030	7.400,00
HUB RADIATOR FULL 5.2/125	76112545	5.700,00
HUB RADIATOR FULL 5.2/300	76130045	6.100,00
HUB RADIATOR FULL 7.8/125	76112578	5.600,00
HUB RADIATOR FULL 7.8/300	76130078	6.000,00
HUB RADIATOR FULL 8.3/125	76112583	6.200,00
HUB RADIATOR FULL 8.3/300	76130083	6.600,00
HUB RADIATOR FULL 3.0+3.0/300 O.U.recessed	76330030	9.600,00
HUB RADIATOR FULL 7.8+7.8/300	76330078	7.900,00
Booster outdoor HR 3.0 heating (3.0 kW)	76010240	1.880,00
Booster outdoor HR 7.8 heating (7.8) kW	76010500	3.280,00

## Accessories HUB RADIATOR FULL



Circulator electronic inverter  
additional max 3.3 m<sup>3</sup>/h  
max head 6.2 m  
power consumption min. 4 W - 45 W max

35006001

214,00



Mixing valve fixed point  
for radiant systems at low temperature

75100003

200,00

# HUB RADIATOR FULL

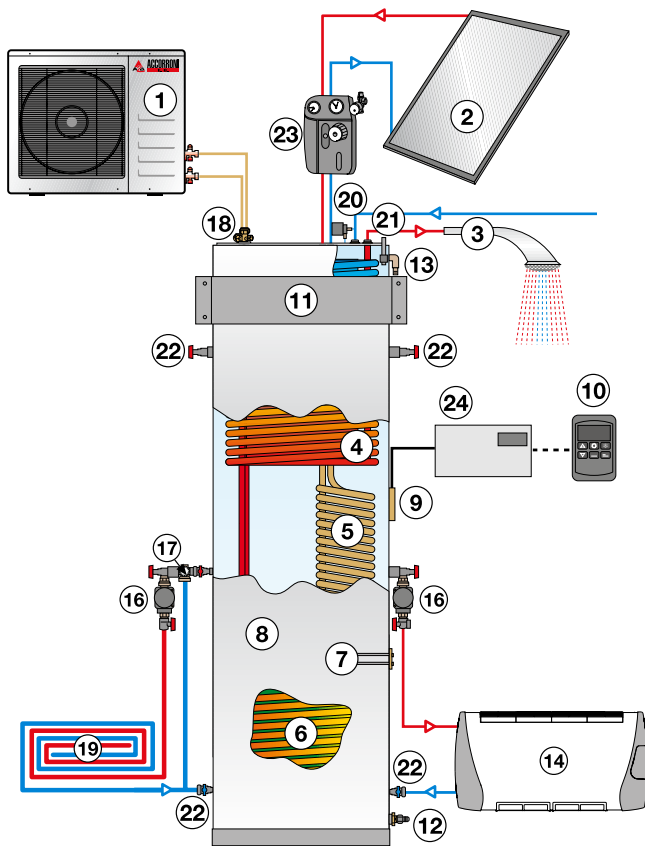
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Accessories HUB RADIATOR FULL			Code	€
	Solar heat exchanger heat or biomass	mod. 0,75 m <sup>2</sup>	75100002	374,00
		mod. 1,50 m <sup>2</sup>	75101002	644,00
	Control panel and remote control wall or recessed		75100005	228,00
	Anchor bracket for external Booster including rubber anti vibration	mod. Booster 3.0	37081060	78,00
		mod. Booster 5.2-7.8-8.3	37081061	114,00
	Option electrical resistance increased single-phase 230 V degree of protection IP 65	mod. 2000 W	75050103	152,00
		mod. 3000 W	75060300	290,00
	recessed template galvanized sheet with or without Closing panel Sheet galvanized	<b>basic models:</b>		
		mod. 125 I (H 242 - L 85 - P 25)	75000125	330,00
		mod. 300 I (H 242 - L 150 - P 25)	75000300	450,00
		<b>models with closing panels:</b>		
		mod. 125 I (H 242 - L 85 - P 25)	75102125	436,00
		mod. 300 I (H 242 - L 150 - P 25)	75102300	598,00
	recessed internal template galvanized sheet complete of Freestanding panel recessed wall fitting painted MDF powder	mod. 125 I (H 242 - L 85 - P 25)	75101125	460,00
		mod. 300 I (H 242 - L 150 - P 25)	75101300	620,00
	AIR BOX external cabinet sheet prepainted white RAL 7030	mod. 125 I (H 222 - L 85 - P 28,5)	75060200	570,00
		mod. 300 I (H 222 - L 150 - P 28,5)	75060201	1.040,00
	Wall thermostat to control circulating pump with digital display		75100007	120,00
	Support base with anti-vibration for external Booster		75100020	384,00
	Additional capacitor Booster for just hot		26505565	300,00
	Booster Kit muted		75100001	184,00
	Vibration damper kit for floor installation		75100021	62,00
	Kit timer		35639900	110,00

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## HUB Connection diagram RADIATOR FULL



### Legend:

- 1 Unit Moto-evaporating external (Booster) in heat pump
- 2 Solar thermal collector (accessory)
- 3 Supply hot water DHW
- 4 Exchanger quick DHW
- 5 Exchanger solar thermal or biomass (as accessory)
- 6 Exchanger refrigerant / water units outside Moto-evaporating
- 7 Electric heater from 1.5 kW (standard)
- 8 Radiator technique water storage Open Cup
- 9 Temperature sensor technical water
- 10 Remote control (accessory)
- 11 Anti-tip bracket
- 12 Drain tap
- 13 Drain "Overflow"
- 14 Example of connection with fan coil FIJI
- 15 Circulator system for radiant floor (as an accessory)
- 16 Pump for fan or radiator series
- 17 Fixed point mixing valve (accessory)
- 18 Taps refrigerant R410A for connecting external drive
- 19 Example of radiant floor heating EASY COMFORT
- 20 Solenoid filling
- 21 Level technical water
- 22 Taps 3/4"
- 23 Solar station lifting UNIT 2 (accessory)
- 24 Electrical control and monitoring

## Installation example HUB RADIATOR FULL with accessories to be quoted separately

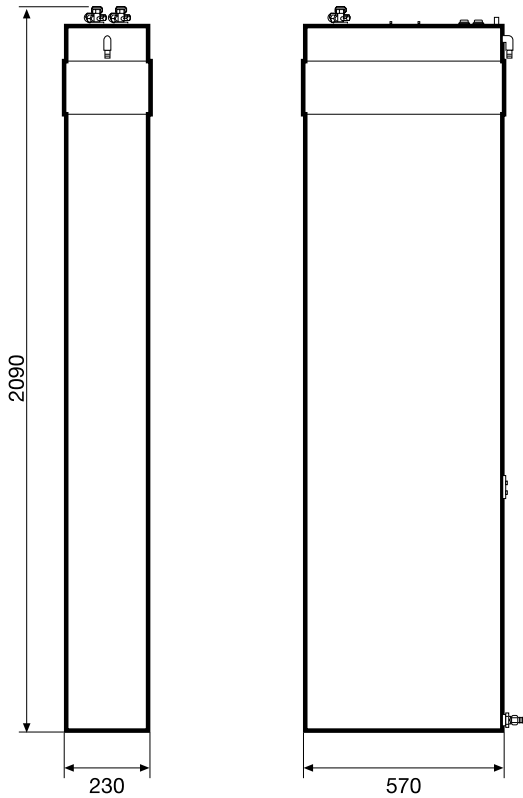
- 1) Form radiant copper EASY COMFORT wall, floor or ceiling
- 2) Heat exchanger solar thermal or biomass
- 3) Additional electric heater from 3.0 kW as an alternative to 1.5 kW as standard.
- 4) Additional circulation pump or pumping unit extra



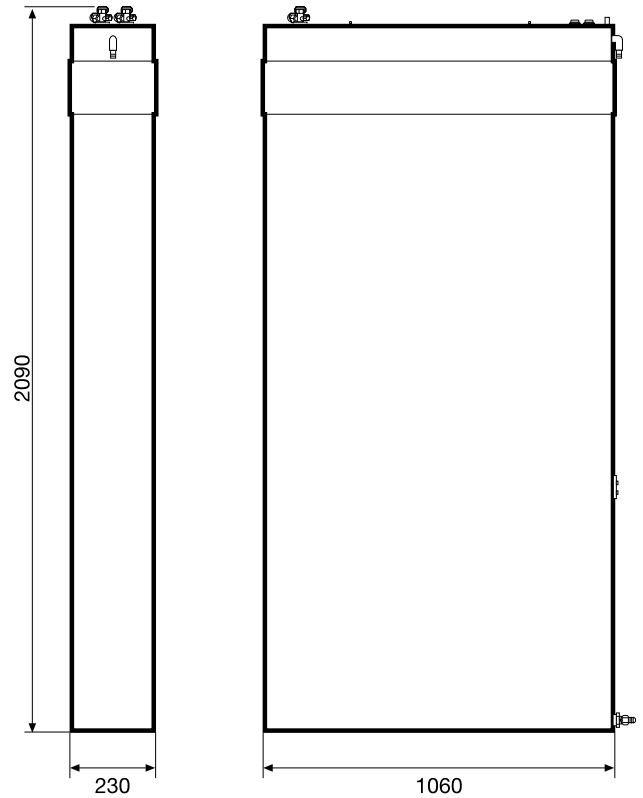
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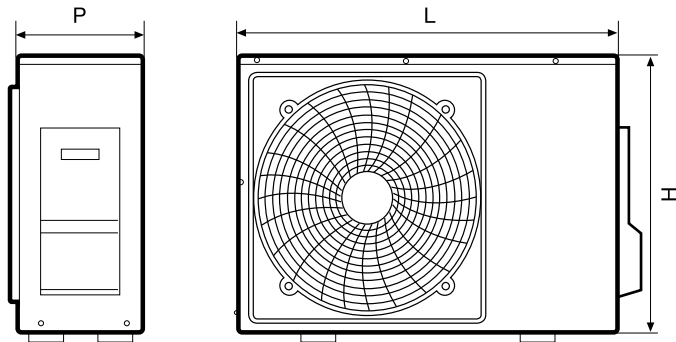
## Radiator size accumulator 125 liters



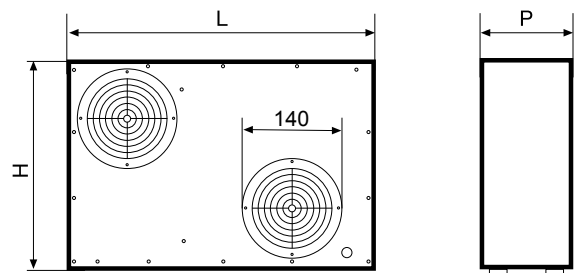
## Radiator size accumulator 300 liters



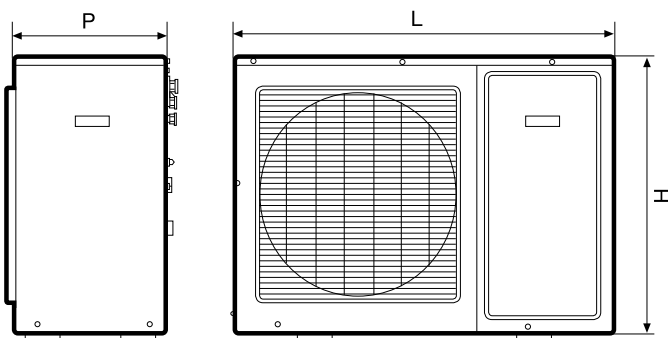
## Dimensions Booster external HR 5.2 - 8.3



## Dimensions Booster recessed HR 3.0



## Dimensions Booster external HR 5.2 - 8.3



Booster	L	H	P	kg
HR 3.0 external	700	552	256	33
HR 3.0 recessed	590	400	230	35
HR 5.2 external	950	690	360	55
HR 7.8 external	902	650	307	55
HR 8.3 external	925	872	368	76

Value in mm

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## Technical data table HUB RADIATOR FULL

DESCRIPTION	U.M.	HR 3.0	HR 5.2	HR 7.8	HR 8.3	HR 3.0 INC.	
Thermal power air 7 °C / water 35 °C	kW	3,11	5,51	8,12	9,12	3,12	
COP	W/W	4,12	4,11	4,10	4,10	3,95	
Thermal power air 2 °C / water 35 °C	kW	2,72	4,82	7,10	7,99	2,73	
COP	W/W	3,67	3,57	3,59	3,52	3,43	
Thermal power air 7 °C / water 45 °C	kW	2,97	5,25	7,75	8,68	2,98	
COP	W/W	3,16	3,07	3,07	3,01	2,95	
Thermal power air 2 °C / water 45 °C	kW	2,61	4,62	6,80	7,65	2,62	
COP	W/W	2,76	2,68	2,70	2,64	2,58	
Water temperature max	°C	58					
Fans	n.	1					
Air temperature	max	°C				45	42
	min	°C				- 12	-7
Compressor type		Rotary					
Refrigerant		R410A					
Power supply		230V/1/50Hz					
Current consumption in heating*	A	4,19	7,20	11,49	13,20	4,20	
Degree of protection		IP 24					
Water connection	"	3/4					
Hydraulic connection for filling	"	1/2					
Connecting domestic hot water	"	1/2					
Connection refrigerant	liquid	"	1/4	1/4	3/8	3/8	1/4
	gas	"	3/8	1/2	5/8	5/8	1/2
Maximum length of refrigerant pipes	m	15				10	
Sound pressure**	dB(A)	50	52	58	57	52	
Water content accumulation HR 125	l	125					
Water content accumulation HR 300	l	300					
Pressure drop DHW circuit with flow rate of 10 l/m	kPa	38					
Electric power system circulator	W	3 - 45					
Max capacity circulating pump	m <sup>3</sup> /h	3,3					
Max head circulating pump	m	6,2					
Water quantity in single drawdown to 40 °C - HR 125 l	l	69	71	73	73	69	
Water quantity in single drawdown to 40 °C - HR 300 l	l	130	130	132	133	130	
Recovery time from 10 to 58 °C - HR 125 l	h	2,62	1,78	1,02	0,96	2,62	
Recovery time from 10 to 58 °C - HR 300 l	h	5,21	3,51	2,06	1,98	5,18	
Recovery time from 46 to 58 °C - HR 125 l	h	0,90	0,61	0,34	0,31	0,88	
Recovery time from 46 to 58 °C - HR 300 l	h	1,81	1,23	0,72	0,65	1,81	
Weight shipping unit 125	kg	87					
Weight shipping unit 300	kg	122					
Operating weight unit 125	kg	202					
Operating weight unit 300	kg	422					

Data referred to the following operating conditions

\*Winter heating: external air temperature 7 °C db - 6 °C h.b., storage temperature 55 °C

\*\*Measured in free field conditions with a reference distance of one meter