HPE R410A 05÷16T INVERTER

Air / water inverter heat pumps with axial fans for Heating/ Cooling

Control box included

mod. HPE R410A 05/07

mod. HPE R410A 10/12/12T/14T/16T

ECOLOGIC GAS

RENEWABLE ENERGY

AXIAL FANS DC BRUSHLESS

HIGH EFFICIENCY

PLATE HEAT EXCHANGER AISI 316

OPTIMIZED HEAT EXCHANGE BATTERY

PUMP DC INVERTER

COMPRESSOR DC INVERTER

Technical and construction features

HPE R410A heat pumps allow you to cool and heat rooms using dedicated hydronic terminals such as fan coils or radiant floors. In heating, high efficiency tubular radiators can also be powered. An ultra compact design and the double control panel (on the machine or remote) make the HPE R410A a system that is easy to install and extremely functional.
The FULL DC INVERTER control of the compressor and the recent optimizations on the individual components guarantee maximum efficiency and great energy savings.
Main components:

- Integrated inverter control to optimize the modulation of the power supplied in cooling and heating
- Twin Rotary compressor with double balanced eccentric cam
- DC electric motor with high ventilation efficiency
- High air flow and reduced noise
- Plate heat exchangers and fficient and reliable in AISI stainless 316 and anti-corrosion paint steel
- Integrated frost protection system
- Optimized heat exchange coil, better passage of the air between the ranks
- High internal turbulence piping
- Anti-corrosion treatment
- Galvanized steel paneling with epoxy paint - Improved coolant flow control (500 pulses): increase in energy performance and reduction of defrost cycles
- Possibility of purchasing the remote control as an option
- Possibility of using the remote control via contacts clean: ON / OFF, Hot / Cold Inversion
- Ultra compact fully integrated hydronic module in the external monobloc unit which includes: plate exchanger, circulator, expansion tank, safety valve, flow switch, antifreeze protection.

Model	Thermal power kW	Cooling power kW	Code	€
HPE R410A 05	**6,2 (2,1÷7,0)**	**5,0 (1,9÷5,8)**	**37950901**	**4.130,00**
HPE R410A 07	**8,0 (2,3÷9,0)**	**7,0 (2,1÷7,8)**	**37960901**	**4.620,00**
HPE R410A 10	**11,0 (3,2÷12,0)**	**10,0 (3,0÷10,5)**	**37970901**	**6.765,00**
HPE R410A 12	**12,3 (3,3÷13,2)**	**11,2 (3,1÷12,0)**	**37980901**	**7.162,00**
HPE R410A 12T three-phase	**12,3 (3,3÷13,2)**	**11,2 (3,1÷12,0)**	**37980902**	**7.260,00**
HPE R410A 14T three-phase	**13,8 (3,5÷15,4)**	**12,5 (3,3÷14,0)**	**37990901**	**7.360,00**
HPE R410A 16T three-phase	**16,0 (3,7÷17,0)**	**14,5 (3,5÷15,5)**	**37990902**	**7.392,00**

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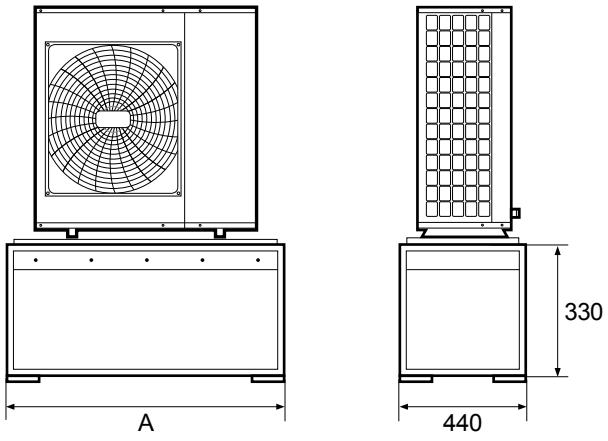
Accessories HPE 410A

			Code	€
	First Start		**37920020**	**340,00**
	Wired control for protocol MODBUS		**37990904**	**240,00**
	ATC Technical inertial tank for hot and chilled technical water	**mod. 55 l** **mod. 75 l** **mod. 90 l**	**37900828** **37900829** **37900830**	**650,00** **750,00** **850,00**
	230 V single-phase integrative electrical resistance degree of protection IP 65	**mod. 1500 W** **mod. 2000 W** **mod. 3000 W**	**75050102** **75050103** **75060300**	**150,00** **160,00** **170,00**
	8 liter supplementary system expansion vessel		**10726304**	**80,00**
	Antivibration floor base in vulcanized rubber (height from the ground 95 mm) with level and screws for Booster HR 3.0 and Booster HR 7.8 (pack of 2 pieces)		**75100018**	**94,00**

ATC INERTIAL TECHNICAL ACCUMULATION 55 - 75 - 95 LITERS

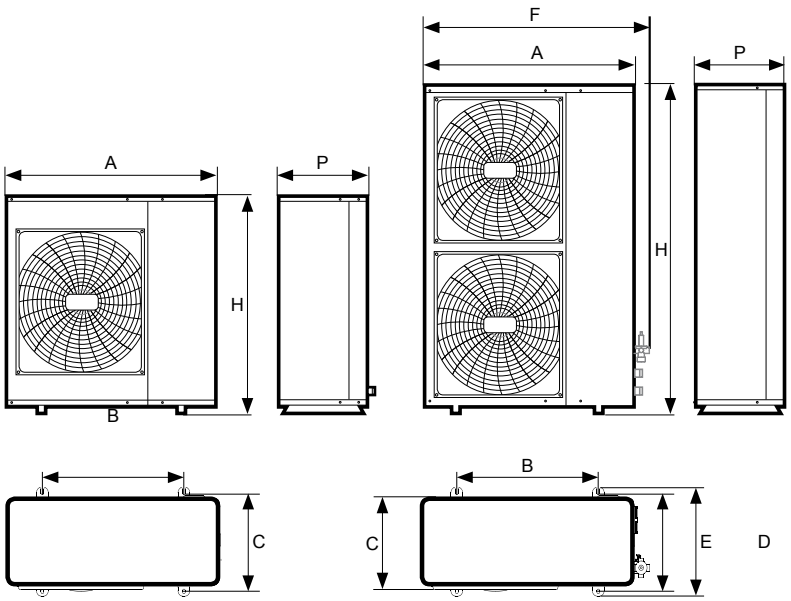


DESCRIPTION	U.M.	55	75	95
Useful capacity	l	55	75	95
Insulation thickness	mm		40	
Coefficient of thermal conductivity	W/mK		0,03	
Max working temp	°C		95	
Max working pressure	bar		6	
Max testing pressure	bar		3	
Empty weight	kg	60	65	69
Operating weight	kg	115	140	165

Overall length change (A) depending on the amount of technical water accumulation

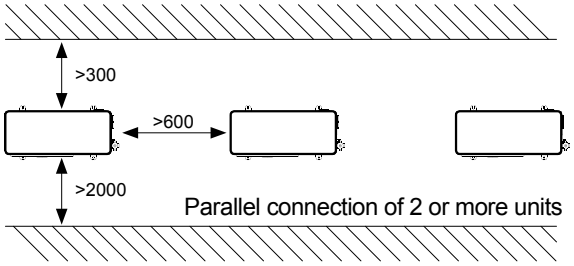
Dimensions quote A	mm
mod. 55 l	998
mod. 75 l	1328
mod. 95 l	1588

Dimensions HPE R410A



	05	07	10	12	12T	14T	16T
A	990	990	900	900	900	900	900
B	624	624	600	600	600	600	600
C	366	366	348	348	348	348	348
D	-	-	360	360	360	360	360
E	-	-	400	400	400	400	400
F	-	-	970	970	970	970	970
H	966	966	1327	1327	1327	1327	1327
P	354	354	320	320	320	320	320

Values in mm



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Technical data table HPE R410A 05÷16T

Model HPE 410A			U.M.	05	07	10	12	12T	14T	16T
Power supply				230V/1/50Hz				380V/3/50Hz		
Cooling	Nominal power	Air 35 °C - Water 18 °C	kW	5,6	8,0	10,6	12,0	12,2	14,2	15,6
	Electric absorption		kW	1,15	1,85	2,30	2,65	2,60	3,10	3,60
Cooling	Nominal power	Air35 °C - Water 7 °C	kW	5,0	7,0	10,0	11,2	11,2	12,5	14,5
	Assorbimento elettrico		kW	1,55	2,25	2,95	3,50	3,38	3,90	4,70
Heating	Nominal power	Air 7 °C - Water 35 °C	kW	6,2	8,6	11,5	13,0	13,0	15,1	16,5
	Electric absorption		kW	1,35	2,10	2,65	2,92	2,85	3,35	3,92
Heating	Nominal power	Air 7 °C - Water 45 °C	kW	6,2	8,0	11,0	12,3	12,3	13,8	16,0
	Electric absorption		kW	1,90	2,50	3,14	3,78	3,72	4,25	4,85
Range power	Heating	Air35 °C - Water 7 °C	kW	5,0 (1,9÷5,8)	7,0 (2,1÷7,8)	10,0 (2,9÷10,5)	11,2 (3,1÷12,0)	11,2 (3,1÷12,0)	12,5 (3,3÷14,0)	12,5 (3,3÷15,5)
	Cooling	Air 7 °C - Water 45 °C	kW	6,2 (2,1÷7,0)	8,0 (2,3÷9,0)	11,0 (3,2÷12,0)	12,3 (3,3÷13,2)	12,3 (3,3÷13,2)	13,8 (3,5÷15,4)	16,0 (3,7÷17,0)
EER		Air 35 °C - Water 18 °C	W/W	4,87	4,32	4,61	4,60	4,69	4,58	4,33
EER		Air 35 °C - Water 7 °C	W/W	3,23	3,11	3,39	3,20	3,31	3,21	3,09
SEER		Air35 °C - Water 18 °C	W/W	5,83	6,07	5,7	6,0	6,0	7,0	7,0
COP		Air 7 °C - Water35 °C	WW	4,59	4,10	4,34	4,45	4,56	4,51	4,21
COP		Air 7 °C - Water 45 °C	WW	3,26	3,20	3,50	3,25	3,31	3,25	3,30
SCOP		Air7 °C - Water35 °C	WW	3,55	3,46	3,34	3,46	3,66	3,78	3,39
Seasonal heating efficiency (ηs)				142,0%	138,4%	133,6%	138,4%	146,4%	151,2%	135,6%
Heating energy efficiency class				A+						
Air temperature	Cooiling		°C	-5 +46						
	Heating		°C	-15 +27						
Water temperature	Cooiling		°C	+4 +20						
	Heating		°C	+30 +55						
Maximum electrical absorption			kW	2,1	2,6	4,7	3,6	5,0	5,4	5,7
			A	11,4	13,7	25,0	19,1	8,9	9,6	10,1
Compressor	Type			Twin Rotary DC Inverter						
Refrigerant	Type			R410A						
	Charge		Kg	2,5		2,8			2,9	3,2
Expension valve			Tipo	Elettronica						
Air exchanger			Tipo	Tubo rame scanalato interamente alette alluminio idrofilico						
Pump	Flow		litri/h	240						
	Prevalence		m	5,5		8,5				
	Type			Elettronico						
	Brand			WILO						
Nominal water flow			m³/h	0,86	1,20	1,72	1,92		2,15	2,49
Water exchanger	Type			Piastre saldobrasate INOX						
	Volume		l	5,3		7,0	7,8			10,6
	Flow		litri/h	860	1200	1720	1920		2150	2490
	Load losses		kPa	15		18	18			19
Maximum / minimum water pressure			bar	5,0 / 1,5						
Expansion vessel	Volume		l	2		3				
	Pre-charge		bar	1						
Fan	Motor		Tipo	Brushless DC						
			n.	1		2				
	Flow		m³/h	5100		7000				
Sound pressure level(*)			dB(A)	58		59		62		
Sound power level			dB(A)	63	66	68			70	72
Electric cables	Power	n. x mm²		3 x 2,5		3 x 4		5 x 4		
	Signal (shielded)	n. x mm²		3 x 0,75						
Hydraulic connections				1”		1” 1/4				
Net / gross weight			Kg	81 / 91		110 / 121			111 / 122	

(*)Sound pressure measured at 1 m distance in open field.

Above data referred to the following standards: EN14511: 2013; EN14825: 2013; EN50564: 2011; EN12102: 2011; (EU) No: 811: 2013; (EU) No: 813: 2013; OJ 2014 / C 207/02: 2014.