prana

prana

i-NRG 0061m÷0061t

Reversible heat pump with inverter compressor, total heat recovery, air source for indoor/outdoor installation 16,3 kW

Unit description

The new i-NRG heat pump provides exactly the energy required by the system, perfectly following the real load of the building, thanks to the modulation of the DC inverter fan. One single unit for the highest efficiency, sustainability and huge savings, thanks to the advantages of DC frequency driven fans and circulating pumps (inverter) for both plant and domestic hot water circuits.
i-NRG is the new generation heat pump for all year round operation in any operating mode: single cycle (air conditioning, heating, domestic hot water) as well as combined cycle (domestic hot water together with heating or cooling). Domestic hot water production is guaranteed by the dedicated exchanger for heat recovery: total, for free domestic hot water production, or partial. Domestic hot water is stored in a properly dimensioned storage tank.
The unit can be installed indoor or outdoor, thus ensuring complete flexibility.

Commands

Electronic control provides great application flexibility. The remote keyboard kit wired indoor and outdoor temperature sensors allow dynamic control of delivery temperature water, optimizing comfort in the room and increasing the energy efficienty. The electronic board allows you to manage:
- a zone of direct heating for radiator, floor heating or fan coil
- zone with mix valve for floor heating
- outdoor temperature sensor for water plant side modular set point compensation
- electrical heating element for possible integration and anti-legionellosis cycle for cylinder
- boiler in substitution or in additional
- integration by solar panels with extension module (accessorie)
- several solutions through appropriate configurations of the controller and use of dedicated extension modules (accessories)

Versioni

i-NRG Reversible heat pump with inverter compressor, total heat recovery, air source for indoor/outdoor installation

Features

Structure and base in hot galvanised epoxy powder coated steel.
Stainless steel (AISI 316) with high efficiency and low pressure drop plate to plate exchanger (at the domestic hot water side). It is positioned next after the compressor, it ensures the domestic hot water production. That can work either in full recovery or in part, with the constant optimization of efficiency through logic advanced adjusting controller
Exchangers plant side plate of stainless steel AISI 316 with high efficiency and low pressure drop meets the supply of both hot or cold water for the facility, regardless of the domestic hot water
DC inverter scroll compressor with self-adaptive capacity adjustment.
Electronic expansion valve
Finned coils made with copper pipes and aluminium fins with large exchange surface area (100% fully quality tested)
Axial electric fan in continuous current housed in aerodynamic conveyor profile with safety grill.
Low external air temperature device: continuous fan speed regulation with pressure switch
The water circuit comes complete with:
- Variable flow circulating pump in continuous current, plant side.
- Variable flow circulating pump in continuous current, hot water side.
- Expansion tank 10 lt.
- Safety valve 3 bar.
- Differential pressure swich plant side.
- Pressure gauge.
- Manual filling assembly.

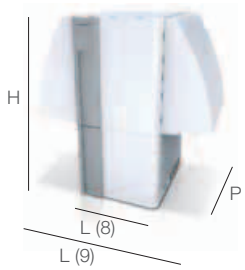
Main accessories

- Room terminal with temperature and humidity probe
- Expansion module for plant circuits additional
- Expansion module for solar thermal collector
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300, 500, 1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- Removable metal mesh water filter kit
- Kit acoustic insulationg casing kit (mandatory for outdoor installation)
- KIt rectangular air ducts and grills for indoor installation

i-NRG

Models			0061m	0061t
Nominal heating power	(1)	kW	16,3	16,3
Total absorbed power	(2)	kW	4,0	4,0
COP EN 14511			3,91	3,94
Cooling capacity	(3)	kW	19,6	19,7
Total absorbed power	(2)	kW	5,40	5,40
EER EN 14511			3,62	3,66
Total absorbed power	(4)	kW	17,9	18
Total absorbed power		kW	4,9	4,9
Recovery heating capacity		kW	22,6	22,6
Compressor type			SCROLL INVERTER DC	SCROLL INVERTER DC
N. Compressors		N.	1	1
Refrigerant			R410A	R410A
N. fans		N.	1	1
Plant side pump type	(5)		i-Ci	i-Ci
Recovery side pump type	(5)		i-Ci	i-Ci
Electrical power supply		V-Ph~Hz	230-1~50	400-3N~50
Sound power	(6)	dB(A)	68	68
Sound pressure	(7)	dB(A)	52	52
DIMENSION				
L	(8)	mm	750	750
L	(9)	mm	1535	1535
H		mm	1600	1600
P		mm	1050	1050
Operational weight		kg	260	260

NOTE
(1) Water in-out 30/35°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(2) Total input is obtained from compressor input and fan input.
(3) Water in-out 23/18°C (plant side), outdoor air temperature 35°C b.s.
(4) Water in-out 23/18°C (plant side), water in-out 45/50°C (total recovery side)
(5) i-Ci= Circolatore inverter corrente continua
(6) Sound power level according to ISO 9614 and Eurovent 8/1
(7) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.
(8) Indoor installation
(9) Outdoor installation



AWR DHW 0021m÷0101ts

Reversible heat pump, total heat recovery, air source for outdoor installation 7,7 ÷ 33,5 kW

Unit description

PRANA DHW is the heat pump new generation able to operate throughout the year in any operating mode: either a single cycle (cooling, heating, hot water) and combined cycle (hot water along with air conditioning or heating). Energy efficiency is highest during the summer cycle, when, thanks to the full recovery of the heat, the production of hot water is free. During the combined use, the DHW exchanger uses the temperature of the discharge gases to gets inside the accumulation sanitary water as high as 65° C. The advanced electronic regulation developed by Climaveneta ensures the highest operational flexibility, fast working condition a significant increase in the overall COP, which go hand in hand with electricity and space reduction. Advantages, combined with the possibility of completely eliminating the traditional boiler, making heat pumps PRANA DHW the ideal solution for energy saving applications in residential, hotel and small sector.

Commands

AWR-DHW heats water stored in the tank as energy storage. It also comes with a state-of-the-art electronic unit, which independently controls the modes of operation. The appliance can operate throughout the year in any mode, both with single cycle (cooling, heating, hot water) and with combined cycle (hot water together with cooling or hot water together heating).During the summer cycle there is maximum energy saving through total heat recovery. This energy is completely free of charge with regard to the production of hot water.

Versioni

AWR DHW	Air source reversible heat pump with domestic hot water supply with total heat recovery
AWR DHW - SL	Air source reversible heat pump with domestic hot water supply with total heat recovery

Features

Structure and base in hot galvanised epoxy powder coated steel.
Stainless steel (AISI 316) with high efficiency and low pressure drop plate to plate exchanger (at the domestic hot water side). It is positioned next after the compressor, it ensures the domestic hot water production. That can work either in full recovery or in part, with the constant optimization of efficiency through logic advanced adjusting controller.
Exchangers plant side plate of stainless steel AISI 316 with high efficiency and low pressure drop meets the supply of both hot or cold water for the facility, regardless of the domestic hot water
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Finned coils made with copper pipes and aluminium fins with large exchange surface area (100% fully quality tested)
Axial electric fans, external rotor, electric motor with a 6-pole fitted with thermal protection, housed in aerodynamic conveyor profile with safety grill
Low external air temperature device: continuous fan speed regulation with pressure switch
Coil protection grille
Soft starter for 230V units /ms and 400V units /ts
The water circuit comes complete with:

- Variable flow circulator for 0021÷0025 models and multistage centrifugal variable flow pump for models 0041÷0101, plant side
- Domestic hot water side water pump
- Expansion tank
- Safety valve
- Manual filling assembly
- Pressure gauge
- Air vent valve

Comando accessibile dallesterno con dispositivo antimanomissione

Main accessories

- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- Remote keyboard
- Rubber anti-vibration mounting kit
- Removable metal mesh water filter kit
- Condensate collecting tray for models 0065÷0101

AWR DHW

Models			0021m	0025m	0041m	0021ms	0025ms	0041ms	0025t	0041t	0065t	0101t	0025ts	0041ts	0065ts	0101ts
Nominal heating power	(1)	kW	7,70	9,10	13	7,70	9,10	13	9,10	13	21,3	33,5	9,10	13	21,3	33,5
Total absorbed power	(2)	kW	2,30	2,70	3,70	2,30	2,70	3,70	2,70	3,70	5,60	8,50	2,70	3,70	5,60	8,50
COP		*	3,35	3,37	3,51	3,35	3,37	3,51	3,37	3,51	3,80	3,94	3,37	3,51	3,80	3,94
Cooling capacity	(3)	kW	7,60	8,90	12,7	7,60	8,90	12,7	8,90	12,7	21,1	33	8,90	12,7	21,1	33
Total absorbed power	(2)	kW	2,40	2,70	3,80	2,40	2,70	3,80	2,70	3,80	5,80	9,40	2,70	3,80	5,80	9,40
EER		*	3,17	3,30	3,34	3,17	3,30	3,34	3,30	3,34	3,64	3,51	3,30	3,34	3,64	3,51
Total absorbed power	(4)	kW	7,40	8,50	11,8	7,40	8,50	11,8	8,40	11,9	18,2	33,1	8,40	11,9	18,2	33,1
Total absorbed power		kW	2,30	2,70	4	2,30	2,70	4	2,60	4	6,10	9,40	2,60	4	6,10	9,40
Recovery heating capacity		kW	9,60	11,0	15,5	9,60	11,0	15,5	10,9	15,6	23,9	42,0	10,9	15,6	23,9	42,0
Heating capacity	(5)	kW	7,60	9	12,8	7,60	9	12,8	9,10	12,9	20,9	32,6	9,10	12,9	20,9	32,6
Total absorbed power	(2)	kW	2,90	3,40	4,60	2,90	3,40	4,60	3,40	4,60	7	10,3	3,40	4,60	7	10,3
COP		*	2,66	2,68	2,78	2,66	2,68	2,78	2,68	2,81	2,99	3,17	2,68	2,81	2,99	3,17
Cooling capacity	(6)	kW	5,40	6,30	9,10	6,40	7,30	11,2	6,30	9,00	15,1	23,7	7,30	11,2	17	27,7
Total absorbed power	(2)	kW	2,40	2,70	3,70	2,40	2,70	3,80	2,70	3,60	5,40	9,00	2,70	3,80	5,90	9,50
EER		*	2,25	2,33	2,46	2,25	2,33	2,46	2,33	2,50	2,80	2,63	2,33	2,50	2,80	2,63
Compressor type			SCROLL													
N. Compressors		N.	1													
Refrigerant			R407C													
N. fans		N.	2	2	2	2	2	2	2	2	1	2	2	2	1	2
Plant side pump type	(7)		Ci	Ci	Ce	Ci	Ci	Ce	Ci	Ce	Ce	Ce	Ci	Ce	Ce	Ce
Recovery side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Corrente di spunto		A	61	78	114	29	34	45	40	50	101	127	22	28	56	70
Sound power	(8)	dB(A)	68	69	70	68	69	70	69	70	76	77	69	70	76	77
Sound pressure	(9)	dB(A)	53	54	55	53	54	55	54	55	60	61	54	55	60	61
DIMENSION																
L		mm	1125	1125	1250	1125	1125	1250	1125	1250	1700	1700	1125	1250	1700	1700
H		mm	1125	1125	1125	1125	1125	1125	1125	1125	1200	1700	1125	1125	1200	1700
P		mm	370	370	420	370	370	420	370	420	650	650	370	420	650	650
Operational weight		kg	144	144	168	144	144	168	144	168	295	378	144	168	295	378

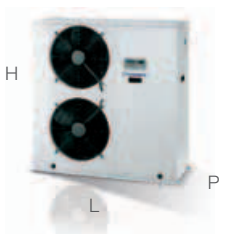
AWR DHW SL

Models			0065t	0101t	0065ts	0101ts
Nominal heating power	(1)	kW	21,3	33,5	21,3	33,5
Total absorbed power	(2)	kW	5,60	8,50	5,60	8,50
COP		*	3,80	3,94	3,80	3,94
Cooling capacity	(3)	kW	21,1	33	21,1	33
Total absorbed power	(2)	kW	5,80	9,40	5,80	9,40
EER		*	3,64	3,51	3,64	3,51
Total absorbed power	(4)	kW	18,2	33,1	18,2	33,1
Total absorbed power		kW	6,10	9,40	6,10	9,40
Recovery heating capacity		kW	23,9	42,0	23,9	42,0
Heating capacity	(5)	kW	21	32,9	21	32,9
Total absorbed power	(2)	kW	7,10	10,5	7,10	10,5
COP		*	2,97	3,15	2,97	3,15
Cooling capacity	(6)	kW	15,2	23,9	15,2	23,9
Total absorbed power	(2)	kW	5,30	8,80	5,30	8,80
EER		*	2,87	2,72	2,87	2,72
Compressor type			SCROLL	SCROLL	SCROLL	SCROLL
N. Compressors		N.	1	1	1	1
Refrigerant			R407C	R407C	R407C	R407C
N. fans		N.	2	3	2	3
Plant side pump type	(7)		Ce	Ce	Ce	Ce
Recovery side pump type	(7)		Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	101	127	56	70
Sound power	(8)	dB(A)	73	74	73	74
Sound pressure	(9)	dB(A)	57	58	57	58
DIMENSION						
L		mm	1700	1700	1700	1700
H		mm	1200	1700	1200	1700
P		mm	650	650	650	650
Operational weight		kg	295	378	295	378

NOTE

(1) Water in-out 30/35°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(2) Total input is obtained from compressor input and fan input
(3) Water in-out 23/18°C (plant side), outdoor air temperature 35°C b.s.
(4) Water in-out 23/18°C (plant side), water in-out 45/50°C (total recovery side)
(5) Water in-out 40/45°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(6) Water in-out 12/7°C (plant side), outdoor air temperature 35°C b.s.
(7) Ci=Circolatore; Ce=Centrifuga
(8) Sound power level according to ISO 9614 and Eurovent 8/1
(9) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent



AWR MTD1 0021ms÷0061t

Reversible heat pump, air source for outdoor installation
6,9 ÷ 17,4 kW

Unit description

Heat pumps AWR-MTD1 are reversible outdoor units with axial fans, hermetic scroll compressors and Full Floating technology. Full Floating is advanced electronics which has been developed by CLIMAVENETA in order to meet the needs of typical residential small size and small/medium tertiary sector, thanks to the accumulation. Another advantage that, together with the Hydraulic module components it make extremely simple the installation of heat pump: simply by connecting the unit to water plant and electricity so that it can be put into operation.

Commands

The new generation electronic controller allows to manage the heat pump by using the Full Floating technology, designed by Climaveneta for improving the system´s efficiency for the fans (Floating Fans), for the circulating pump (Floating Flow) and finally for the working temperature (Floating Setpoint). This also allows to achieve all the following benefits: chiller operation even with larger operating limits, improvement of efficiency in both standard and extreme conditions, much lower operating noise in part load conditions, lower installation time, lower time for system set-up, broader operating limits, faster transient after defrosts.
The electronic menu allows to manage:
- domestic hot water production by external three-way valve (accessory)
- a zone of direct heating
- outdoor temperature sensor for water plant side modular set point compensation
- electrical heating element for possible integration and anti-legionellosis cycle for cylinder
- boiler or electric heater management

Versioni

AWR MTD1	Medium temperature air source reversible heat pump for water heating up to 55°C

Features

Structure and base in hot galvanised epoxy powder coated steel.
High efficiency and low pressure drop stainless steel (AISI 316) water exchangers complete with closed-cell insulation with vapour barrier,antifreeze heating element and differencial pressure switch
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Finned coils made with copper pipes and aluminium fins with large exchange surface area (100% fully quality tested)
Axial electric fans, external rotor, electric motor with a 6-pole fitted with thermal protection, housed in aerodynamic conveyor profile with safety grill
Low external air temperature device: - continuous fan speed regulation with pressure switch
Condensate collecting tray
Coil protection grille
Soft starter for 230V/1/50Hz units
The water circuit comes complete with:
- Variable flow circulator for all models
- Water side differential pressure switch
- Expansion tank
- Safety valve
- Manual filling assembly
- Pressure gauge
- Air vent valve

Control with foolproof device accessible from the outside

Main accessories

- Valvola deviatrice a 3 vie per produzione acqua calda sanitaria
- Disgiuntore idraulico da 35, 100, 200 litri
- Bollitore acqua calda sanitaria da 300, 500 litri
- Termoaccumulo per acqua calda sanitaria da 300 litri, da abbinare al kit preparatore istantaneo DOMH2O
- Termoaccumulo per acqua calda sanitaria da 300, 500 litri con serpentino solare, da abbinare al kit preparatore istantaneo DOMH2O
- Kit gestione caldaia in sostituzione
- Kit preparatore istantaneo acqua calda sanitaria DOMH2O15 e DOMH2O24
- Kit resistenza elettrica da 1, 2, 3 kW
- Accumulo esterno e kit di collegamento idraulico
- Kit filtro acqua a rete metallica estraibile
- Supporti antivibranti in gomma
- Tastiera remota HSW11

AWR MTD1

Models			0021ms	0031ms	0041ms	0051ms	0041t	0051t	0061t
Nominal heating power	(1)	kW	6,90	10,2	12,9	13,4	13	15,2	17,4
Total absorbed power	(2)	kW	1,70	2,60	3,40	3,20	3,50	3,90	4,10
COP Eurovent		*	3,95	3,94	3,82	4,14	3,77	3,88	4,27
Cooling capacity	(3)	kW	6,80	10,3	12,9	13,9	13,4	15,9	18,4
Total absorbed power	(2)	kW	2	3,40	4,10	4	4,20	4,60	5,40
EER Eurovent		*	3,40	2,98	3,06	3,37	3,20	3,25	3,38
Heating capacity	(4)	kW	6,80	10,1	12,7	13,1	13	14,6	17
Total absorbed power	(2)	kW	2,20	3,30	4,20	4	4,40	4,70	5
COP Eurovent		*	3,09	3,06	3,02	3,27	2,95	3,11	3,40
Cooling capacity	(5)	kW	5,10	7,80	9,90	10,5	10,3	11,9	13,9
Total absorbed power	(2)	kW	2	3,30	3,90	3,80	4	4,50	5
EER Eurovent		*	2,55	2,36	2,54	2,76	2,58	2,64	2,78
ESEER			3,15	2,98	3,06	3,37	3,20	3,25	3,38
Compressor type						SCROLL			
N. Compressors		N.				1			
Refrigerant						R410A			
N. fans		N.	1	1	2	2	2	2	2
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	27	44	45	45	64	64	74
Sound power	(7)	dB(A)	66	66	69	69	69	69	69
Sound pressure	(8)	dB(A)	52	52	54	54	54	54	54
DIMENSION									
L		mm	900	900	900	900	900	900	900
H		mm	640	940	1240	1240	1240	1240	1390
P		mm	370	370	370	370	370	370	420
Operational weight		kg	95	115	140	160	140	160	170

NOTE
(1) Water in-out 30/35°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(2) Total input is obtained from compressor input and fan input
(3) Water in-out 23/18°C (plant side), outdoor air temperature 35°C b.s.
(4) Water in-out 40/45°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(5) Water in-out 12/7°C (plant side), outdoor air temperature 35°C b.s.
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent

AWR MTD XE 0011ms÷0091t

High efficiency reversible heat pump, air source for outdoor installation 6,3 ÷ 17,9 kW

Unit description

Heat pumps AWR-MTD-XE reversible units are able to provide heating, cooling and domestic hot water. Particular attention was paid to the winter, thanks to special technological devices is guaranteed beyond the normal limits of traditional units. Prana AWR-MTD-XE Air can be combined with traditional systems or radiant panels, ensuring a high energy efficiency. All units are certified in accordance with the Class A classification Eurovent energy in heating. This makes them particularly suitable for use radiant installations. The installation is greatly simplified through the integration of the group and hydraulic technology Full floating simply by connecting the unit to water plant and electricity so that it can be put into operation.

Commands

The new generation electronic controller allows to manage the heat pump by using the Full Floating technology, designed by Climaveneta for improving the system´s efficiency for the fans (Floating Fans), for the circulating pump (Floating Flow) and finally for the working temperature (Floating Setpoint). This also allows to achieve all the following benefits: chiller operation even with larger operating limits, improvement of efficiency in both standard and extreme conditions, much lower operating noise in part load conditions, lower installation time, lower time for system set-up, broader operating limits, faster transient after defrosts.
The electronic menu allows to manage:
- domestic hot water production by external three-way valve (accessory)
- a zone of direct heating
- outdoor temperature sensor for water plant side modular set point compensation
- electrical heating element for possible integration and anti-legionellosis cycle for cylinder
- boiler or electric heater management

Versioni

AWR MTD XE	Medium temperature air source reversible heat pump for water heating up to 55°C and operating limits down to -15°C external air temperature
AWR MTD XE/H	Medium temperature air source reversible heat pump for water heating up to 55°C and operating limits down to -15°C external air temperature

Features

Structure and base in hot galvanised epoxy powder coated steel.
High efficiency and low pressure drop stainless steel (AISI 316) water exchangers complete with closed-cell insulation with vapour barrier,antifreeze heating element and differencial pressure switch
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Finned coils made with copper pipes and aluminium fins with large exchange surface area (100% fully quality tested)
Axial electric fans, external rotor, electric motor with a 6-pole fitted with thermal protection, housed in aerodynamic conveyor profile with safety grill
Low external air temperature device: continuous fan speed regulation with pressure switch
Electrical resistance modulating antifreeze to the base located between wing and base exchanger to improve and facilitate the flow of water during defrosting
Condensate collecting tray
Coil protection grille
Soft starter for 230V/1/50Hz units
Phase sequence control relay
The water circuit comes complete with:
- Variable flow circulator for all models
- Water side differential pressure switch
- Expansion tank
- Safety valve
- Manual filling assembly
- Pressure gauge
- Air vent valve

Control with foolproof device accessible from the outside

Main accessories

- Main accessories
- Three-way valve for domestic hot water
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- Kit boiler control
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- 1,2,3 kW single-phase electric heater kit
- External buffer tank and hydronic connecting kit
- Removable metal mesh water filter kit
- Rubber anti-vibration mounting kit
- HSW11 Remote keyboard

NEW! FULL FLOATING A ENERGY CLASS SCROLL AXIAL P PLATES HFC R-410A EUROVENT CERTIFIED PERFORMANCE

AWR MTD XE

Models			0011ms	0025ms	0031ms	0041ms	0031t	0041t	0051t	0061t	0091t
Nominal heating power	(1)	kW	6,30	7,40	11,2	14	10,9	14	15,9	17,9	25,10
Total absorbed power	(2)	kW	1,50	1,80	2,60	3,30	2,60	3,30	3,80	4,20	6
COP Eurovent		*	4,20	4,11	4,31	4,24	4,19	4,24	4,18	4,26	4,18
COP EN14511			4,13	4,15	4,22	4,16	4,15	4,15	4,11	4,25	4,19
Cooling capacity	(3)	kW	7,20	8,30	12,3	15,7	11,7	15,8	17,7	20,2	29,2
Total absorbed power	(2)	kW	1,90	2,20	3,30	4,10	3,10	4,20	4,70	5,30	7,80
EER Eurovent		*	3,79	3,77	3,73	3,83	3,77	3,76	3,77	3,81	3,74
EER EN 14511			3,82	3,82	3,81	3,84	3,84	3,81	3,81	3,81	3,85
Heating capacity	(4)	kW	6,10	7,30	10,8	13,6	10,6	13,8	15,4	17,5	24,60
Total absorbed power	(2)	kW	1,90	2,30	3,30	4,10	3,20	4,30	4,60	5,20	7,40
COP Eurovent		*	3,21	3,17	3,27	3,32	3,31	3,21	3,35	3,37	3,32
Cooling capacity	(5)	kW	5,20	6,30	9,20	11,7	8,60	11,9	13,2	15,2	22,10
Total absorbed power	(2)	kW	1,70	2,20	3,10	4,00	3,00	4,00	4,60	5,00	7,20
EER Eurovent		*	3,06	2,86	2,97	2,93	2,87	2,98	2,87	3,04	3,07
ESEER			3,62	3,63	3,52	3,46	3,42	3,65	3,24	3,55	3,57
Compressor type			SCROLL								
N. Compressors		N.	1								
Refrigerant			R410A								
N. fans		N.	1	1	2	2	2	2	2	2	3
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	27	30	45	45	48	64	64	75	111
Sound power	(7)	dB(A)	69	69	71	71	71	71	71	72	74
Sound pressure	(8)	dB(A)	54	54	56	56	56	56	56	57	58
DIMENSION											
L		mm	900	900	900	900	900	900	900	1550	1550
H		mm	1240	1240	1240	1390	1240	1390	1390	1200	1700
P		mm	420	420	420	420	420	420	420	450	450
Operational weight		kg	145	150	155	170	155	170	180	250	335

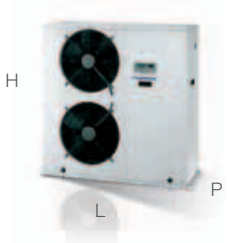
AWR MTD XE/H

Models			0011ms	0025ms	0031ms	0041ms	0031t	0041t	0051t	0061t	0091t
Nominal heating power	(1)	kW	6,30	7,40	11,2	14	10,9	14	15,9	17,9	25,10
Total absorbed power	(2)	kW	1,50	1,80	2,60	3,30	2,60	3,30	3,80	4,20	6
COP Eurovent		*	4,20	4,11	4,31	4,24	4,19	4,24	4,18	4,26	4,18
COP EN14511			4,13	4,15	4,22	4,16	4,15	4,15	4,11	4,25	4,19
Cooling capacity	(3)	kW	7,20	8,30	12,3	15,7	11,7	15,8	17,7	20,2	29,2
Total absorbed power	(2)	kW	1,90	2,20	3,30	4,10	3,10	4,20	4,70	5,30	7,8
EER Eurovent		*	3,79	3,77	3,73	3,83	3,77	3,76	3,77	3,81	3,74
EER EN 14511			3,82	3,82	3,81	3,84	3,84	3,81	3,81	3,81	3,85
Heating capacity	(4)	kW	6,10	7,30	10,8	13,6	10,6	13,8	15,4	17,5	24,6
Total absorbed power	(2)	kW	1,90	2,30	3,30	4,10	3,20	4,30	4,60	5,20	7,4
COP Eurovent		*	3,21	3,17	3,27	3,32	3,31	3,21	3,35	3,37	3,32
Cooling capacity	(5)	kW	5,20	6,30	9,20	11,7	8,60	11,9	13,2	15,2	22,1
Total absorbed power	(2)	kW	1,70	2,20	3,10	4,00	3,00	4,00	4,60	5,00	7,2
EER Eurovent		*	3,06	2,86	2,97	2,93	2,87	2,98	2,87	3,04	3,07
ESEER			3,62	3,63	3,52	3,46	3,42	3,65	3,24	3,55	3,57
Compressor type			SCROLL								
N. Compressors		N.	1								
Refrigerant			R410A								
N. fans		N.	1	1	2	2	2	2	2	2	3
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	27	30	45	45	48	64	64	75	111
Sound power	(7)	dB(A)	69	69	71	71	71	71	71	72	74
Sound pressure	(8)	dB(A)	54	54	56	56	56	56	56	57	58
DIMENSION											
L		mm	900	900	900	900	900	900	900	1550	1550
H		mm	1240	1240	1240	1390	1240	1390	1390	1200	1700
P		mm	420	420	420	420	420	420	420	450	450
Operational weight		kg	145	150	155	170	155	170	180	250	335

NOTE

(1) Water in-out 30/35°C (plant side), outdoor air temperatur 7°C b.s./ 6°C b.u.
(2) Total input is obtained from compressor input and fan input.
(3) Water in-out 23/18°C (plant side), outdoor air temperature 35°C b.s.
(4) Water in-out 40/45°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(5) Water in-out 12/7°C (plant side), outdoor air temperature 35°C b.s.
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent



CLIMAVENETA

AW HT 0031ms÷0071ts

Heat pump, air source for outdoor installation, high water temperature 10,4 ÷ 19,7 kW

Unit description

AW HT is an ideal solution for systems with heating radiators, where the water high temperature is needed. The EVI technology compressor with additional steam injection in the compressing cycle assures a water temperature of 65°C and operating limits as low as -20°C. Neither probes nor connections pipes to wells are needed; the installation is simple, this is a suitable solution for all applications.

Commands

Electronic control provides great application flexibility. The remote keyboard kit wired indoor and outdoor temperature sensors allow dynamic control of delivery temperature water, optimizing comfort in the room and increasing the energy efficienty. The electronic board PRO EXTENDED allows you to manage:
- domestic hot water production by external three-way valve (accessory)
- circulator on system side
- a zone of direct heating
- outdoor temperature sensor for water plant side modular set point compensation
- electrical heating element for possible integration and anti-legionellosis cycle for cylinder
- integrated boiler with heat pump
- several solutions through appropriate configurations of the controller and use of dedicated extension modules (accessories)

Versioni

AW HT	High temperature air source heat pump for water heating up to 65°C, and operating limits down to -20° external air temperature

Features

Structure and base in hot-dip galvanised steel with epoxy powder coating finish.
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection.
High efficiency cycle EVI Hermetic Scroll Compressor (with hot gas direct injection into the compressor) to reach 65° C, with the crankcase heater and thermal protection
Finned coils made with copper pipes and aluminium fins with large exchange surface area (100% fully quality tested); sub cooling circuit to prevent the icing at the basement
A condense collecting tray within water discharge
Coil protection grille
Soft starter for 230V/1/50Hz units
The water circuit comes complete with:
- Circulating pump for all models
- Expansion tank
- Safety valve
- Manual filling assembly
- Pressure gauge
- Air vent valve
- Outside air sensor wired

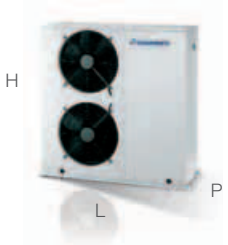
Main accessories

- Three-way valve for domestic hot water
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- Control kit for heat pump with boiler
- 1,2,3 kw single-phase electric heater kit
- Radiant panels or radiator management kit Second zone
- Control kit for underfloor heating with hydronic components
- Removable metal mesh water filter kit
- Rubber anti-vibration mounting kit
- Room unit wired
- Room thermostat wired based

AW HT

Models			0031ms	0041ms	0041t	0061t	0071t	0041ts	0061ts	0071ts
Nominal heating power	(1)	kW	10,4	14,9	14,1	19,7	26,6	14,1	19,7	26,6
Total absorbed power	(2)	kW	2,50	3,50	3,30	4,70	6,1	3,30	4,70	6,1
COP EN14511			4,10	4,12	4,14	4,12	4,26	4,14	4,12	4,26
Heating capacity	(3)	kW	10,4	14,3	14,3	19,7	27,1	14,3	19,7	27,1
Total absorbed power	(2)	kW	3	4	4	5,60	7,4	4	5,60	7,4
COP EN14511			3,30	4,48	3,48	3,45	3,58	3,48	3,45	3,58
Heating capacity	(4)	kW	9,10	12,5	12,5	17,5	23,5	12,5	17,5	23,5
Total absorbed power	(2)	kW	2,50	3,30	3,30	4,60	5,9	3,30	4,60	5,9
COP EN 14511			3,44	3,66	3,66	3,72	3,88	3,66	3,72	3,88
Heating capacity	(5)	kW	7,80	11,4	11,4	14,8	21,2	11,4	14,8	21,2
Total absorbed power	(2)	kW	3,80	5,40	5,40	7,60	10,4	5,40	7,60	10,4
COP EN 14511			1,97	2,06	2,06	1,91	1,99	2,06	1,91	1,99
Compressor type			SCROLL EVI							
N. Compressors		N.	1							
Refrigerant			R407C							
N. fans		N.	2	2	2	2	3	2	2	3
Plant side pump type	(6)		Ci							
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	44	45	64	101	99	35	55	99
Sound power	(7)	dB(A)	70	70	70	71	74	70	71	74
Sound pressure	(8)	dB(A)	55	55	55	56	59	55	56	59
DIMENSION										
L		mm	900	900	900	900	1470	900	900	1470
H		mm	1240	1390	1390	1390	1700	1390	1390	1700
P		mm	420	420	420	420	570	420	420	570
Operational weight		kg	150	160	160	170	320	160	170	320

NOTE
(1) Water in-out 30/35°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(2) Total input is obtained from compressor input and fan input.
(3) Water in-out 40/45°C (plant side), outdoor air temperature 7°C b.s./ 6°C b.u.
(4) Water in-out 30/35°C (plant side), outdoor air temperature 2°C b.s./ 1°C b.u.
(5) Water 65°C, outdoor air temperature -7°C b.s./ 1°C b.u.
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.



WWR MTD 0011m÷0121t

Reversible heat pump, water source 7,2 ÷ 43,8 kW

Unit description

The MTD water-cooled heat pump are reversible units for heating, cooling and domestic hot water by external three-way valve (accessory). Both heat pumps MTD are suitable for traditional heating systemsand radiant panels. The latter, working with water at lower temperatures, ensure a higher yield and are a particularly appreciated for new buildings with low energy consumption that point on using renewable energy resources.
The installation is greatly simplified through the integration of the group and hydraulic technology Full floating simply by connecting the unit to water plant and electricity so that it can be put into operation.

Commands

User interface unit on board, accessible from the outside with a not touch system

Floating Set Once ever y 3 minutes an algorithm automatically optimises the water set point in relation to the compressor operating time and the temperatures of the water in the system. He water storage tank is no longer indispensable because it is compensated by the Floating Set function, with resulting reduction in: size; weight; installation times; system setting-up times.

Floating Flow The controller manages the modulation of the active components (pump and electronic flow valve) through pressure transducers and temperature sensors. The performance of the unit may thus be optimised for different operating conditions, such as traditional fan coil system and panel heating system, ensuring: broader operating limits; easier start-up of installations with both high and low water temperatures; faster system setup.
The electronic menu allows to manage:
- domestic hot water production by external three-way valve (accessory)
- a zone of direct heating
- circulator on system side and modulating valve
- outdoor temperature sensor for water plant side modular set point compensation (accessory)

Versioni

WWR MTD High temperature air source heat pump for water heating up to 65°C, and operating limits down to -20° external air temperature

Features

Structure and base in hot galvanised epoxy powder coated steel.
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection.
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper.
Soft starter for 230V/1/50Hz units /ms
Phase sequence control relay
The water circuit comes complete with:
Variable flow circulator for 0011÷0031 models and multistage centrifugal variable flow pump for models 0071÷0121, plant side
Modulating valve to reduce water consumptions, source side

- Safety valve.
- Expansion tank.
- Manual filling assembly
- Pressure gauge.
- Air vent valve.
- Drain valve on both plant and source circuits.
- Differential pressure switch on source side and system side

Main accessories

- HSW12 remote keyboard
- External temperature sensor (mandatory with HSW12 remote keyboard)
- Three-way valve for domestic hot water
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- 1,2,3 kw single-phase electric heater kit

WWR MTD

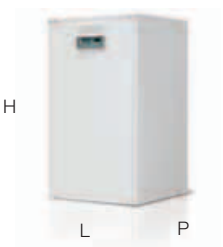
Models			0011m	0021m	0025m	0031m	0041m	0011ms	0021ms	0025ms	0031ms	0041ms
Nominal heating power	(1)	kW	7,20	7,80	9,70	12,1	15,3	7,20	7,80	9,70	12,1	15,3
Total absorbed power	(2)	kW	1,40	1,49	1,81	2,30	2,88	1,40	1,49	1,81	2,30	2,88
COP		*	5,14	5,23	5,36	5,26	5,31	5,14	5,23	5,36	5,26	5,31
Cooling capacity	(3)	kW	7,10	7,60	9,80	12	15,1	7,10	7,60	9,80	12	15,1
Total absorbed power	(2)	kW	1,60	1,70	2	2,50	3,30	1,60	1,70	1,96	2,53	3,27
EER		*	4,44	4,47	4,90	4,80	4,58	4,44	4,47	5	4,74	4,62
Heating capacity	(4)	kW	6,80	7,50	9,20	11,6	14,6	6,80	7,50	9,20	11,6	14,6
Total absorbed power	(2)	kW	1,70	1,90	2,30	3	3,60	1,70	1,90	2,30	3	3,60
COP		*	4	3,95	4	3,87	4,06	4	3,95	4	3,87	4,06
Cooling capacity	(5)	kW	5,20	5,60	7,20	8,80	11,3	5,20	5,60	7,20	8,80	11,3
Total absorbed power	(2)	kW	1,53	1,70	2	2,60	3,20	1,53	1,70	2	2,60	3,20
EER		*	3,47	3,29	3,60	3,38	3,53	3,40	3,29	3,60	3,38	3,53
ESEER			4,03	3,73	4,26	3,95	3,90	4,03	3,73	4,26	3,95	3,90
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R410A									
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50									
Start-up current		A	58	61	82	97	130	26	27	37	44	59
Sound power	(7)	dB(A)	52	52	53	53	58	52	52	53	53	58
Sound pressure	(8)	dB(A)	38	38	39	39	44	38	38	39	39	44
DIMENSION												
L		mm	560									
H		mm	980									
P		mm	575									
Operational weight		kg	148	148	150	152	160	148	148	150	152	160

WWR MTD

Models			0021t	0025t	0031t	0041t	0051t	0061t	0071t	0091t	0101t	0121t
Nominal heating power	(1)	kW	7,80	9,80	12,1	15,9	18,1	21,1	26,2	30,5	35	43,8
Total absorbed power	(2)	kW	1,40	1,73	2,17	2,90	3,40	3,70	4,60	5,20	6	7,60
COP		*	5,57	5,66	5,58	5,48	5,32	5,70	5,70	5,87	5,83	5,76
Cooling capacity	(3)	kW	7,60	9,50	12	15,7	18	21,3	26,9	30,7	34,8	44,8
Total absorbed power	(2)	kW	1,60	1,80	2,50	3,30	3,80	4,10	5,20	6	7	8,80
EER		*	4,75	5,28	4,80	4,76	4,74	5,20	5,17	5,12	4,97	5,09
Heating capacity	(4)	kW	7,40	9,20	11,4	15,3	17,1	20	24,8	28,8	33	41,7
Total absorbed power	(2)	kW	1,90	2,20	2,70	3,70	4,20	4,60	5,80	6,40	7,60	9,50
COP		*	3,89	4,18	4,22	4,14	4,07	4,35	4,28	4,50	4,34	4,39
Cooling capacity	(5)	kW	5,60	7,30	8,90	11,8	13,2	15,7	19,8	22,9	26	33,4
Total absorbed power	(2)	kW	1,60	1,90	2,40	3,20	3,80	4	5,10	5,80	6,80	8,39
EER		*	3,50	3,84	3,71	3,70	3,47	3,93	3,88	3,95	3,82	3,98
ESEER			3,97	4,54	4,33	4,08	3,92	4,51	4,40	4,61	4,33	4,37
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R410A									
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ce	Ce	Ce	Ce
Electrical power supply		V-Ph~Hz	400-3N~50									
Start-up current		A	32	35	48	64	64	75	95	111	118	140
Sound power	(7)	dB(A)	52	52	52	58	58	59	66	66	70	70
Sound pressure	(8)	dB(A)	38	38	38	44	44	45	51	51	55	55
DIMENSION												
L		mm	560	560	560	560	560	560	680	680	680	680
H		mm	980	980	980	980	980	980	1150	1150	1150	1150
P		mm	575	575	575	575	575	575	780	780	780	780
Operational weight		kg	148	150	152	160	170	175	220	230	235	250

NOTE

(1) Condenser water in-out 30/35°C (plant side), Evaporator water in 10°C (source side)
(2) Total input is obtained from compressor input and fan input.
(3) Temperatura acqua impianto 23/18°C, temperatura acqua sorgente 30/35°C
(4) Temperatura acqua impianto 40/45°C, temperatura acqua sorgente ingresso 10°C
(5) Temperatura acqua impianto 12/7°C, temperatura acqua sorgente 30/35°C
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.
* secondo Eurovent



WWR HT Slim Z1M6÷Z1T11

Reversible heat pump, water source, high water temperature with buffer tank 8,3 ÷ 14,1 kW

Unit description

The Prana Slim heat pump is designed for heating, cooling, and domestic hot water. It is an indoor unit with elegant design and thanks to a special sound insulation, the unit is suitable for a living comfort.

Commands

Electronic control provides great application flexibility. The remote keyboard kit wired indoor and outdoor temperature sensors allow dynamic control of delivery temperature water, optimizing comfort in the room and increasing the energy efficienty. The electronic board PRO EXTENDED allows you to manage:
- domestic hot water production by three-way valve
- circulator on system side
- a zone of direct heating
- zone with mix valve for floor heating
- outdoor temperature sensor for water plant side modular set point compensation
- integration by solar panels
- several solutions through appropriate configurations of the controller

Versioni

WWR HT Slim	High temperature heat pump, water source for water heating up to 60°C, reversible

Features

Structure and base in hot galvanised epoxy powder coated steel.
180-litre tank with built-in coil for domestic hot water, with fittings for connecting solar panels or hightemperature fixtures (e.g. fan coils)
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection.
High-efficiency single-and three-phase SCROLL compressor to allow water up to 60 °C to be produced.
Also suitable for traditional radiator systems.
The compressor and plate heat exchangers are housed in a suitably insulated enclosure to limit vibrations and noise.
This enclosure can be removed from the unit to make maintenance easier
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper.
Soft starter for 230V/1/50Hz units
Phase sequence control relay
The water circuit comes complete with:
- Circulator on system side
- Three-way valve for domestic hot water
- Safety valve
- 180Xlt domestic hot water storage tank
- Expansion tank built into the heat pumps tank
- Manual filling assembly
- Pressure gauge
- Air vent valve
- Drain valve
- Differential pressure switch on source side and system side
- Outside air sensor wired

Main accessories

- Room unit wired
- Room thermostat wired based
- Room unit wireless
- Outside air sensor wireless
- NTC probe for select plant diagram or solar panel
- Heating element kit

WWR HT Slim

Models			Z1M6	Z1M9	Z1M11	Z1T6	Z1T9	Z1T11
Nominal heating power	(1)	kW	8,30	11,6	14,1	8,20	11,4	14
Total absorbed power	(2)	kW	1,60	2,22	2,68	1,56	2,14	2,61
COP		*	5,19	5,23	5,26	5,24	5,34	5,35
Cooling capacity	(3)	kW	9,55	13,2	15,5	9,36	12,9	15,6
Total absorbed power	(2)	kW	1,46	2,11	2,72	1,45	2,06	2,64
EER		*	6,54	6,25	5,71	6,46	6,27	5,92
Heating capacity	(4)	kW	7,95	11,1	13,6	7,87	11	13,5
Total absorbed power	(2)	kW	2,02	2,80	3,37	1,98	2,72	3,27
COP		*	3,94	3,96	4,02	3,97	4,04	4,11
Cooling capacity	(5)	kW	6,67	9,24	11,1	6,58	9,12	11,1
Total absorbed power	(2)	kW	1,53	2,17	2,67	1,49	2,09	2,59
EER		*	4,36	4,26	4,16	4,42	4,36	4,28
Hot water tank		l	180					
Compressor type			SCROLL					
N. Compressors		N.	1					
Refrigerant			R407C					
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	37	60	68	32	46	50
Sound power	(7)	dB(A)	42	42	46	42	42	46
Sound pressure	(8)	dB(A)	28	28	32	28	28	32
DIMENSION								
L		mm	600					
H		mm	1940					
P		mm	570					
Operational weight		kg	286	293	300	286	293	300

NOTE

(1) Condenser water in-out 30/35°C (plant side), Evaporator water in 10°C (source side) with identical flow rate that in the cooling mode
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Condenser water in-out 40/45°C (plant side), water in 10°C (source side) with identical flow rate that in the cooling mode
(5) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent

WWR HT Cube Z1M6÷Z1T28

Reversible heat pump, water source, high water temperature
8,3 ÷ 35,9 kW

Unit description
The Prana Cube heat pump is designed for heating, cooling, and domestic hot water, with external three-way valve. It is an indoor unit with elegant design and thanks to a special sound insulation, the unit is suitable for a living comfort.

Commands
Electronic control provides great application flexibility. The remote keyboard kit wired indoor and outdoor temperature sensors allow dynamic control of delivery temperature water, optimizing comfort in the room and increasing the energy efficienty. The electronic board PRO EXTENDED allows you to manage:
- domestic hot water production by external three-way valve (accessory)
- circulator on system side
- a zone of direct heating
- zone with mix valve for floor heating
- outdoor temperature sensor for water plant side modular set point compensation
- integration by solar panels
- several solutions through appropriate configurations of the controller

Versioni

WWR HT Cube	High temperature heat pump, water source for water heating up to 60°C, reversible

Features
Structure and base in hot galvanised epoxy powder coated steel.
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection.
High-efficiency single-and three-phase SCROLL compressor to allow water up to 60 °C to be produced. Also suitable for traditional radiator systems.
The compressor and plate heat exchangers are housed in a suitably insulated enclosure to limit vibrations and noise. This enclosure can be removed from the unit to make maintenance easier
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper.
Soft starter for 230V/1/50Hz units
Phase sequence control relay
The water circuit comes complete with:
- Circulator on system side
- Drain valve
- Differential pressure switch on source side and system side
- Outside air sensor wired

Main accessories
- Room unit wired
- Room thermostat wired based
- Room unit wireless
- Outside air sensor wireless
- NTC probe for select plant diagram or solar panel
- Heating element kit
- Three-way valve for domestic hot water
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump

WWR HT Cube

Models			Z1M6	Z1M9	Z1M11	Z1T6	Z1T9	Z1T11	Z1T13	Z1T17	Z1T24	Z1T28
Nominal heating power	(1)	kW	8,30	11,6	14,1	8,20	11,4	14	17,1	22,6	31,1	35,9
Total absorbed power	(2)	kW	1,60	2,22	2,68	1,56	2,14	2,61	3,28	4,30	5,84	6,59
COP		*	5,19	5,23	5,26	5,24	5,34	5,35	5,22	5,27	5,33	5,45
Cooling capacity	(3)	kW	9,55	13,2	15,5	9,36	12,9	15,6	19	24,9	34,7	40
Total absorbed power	(2)	kW	1,46	2,11	2,72	1,45	2,06	2,64	3,76	4,95	6,14	7
EER		*	6,54	6,25	5,71	6,46	6,27	5,92	5,04	5,02	5,65	5,71
Heating capacity	(4)	kW	7,95	11,1	13,6	7,87	11	13,5	16,4	21,8	29,9	34,5
Total absorbed power	(2)	kW	2,02	2,80	3,37	1,98	2,72	3,27	4,07	5,39	7,28	8,29
COP		*	3,94	3,96	4,02	3,97	4,04	4,11	4,02	4,04	4,11	4,16
Cooling capacity	(5)	kW	6,67	9,24	11,1	6,58	9,12	11,1	13,4	17,5	24,3	28,2
Total absorbed power	(2)	kW	1,53	2,17	2,67	1,49	2,09	2,59	3,38	4,53	6,01	6,77
EER		*	4,36	4,26	4,16	4,42	4,36	4,28	3,97	3,87	4,05	4,16
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R407C									
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	37	60	68	32	46	50	66	101	123	127
Sound power	(7)	dB(A)	42	42	46	42	42	46	47	51	55	55
Sound pressure	(8)	dB(A)	28	28	32	28	28	32	33	37	41	41
DIMENSION												
L		mm	600	600	600	600	600	600	600	600	900	900
H		mm	940	940	940	940	940	940	940	940	1117	1117
P		mm	570	570	570	570	570	570	570	570	648	648
Operational weight		kg	160	180	190	160	180	190	200	220	240	250

NOTE

(1) Condenser water in-out 30/35°C (plant side), Evaporator water in 10°C (source side) with identical flow rate that in the cooling mode
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Condenser water in-out 40/45°C (plant side), water in 10°C (source side) with identical flow rate that in the cooling mode
(5) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent

WWR DHW 0011m÷0121t

Reversible heat pump, total heat recovery, water source 6,0 ÷ 40,5 kW

Unit description

PRANA DHW is the heat pump new generation able to operate throughout the year in any operating mode: either a single cycle (air conditioning, heating, hot water) and combined cycle (hot water along with air conditioning or heating). Energy efficiency is highest during the summer cycle, when, thanks to the full recovery of the heat, the production of hot water is free. During the combined use, the DHW exchanger uses the temperature of the hot exhaust gases to gets inside the accumulation sanitary water as high as 65° C. The advanced CLIMAVENETA fully patented electronic ensures the highest flexibility of operation, a rapid speed and a significant increase in the overall COP, which go hand in hand with electricity and space reduction. Advantages, combined with the possibility of completely eliminating the traditional boiler, making heat pumps PRANA DHW the ideal solution for energy saving applications in residential, hotel and small sector.

Commands

User interface unit on board, accessible from the outside with a not touch system
WWR-DHW heats water stored in the tank as energy storage. It also comes with a state-of-the-art electronic unit, which independently controls the modes of operation. The appliance can operate throughout the year in any mode, both with single cycle (cooling, heating, hot water) and with combined cycle (hot water together with cooling or hot water together heating).During the summer cycle there is maximum energy saving through total heat recovery. This energy is completely free of charge with regard to the production of hot water.

Versioni

WWR MTD Water source reversible heat pump with domestic hot water supply with total heat recovery

Features

Structure and base in hot galvanised epoxy powder coated steel
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Stainless steel (AISI 316) with high efficiency and low pressure drop plate to plate exchanger (at the domestic hot water side). It is positioned next after the compressor, it ensures the domestic hot water production. That can work either in full recovery or in part, with the constant optimization of efficiency through logic advanced adjusting controller
Exchangers plant side plate of stainless steel AISI 316 with high efficiency and low pressure drop meets the supply of both hot or cold water for the facility, regardless of the domestic hot water
High efficiency and low pressure drop stainless steel (AISI 316) source side plate exchanger
Soft starter for 230V/1/50Hz units /ms
The water circuit comes complete with:

- Variable flow circulator for 0011÷0031 models and multistage centrifugal variable flow pump for models 0071÷0121, plant side
- Domestic hot water, water side, variable flow pump
- Modulating valve to reduce water consumptions, source side
- Safety valve
- Expansion tank
- Drain valve on both plant and source circuits

Main accessories

- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- Remote keyboard
- Removable metal mesh water filter kit

WWR DHW

Models			0011m	0021m	0025m	0031m	0041m	0011ms	0021ms	0025ms	0031ms	0041ms
Nominal heating power	(1)	kW	6	7,60	9	10,5	12,9	6	7,60	9	10,5	12,9
Total absorbed power	(2)	kW	1,30	1,70	2	2,40	2,90	1,30	1,70	2	2,40	2,90
COP			4,49	4,48	4,51	4,36	4,50	4,49	4,48	4,51	4,36	4,50
Cooling capacity	(3)	kW	7,30	9,20	11	12,5	15,3	7,30	9,20	11	12,5	15,3
Total absorbed power	(2)	kW	1,30	1,70	2	2,40	2,90	1,30	1,70	2	2,40	2,90
EER			5,62	5,41	5,50	5,21	5,28	5,62	5,41	5,50	5,21	5,28
Total absorbed power	(4)	kW	6	7,80	9,20	10,3	12,9	6	7,80	9,20	10,3	12,9
Total absorbed power		kW	1,90	2,40	2,90	3,40	4,20	1,90	2,40	2,90	3,40	4,20
Recovery heating capacity	(4)	kW	7,90	10	11,9	13,5	16,8	7,90	10	11,9	13,5	16,8
Heating capacity	(5)	kW	5,70	7,30	8,70	10,1	12,4	5,60	7,20	8,50	9,90	12,2
Total absorbed power	(2)	kW	1,70	2,20	2,60	3,10	3,60	1,70	2,20	2,60	3,10	3,60
COP			3,33	3,35	3,37	3,28	3,40	3,33	3,35	3,37	3,28	3,40
Cooling capacity	(6)	kW	5,10	6,50	7,70	8,90	11	5,10	6,50	7,70	8,90	11
Total absorbed power	(2)	kW	1,30	1,70	2	2,40	2,90	1,30	1,70	2	2,40	2,90
EER			3,92	3,82	3,85	3,71	3,79	3,92	3,82	3,85	3,71	3,79
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R407C									
Plant side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Recovery side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50
Start-up current		A	47	61	76	100	114	21	27	34	45	51
Sound power	(8)	dB(A)	52	52	53	53	58	52	52	53	53	58
Sound pressure	(9)	dB(A)	38	38	39	39	44	38	38	39	39	44
DIMENSION												
L		mm	560	560	560	560	560	560	560	560	560	560
H		mm	980	980	980	980	980	980	980	980	980	980
P		mm	575	575	575	575	575	575	575	575	575	575
Operational weight		kg	188	188	190	195	215	188	188	190	195	215

Models			0021t	0025t	0031t	0041t	0051t	0061t	0071t	0091t	0101t	0121t
Nominal heating power	(1)	kW	7,50	8,90	10,3	12,7	15,6	18,7	25,3	28,4	32,6	40,5
Total absorbed power	(2)	kW	1,70	2	2,30	2,80	3,40	3,90	5,30	5,90	6,90	8,80
COP			4,55	4,58	4,44	4,57	4,58	4,75	4,73	4,84	4,69	4,59
Cooling capacity	(3)	kW	9,20	10,9	12,4	15,4	19,1	22,5	30,2	34,4	38,9	49,7
Total absorbed power	(2)	kW	1,60	1,90	2,30	2,80	3,60	4,10	5,50	6,10	7,30	9,30
EER			5,75	5,74	5,39	5,50	5,31	5,49	5,49	5,64	5,33	5,34
Total absorbed power	(4)	kW	7,70	9,10	10,3	13,1	16	18,9	25,5	29	32,7	41,1
Total absorbed power		kW	2,30	2,80	3,30	4	4,90	5,70	7,70	8,40	10,2	12,8
Recovery heating capacity	(4)	kW	9,90	11,7	13,4	16,9	20,6	24,2	32,7	36,9	42,4	53,1
Heating capacity	(5)	kW	7,20	8,60	9,90	12,3	14,9	17,9	24	27,1	31,1	38,3
Total absorbed power	(2)	kW	2,10	2,50	3	3,50	4,30	4,90	6,80	7,30	8,70	11,1
COP			3,41	3,42	3,34	3,48	3,50	3,62	3,55	3,69	3,55	3,45
Cooling capacity	(6)	kW	6,50	7,70	8,80	10,9	13,4	16,1	21,7	24,6	28	34,8
Total absorbed power	(2)	kW	1,70	2	2,30	2,80	3,40	4	5,40	5,90	7	8,90
EER			3,82	3,85	3,83	3,89	3,94	4,03	4,02	4,17	4,00	3,91
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R407C									
Plant side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ce	Ce	Ce	Ce	Ce
Recovery side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	400-3N~50									
Start-up current		A	32	40	46	50	66	74	95	111	118	140
Sound power	(8)	dB(A)	52	52	52	58	58	59	66	66	70	70
Sound pressure	(9)	dB(A)	38	38	38	44	44	45	51	51	55	55
DIMENSION												
L		mm	560	560	560	560	560	560	680	680	680	680
H		mm	980	980	980	980	980	980	1150	1150	1150	1150
P		mm	575	575	575	575	575	575	780	780	780	780
Operational weight		kg	188	190	195	215	228	233	260	270	280	305

NOTE

(1) Condenser water in-out 30/35°C (plant side), Evaporator water in 10°C (source side) with identical flow rate that in the cooling mode
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Water in-out 23/18°C (plant side), water in-out 45/50°C (total recovery side)
(5) Condenser water in-out 40/45°C (plant side), water in 10°C (source side) with identical flow rate that in the cooling mode
(6) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(7) Ci=Circulator; Ce=Centrifugal
(8) Sound power level according to ISO 9614 and Eurovent 8/1
(9) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

BWR MTD 0011m÷0121t

Reversible heat pump, geothermal source 5,4 ÷ 33,3 kW

Unit description

The MTD heat pump optimized for geothermal systems are reversible units for heating, cooling and domestic hot water by external three-way valve (accessory). Both heat pumps MTD are suitable for traditional heating systemsand radiant panels. The latter, working with water at lower temperatures, ensure a higher yield and are a particularly appreciated for new buildings with low energy consumption that point on using renewable energy resources.
The installation is greatly simplified through the integration of the group and hydraulic technology Full floating simply by connecting the unit to water plant and electricity so that it can be put into operation.

Commands

User interface unit on board, accessible from the outside with a not touch system
Floating Set Once ever y 3 minutes an algorithm automatically optimises the water set point in relation to the compressor operating time and the temperatures of the water in the system. he water storage tank is no longer indispensable because it is compensated by the Floating Set function, with resulting reduction in: size; weight; installation times; system setting-up times.
Floating Flow The controller manages the modulation of the active components (pump and electronic flow valve) through pressure transducers and temperature sensors. The performance of the unit may thus be optimised for different operating conditions, such as traditional fan coil system and panel heating system, ensuring: broader operating limits; easier start-up of installations with both high and low water temperatures; faster system setup.
The electronic menu allows to manage:
- domestic hot water production by external three-way valve (accessory)
- a zone of direct heating
- circulator on system and source side
- outdoor temperature sensor for water plant side modular set point compensation (accessory)

Versioni

BWR MTD	Medium temperature geothermal reversible heat pump for water heating up to 55°C

Features

Structure and base in hot galvanised epoxy powder coated steel.
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection.
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper.
Soft starter for 230V/1/50Hz units /ms
Phase sequence control relay
The water circuit comes complete with:

- Variable flow circulator for 0011÷0031 models and multistage centrifugal variable flow pump for models 0071÷0121, plant side
- Variable flow circulator for 0011÷0031 models, multistage centrifugal variable flow pump for models 0071-0121 on source side (for geothermal systems, closed vertical or horizontal loops)
- Safety valve.
- Expansion tank.
- Manual filling assembly
- Pressure gauge.
- Air vent valve.
- Drain valve on both plant and source circuits.
- Differential pressure switch on source side and system side

Main accessories

- HSW12 remote keyboard
- External temperature sensor (mandatory with HSW12 remote keyboard)
- Three-way valve for domestic hot water
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- 1,2,3 kw single-phase electric heater kit

BWR MTD

Models			0011m	0021m	0025m	0031m	0041m	0011ms	0021ms	0025ms	0031ms	0041ms
Nominal heating power	(1)	kW	5,40	5,90	7,30	9,20	11,7	5,40	5,90	7,30	9,20	11,7
Total absorbed power	(2)	kW	1,34	1,50	1,82	2,35	2,80	1,34	1,50	1,82	2,35	2,80
COP		*	4,03	3,93	4	3,92	4,18	4,03	3,93	4	3,92	4,18
Cooling capacity	(3)	kW	7,10	7,60	9,80	12	15,1	7,10	7,60	9,80	12	15,1
Total absorbed power	(2)	kW	1,60	1,70	1,96	2,53	3,27	1,60	1,70	1,96	2,53	3,27
EER		*	4,44	4,47	5	4,74	4,62	4,44	4,47	5	4,74	4,62
Heating capacity	(4)	kW	5,20	5,70	7,10	9	11,3	5,20	5,70	7,10	9	11,3
Total absorbed power	(2)	kW	1,70	1,90	2,30	3	3,60	1,70	1,90	2,30	3	3,60
COP		*	3,06	3	3,09	3	3,14	3,06	3	3,09	3	3,14
Cooling capacity	(5)	kW	5,20	5,60	7,20	8,80	11,3	5,20	5,60	7,20	8,80	11,3
Total absorbed power	(2)	kW	1,53	1,70	2	2,60	3,20	1,53	1,70	2	2,60	3,20
EER		*	3,40	3,29	3,60	3,38	3,53	3,40	3,29	3,60	3,38	3,53
ESEER			4,03	3,73	4,26	3,95	3,90	4,03	3,73	4,26	3,95	3,90
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R410A									
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Source side pump type	(6)		Ci	Ci	Ci	Ci	Ce	Ci	Ci	Ci	Ci	Ce
Electrical power supply		V-Ph~Hz	230-1~50									
Start-up current		A	58	61	82	97	130	26	27	37	44	59
Sound power	(7)	dB(A)	52	52	53	53	58	52	52	53	53	58
Sound pressure	(8)	dB(A)	38	38	39	39	44	38	38	39	39	44
DIMENSION												
L		mm	560									
H		mm	980									
P		mm	575									
Operational weight		kg	148	148	150	152	160	148	148	150	152	160

Models			0021t	0025t	0031t	0041t	0051t	0061t	0071t	0091t	0101t	0121t
Nominal heating power	(1)	kW	5,90	7,50	9,10	12,2	13,7	16	19,8	23	26,5	33,3
Total absorbed power	(2)	kW	1,40	1,74	2,10	2,80	3,40	3,50	4,40	4,90	5,80	7,30
COP		*	4,21	4,31	4,33	4,36	4,03	4,57	4,50	4,69	4,57	4,56
Cooling capacity	(3)	kW	7,60	9,50	12	15,7	18	21,3	26,9	30,7	34,8	44,8
Total absorbed power	(2)	kW	1,60	1,84	2,50	3,30	3,70	4,10	5,15	5,95	7	8,80
EER		*	4,75	5,16	4,80	4,76	4,86	5,20	5,22	5,16	4,97	5,09
Heating capacity	(4)	kW	5,70	7	8,70	11,8	12,9	15,2	18,8	21,8	25,1	31,9
Total absorbed power	(2)	kW	1,90	2,20	2,70	3,70	4,10	4,40	5,60	6,20	7,40	9
COP		*	3	3,18	3,22	3,19	3,15	3,45	3,36	3,52	3,39	3,54
Cooling capacity	(5)	kW	5,60	7,30	8,90	11,8	13,2	15,7	19,8	22,9	26	33,4
Total absorbed power	(2)	kW	1,63	1,90	2,41	3,19	3,80	4	5,10	5,80	6,80	8,40
EER		*	3,44	3,84	3,69	3,70	3,47	3,93	3,88	3,95	3,82	3,98
ESEER			3,97	4,54	4,33	4,08	3,92	4,51	4,40	4,61	4,33	4,37
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R410A									
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ce	Ce	Ce	Ce
Source side pump type	(6)		Ci	Ci	Ci	Ce	Ce	Ce	Ce	Ce	Ce	Ce
Electrical power supply		V-Ph~Hz	400-3N~50									
Start-up current		A	32	35	48	64	64	75	95	111	118	140
Sound power	(7)	dB(A)	52	52	52	58	58	59	66	66	70	70
Sound pressure	(8)	dB(A)	38	38	38	44	44	45	51	51	55	55
DIMENSION												
L		mm	560	560	560	560	560	560	680	680	680	680
H		mm	980	980	980	980	980	980	1150	1150	1150	1150
P		mm	575	575	575	575	575	575	780	780	780	780
Operational weight		kg	148	150	152	160	170	175	220	230	235	250

NOTE

(1) Condenser water in-out 30/35°C (plant side), Evaporator water in-out 0/-3°C (source side)
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Condenser water in-out 40/45°C (plant side), Evaporator water in-out 0/-3°C (source side)
(5) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent

BWR HT Slim Z1M6÷Z1T11

Reversible heat pump, geothermal source, high water temperature with buffer tank 6,2 ÷ 10,6 kW

Unit description

The Prana Slim heat pump is designed for heating, cooling, and domestic hot water. It is an indoor unit with elegant design and thanks to a special sound insulation, the unit is suitable for a living comfort.

Commands

Electronic control provides great application flexibility. The remote keyboard kit wired indoor and outdoor temperature sensors allow dynamic control of delivery temperature water, optimizing comfort in the room and increasing the energy efficienty. The electronic board PRO EXTENDED allows you to manage:
- domestic hot water production by three-way valve
- circulator on system and source side
- a zone of direct heating
- zone with mix valve for floor heating
- outdoor temperature sensor for water plant side modular set point compensation
- integration by solar panels
- several solutions through appropriate configurations of the controller

Versioni

BWR HT Slim	High temperature heat pump, geothermal source, for water heating up to 60°C, reversible

Features

Structure and base in hot galvanised epoxy powder coated steel
180-litre tank with built-in coil for domestic hot water, with fittings for connecting solar panels or hightemperature fixtures (e.g. fan coils)
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection
High-efficiency single-and three-phase SCROLL compressor to allow water up to 60 °C to be produced
Also suitable for traditional radiator systems
The compressor and plate heat exchangers are housed in a suitably insulated enclosure to limit vibrations and noise. This enclosure can be removed from the unit to make maintenance easier
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper
Soft starter for 230V/1/50Hz units
Phase sequence control relay
The water circuit comes complete with:
- Circulator on system side
- Circulator on source side (for geothermal systems, closed vertical or horizontal loops)
- Three-way valve for domestic hot water
- 180Xlt domestic hot water storage tank
- Safety valve
- Expansion tank built into the heat pumps tank
- Manual filling assembly
- Pressure gauge
- Drain valve
- Air vent valve
- Differential pressure switch on source side and system side
- Outside air sensor wired

Main accessories

- Room unit wired
- Room thermostat wired based
- Room unit wireless
- Outside air sensor wireless
- NTC probe for select plant diagram or solar panel
- Heating element kit

BWR HT Slim

Models			Z1M6	Z1M9	Z1M11	Z1T6	Z1T9	Z1T11
Nominal heating power	(1)	kW	6,21	8,66	10,6	6,04	8,43	10,5
Total absorbed power	(2)	kW	1,60	2,22	2,68	1,55	2,13	2,60
COP		*	3,88	3,90	3,96	3,90	3,96	4,02
Cooling capacity	(3)	kW	9,55	13,2	15,5	9,36	12,9	15,6
Total absorbed power	(2)	kW	1,46	2,11	2,72	1,45	2,06	2,64
EER		*	6,54	6,25	5,71	6,46	6,27	5,92
Heating capacity	(4)	kW	6,04	8,41	10,3	5,89	8,20	10,2
Total absorbed power	(2)	kW	2,02	2,80	3,35	1,97	2,71	3,24
COP		*	2,99	3	3,08	2,99	3,03	3,14
Cooling capacity	(5)	kW	6,67	9,24	11,1	6,58	9,12	11,1
Total absorbed power	(2)	kW	1,53	2,17	2,67	1,49	2,09	2,59
EER		*	4,36	4,26	4,16	4,42	4,36	4,28
Hot water tank		l	180					
Compressor type			SCROLL					
N. Compressors	N.		1					
Refrigerant			R407C					
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci
Source side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	37	60	68	32	46	50
Sound power	(7)	dB(A)	42	42	46	42	42	46
Sound pressure	(8)	dB(A)	28	28	32	28	28	32
DIMENSION								
L		mm	600					
H		mm	1940					
P		mm	570					
Operational weight		kg	286	293	300	286	293	300

NOTE
(1) Condenser water in-out 30/35°C (plant side), Evaporator water in-out 0/-3°C (source side)
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Condenser water in-out 40/45°C (plant side), Evaporator water in-out 0/-3°C (source side)
(5) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(6) Ci=Circulator; Ce=Centrifugal
(7) Sound power level according to ISO 9614 and Eurovent 8/1
(8) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent

BWR HT Cube Z1M6÷Z1T28

Reversible heat pump, geothermal source, high water temperature
6,2 ÷ 27,0 kW

Unit description
The Prana Cube heat pump is designed for heating, cooling, and domestic hot water, with external three-way valve. It is an indoor unit with elegant design and thanks to a special sound insulation, the unit is suitable for a living comfort.

Commands
Electronic control provides great application flexibility. The remote keyboard kit wired indoor and outdoor temperature sensors allow dynamic control of delivery temperature water, optimizing comfort in the room and increasing the energy efficienty. The electronic board PRO EXTENDED allows you to manage:
- domestic hot water production by three-way valve
- circulator on system and source side
- a zone of direct heating
- zone with mix valve for floor heating
- outdoor temperature sensor for water plant side modular set point compensation
- integration by solar panels
- several solutions through appropriate configurations of the controller

Versioni

BWR HT Cube	High temperature heat pump, geothermal source, for water heating up to 60°C, reversible

Features
Structure and base in hot galvanised epoxy powder coated steel
High-efficiency plate exchangers in AISI 316 stainless steel with low pressure drops, fitted with heating element for frost protection
High-efficiency single-and three-phase SCROLL compressor to allow water up to 60 °C to be produced
Also suitable for traditional radiator systems
The compressor and plate heat exchangers are housed in a suitably insulated enclosure to limit vibrations and noise. This enclosure can be removed from the unit to make maintenance easier
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper
Soft starter for 230V/1/50Hz units
Phase sequence control relay
The water circuit comes complete with:
- Circulator on system side
- Circulator on source side (for geothermal systems, closed vertical or horizontal loops)
- Drain valve
- Differential pressure switch on source side and system side
- Outside air sensor wired

Main accessories
- Room unit wired
- Room thermostat wired based
- Room unit wireless
- Outside air sensor wireless
- NTC probe for select plant diagram or solar panel
- Heating element kit
- Three-way valve for domestic hot water
- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump

BWR HT Cube

Models			Z1M6	Z1M9	Z1M11	Z1T6	Z1T9	Z1T11	Z1T13	Z1T17	Z1T24	Z1T28
Nominal heating power	(1)	kW	6,21	8,66	10,6	6,04	8,43	10,5	12,6	16,9	23,3	27
Total absorbed power	(2)	kW	1,60	2,22	2,68	1,55	2,13	2,60	3,17	4,14	5,74	6,53
COP		*	3,88	3,90	3,96	3,90	3,96	4,02	3,96	4,09	4,06	4,14
Cooling capacity	(3)	kW	9,55	13,2	15,5	9,36	12,9	15,6	19	24,9	34,7	40
Total absorbed power	(2)	kW	1,46	2,11	2,72	1,45	2,06	2,64	3,76	4,95	6,14	7
EER		*	6,54	6,25	5,71	6,46	6,27	5,92	5,04	5,02	5,65	5,71
Heating capacity	(4)	kW	6,04	8,41	10,3	5,89	8,20	10,2	12,2	16,4	22,6	26,2
Total absorbed power	(2)	kW	2,02	2,80	3,35	1,97	2,71	3,24	3,94	5,24	7,12	8,12
COP		*	2,99	3	3,08	2,99	3,03	3,14	3,09	3,14	3,18	3,23
Cooling capacity	(5)	kW	6,67	9,24	11,1	6,58	9,12	11,1	13,4	17,5	24,3	28,2
Total absorbed power	(2)	kW	1,53	2,17	2,67	1,49	2,09	2,59	3,38	4,53	6,01	6,77
EER		*	4,36	4,26	4,16	4,42	4,36	4,28	3,97	3,87	4,05	4,16
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R407C									
Plant side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Source side pump type	(6)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	37	60	68	32	46	50	66	101	123	127
Sound power	(7)	dB(A)	42	42	46	42	42	46	47	51	55	55
Sound pressure	(8)	dB(A)	28	28	32	28	28	32	33	37	41	41
DIMENSION												
L		mm	600	600	600	600	600	600	600	600	900	900
H		mm	940	940	940	940	940	940	940	940	1117	1117
P		mm	570	570	570	570	570	570	570	570	648	648
Operational weight		kg	160	180	190	160	180	190	200	220	240	250

NOTE
(1) Condenser water in-out 30/35°C (plant side), Evaporator water in-out 0/-3°C (source side)
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Condenser water in-out 40/45°C (plant side), Evaporator water in-out 0/-3°C (source side)
(5) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(6) Ci=Circulator; Ce=Centrifugal
(8) Sound power level according to ISO 9614 and Eurovent 8/1
(9) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.

* secondo Eurovent

BWR DHW 0011m÷0121t

Reversible heat pump, total heat recovery, geothermal source 4,5 ÷ 29,7 kW

Unit description

PRANA DHW is the heat pump new generation able to operate throughout the year in any operating mode: either a single cycle (air conditioning, heating, hot water) and combined cycle (hot water along with air conditioning or heating). Energy efficiency is highest during the summer cycle, when, thanks to the full recovery of the heat, the production of hot water is free. During the combined use, the DHW exchanger uses the temperature of the hot exhaust gases to gets inside the accumulation sanitary water as high as 65° C.
The advanced CLIMAVENETA fully patented electronic ensures the highest flexibility of operation, a rapid speed and a significant increase in the overall COP, which go hand in hand with electricity and space reduction. Advantages, combined with the possibility of completely eliminating the traditional boiler, making heat pumps PRANA DHW the ideal solution for energy saving applications in residential, hotel and small sector.

Commands

User interface unit on board, accessible from the outside with a not touch system
BWR-DHW heats water stored in the tank as energy storage. It also comes with a state-of-the-art electronic unit, which independently controls the modes of operation. The appliance can operate throughout the year in any mode, both with single cycle (cooling, heating, hot water) and with combined cycle (hot water together with cooling or hot water together heating).During the summer cycle there is maximum energy saving through total heat recovery. This energy is completely free of charge with regard to the production of hot water.

Versioni

BWR DHW Geothermal reversible heat pump with domestic hot water supply with total heat recovery

Features

Structure and base in hot galvanised epoxy powder coated steel.
Case panels are insulated within low noise material for further improvement of silence
Rubber vibration damper.
Hermetic scroll type compressors, equipped with the crankcase heater and thermal protection
Stainless steel (AISI 316) with high efficiency and low pressure drop plate to plate exchanger (at the domestic hot water side). It is positioned next after the compressor, it ensures the domestic hot water production. That can work either in full recovery or in part, with the constant optimization of efficiency through logic advanced adjusting controller
Exchangers plant side plate of stainless steel AISI 316 with high efficiency and low pressure drop meets the supply of both hot or cold water for the facility, regardless of the domestic hot water
High efficiency and low pressure drop stainless steel (AISI 316) source side plate exchanger
Soft starter for 230V/1/50Hz units /ms
The water circuit comes complete with:

- Variable flow circulator for 0011÷0031 models and multistage centrifugal variable flow pump for models 0071÷0121, plant side
- Domestic hot water, water side, variable flow pump
- Variable flow circulator for 0011÷0031 models, multistage centrifugal variable flow pump for models 0071-0121 on source side (for geothermal systems, closed vertical or horizontal loops)
- Safety valve
- Expansion tank
- Drain valve on both plant and source circuits

Main accessories

- Buffer tank 35,100,200 liters
- Hot water cylinder 300,500 liters
- 300 litres thermal store for domestic hot water, for kit DOMH2O
- 300,500,1000 litres thermal store for domestic hot water with solar heat exchanger, for kit DOMH2O
- DOMH2O15 e DOMH2O24 kit for domestic hot water with external heat exchanger plate-to-plate and pump
- Remote keyboard
- Removable metal mesh water filter kit

BWR DHW

Models			0011m	0021m	0025m	0031m	0041m	0011ms	0021ms	0025ms	0031ms	0041ms
Nominal heating power	(1)	kW	4,50	5,70	6,70	7,80	9,70	4,50	5,70	6,70	7,80	9,70
Total absorbed power	(2)	kW	1,30	1,60	1,90	2,30	2,80	1,30	1,60	1,90	2,30	2,80
COP			3,44	3,45	3,48	3,39	3,51	3,44	3,45	3,48	3,39	3,51
Cooling capacity	(3)	kW	7,30	9,20	11	12,5	15,3	7,30	9,20	11	12,5	15,3
Total absorbed power	(2)	kW	1,30	1,70	2	2,40	2,90	1,30	1,70	2	2,40	2,90
EER			5,62	5,41	5,50	5,21	5,28	5,62	5,41	5,50	5,21	5,28
Total absorbed power	(4)	kW	6	7,80	9,20	10,3	12,9	6	7,80	9,20	10,3	12,9
Total absorbed power		kW	1,90	2,40	2,90	3,40	4,20	1,90	2,40	2,90	3,40	4,20
Recovery heating capacity	(4)	kW	7,90	10	11,9	13,5	16,8	7,90	10	11,9	13,5	16,8
Heating capacity	(5)	kW	4,30	5,50	6,60	7,70	9,40	4,30	5,50	6,60	7,70	9,40
Total absorbed power	(2)	kW	1,70	2,10	2,50	3	3,50	1,70	2,10	2,50	3	3,50
COP			2,60	2,63	2,64	2,59	2,69	2,60	2,63	2,64	2,59	2,69
Cooling capacity	(6)	kW	5,10	6,50	7,70	8,90	11	5,10	6,50	7,70	8,90	11
Total absorbed power	(2)	kW	1,30	1,70	2	2,40	2,90	1,30	1,70	2	2,40	2,90
EER			3,92	3,82	3,85	3,71	3,79	3,92	3,82	3,85	3,71	3,79
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R407C									
Plant side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Recovery side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Source side pump type	(7)		Ci	Ci	Ci	Ci	Ce	Ci	Ci	Ci	Ci	Ce
Electrical power supply		V-Ph~Hz	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50	230-1~50
Start-up current		A	47	61	76	100	114	21	27	34	45	51
Sound power	(8)	dB(A)	52	52	53	53	58	52	52	53	53	58
Sound pressure	(9)	dB(A)	38	38	39	39	44	38	38	39	39	44
DIMENSION												
L		mm	560									
H		mm	980									
P		mm	575									
Operational weight		kg	188	188	190	195	215	188	188	190	195	215

Models			0021t	0025t	0031t	0041t	0051t	0061t	0071t	0091t	0101t	0121t
Nominal heating power	(1)	kW	5,60	6,60	7,70	9,50	11,4	13,9	18,8	21,2	24,4	29,7
Total absorbed power	(2)	kW	1,60	1,90	2,20	2,70	3,20	3,70	5,10	5,60	6,60	8,30
COP			3,50	3,51	3,44	3,56	3,57	3,72	3,70	3,81	3,72	3,57
Cooling capacity	(3)	kW	9,20	10,9	12,4	15,4	19,1	22,5	30,2	34,4	38,9	49,7
Total absorbed power	(2)	kW	1,60	1,90	2,30	2,80	3,60	4,10	5,50	6,10	7,30	9,30
EER			5,75	5,74	5,39	5,50	5,31	5,49	5,49	5,64	5,33	5,34
Total absorbed power	(4)	kW	7,70	9,10	10,3	13,1	16	18,9	25,5	29	32,7	41,1
Total absorbed power		kW	2,30	2,80	3,30	4	4,90	5,70	7,70	8,40	10,2	12,8
Recovery heating capacity	(4)	kW	9,90	11,7	13,4	16,9	20,6	24,2	32,7	36,9	42,4	53,1
Heating capacity	(5)	kW	5,40	6,50	7,50	9,30	11,1	13,3	17,9	20,5	23,5	28,4
Total absorbed power	(2)	kW	2	2,40	2,90	3,40	4	4,70	6,50	7	8,30	10,5
COP			2,67	2,67	2,63	2,75	2,78	2,86	2,77	2,95	2,84	2,69
Cooling capacity	(6)	kW	6,50	7,70	8,80	10,9	13,4	16,1	21,7	24,6	28	34,8
Total absorbed power	(2)	kW	1,70	2	2,30	2,80	3,40	4	5,40	5,90	7	8,90
EER			3,82	3,85	3,83	3,89	3,94	4,03	4,02	4,17	4,00	3,91
Compressor type			SCROLL									
N. Compressors		N.	1									
Refrigerant			R407C									
Plant side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ce	Ce	Ce	Ce
Recovery side pump type	(7)		Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci	Ci
Source side pump type	(7)		Ci	Ci	Ci	Ce	Ce	Ce	Ce	Ce	Ce	Ce
Electrical power supply		V-Ph~Hz	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50	400-3N~50
Start-up current		A	32	40	46	50	66	74	95	111	118	140
Sound power	(8)	dB(A)	52	52	52	58	58	59	66	66	70	70
Sound pressure	(9)	dB(A)	38	38	38	44	44	45	51	51	55	55
DIMENSION												
L		mm	560	560	560	560	560	560	680	680	680	680
H		mm	980	980	980	980	980	980	1150	1150	1150	1150
P		mm	575	575	575	575	575	575	780	780	780	780
Operational weight		kg	188	190	195	215	228	233	260	270	280	305

NOTE

(1) Condenser water in-out 30/35°C (plant side), Evaporator water in-out 0/-3°C (source side)
(2) According to Eurovent
(3) Evaporator water in-out 23/18°C (plant side), Condenser water in-out 30/35°C (source side)
(4) Water in-out 23/18°C (plant side), water in-out 45/50°C (total recovery side)
(5) Condenser water in-out 40/45°C (plant side), Evaporator water in-out 0/-3°C (source side)
(6) Evaporator water in-out 12/7°C (plant side), Condenser water in-out 30/35°C (source side)
(7) Ci=Circolatore; Ce=Centrifuga
(8) Sound power level according to ISO 9614 and Eurovent 8/1
(9) Average sound pressure level above one reflecting surface (Q=2) at 1 meter from the outside dimensions of the unit.