AUDAX TOP ErP

Air/water inverter heat pumps

WIDE RANGE OF PRODUCTS

Heat pumps are among the best solutions for environment-friendly climate control in homes and offices, summer and winter. The new Immergas range **is dedicated to professionals who are looking for systems with a strong use of renewable energy, integrated or hybrid systems that can provide great comfort while complying with regulations**.

AUDAX TOP ErP is the name of our **new self-contained air/water units**. Inverter technology modulates power, reduces power absorption and delivers high performance. It features a low-consumption circulator and a control panel that can be installed inside the home to control the unit remotely. AUDAX TOP ErP units are **suitable for any system solution** and can be combined with a separate storage tank for production of domestic hot water. The range includes:

- **3 single-phase versions**, designed for home applications (6, 8 or 12 kW)
- **1 three-phase version**, ideal for commercial facilities and offices (16 kW)

OPTIMAL OPERATION WITH FAN COIL AND RADIANT PANELS

With primary heating flow up to 60 °C, AUDAX TOP ErP units can work on low or medium temperature heating systems; in the summer cooling phase, they are ideal combined with a fan coil or radiant panels in association with a dehumidifier (see page 15).

FAST, EASY INSTALLATION

Featuring standard low-consumption circulator, expansion vessel, vibration dampers, 1" Y-shaped water filter and condensate drain fitting, our AUDAX TOP ErP heat pumps are also easy to install.

LOW ABSORPTION AND REDUCED NOISE LEVEL

Thanks to the use of inverter technology, power consumption is lower but heating and cooling performance remain high, especially during the in-between seasons when the heat load is reduced. Thanks to special technical features, sound emissions have also been reduced.

INTEGRATED SYSTEMS

Air-water heat pumps can be used as single components but also in an **integrated system** (such as boiler - solar thermal - heat pumps): these system solutions allow obtaining the maximum benefit from the different energy production systems.

For a correct functioning of the entire system, Immergas proposes an "intelligent" **system controller, able to determine the more convenient energy source in that moment** and therefore choose the appliance to be activated.

Moreover, the system controller allows:
- **maintaining the system performance high** in any circumstances
- **containing to the maximum the pollutant emissions** in the atmosphere
- **managing all the technological system** with a single device
- **controlling up to 4 AUDAX TOP ErP** in cascade

USER-FRIENDLY INTERFACE

The standard control panel not only displays operation diagnostics but also serves as weekly thermostat for **managing heating/cooling** with room temperature/humidity sensor in stand-alone applications. Easy connections by only 2 BUS cables and 2 power supply cables to connect It at AUDAX TOP ErP. The control panel doesn't need battery.

The control panel lets you:
- set room temperature (comfort/economy)
- set time and climate curve (in heating and cooling mode)
- view error codes for the heat pump

MAIN FEATURES AUDAX TOP

- **Inverter twin-rotary** (PAM and PWM) for all models
- **R410A refrigerant gas**
- **Variable speed fan** (modulating) with low turbolence blades and **Low loss Front grill**
- **Water/gas** steel heat **exchanger**
- Electronic **expansion valve**
- Electronic expansion valve and 4 way valve (for **reversible operation**)
- **Hot/cold** (reversible) **functioning**
- **Outdoor** installation
- **Espansion vessel as standard**
- **Low consumption system circulation pump**
- Heat pump setting and regulation (stand alone) through **control panel**, autodiagnostic with error code visualization
- Possible installation at **D.H.W. storage tank**
- **External probe as standard**

AUDAX TOP 6 ErP model

| Technical characteristics	Unit of measurement	AUDAX TOP 6 ErP	AUDAX TOP 8 ErP	AUDAX TOP 12 ErP	AUDAX TOP 16 ErP
Code heat pump		**3.025557**	**3.025558**	**3.025560**	**3.025562**
Refrigerant quantity (R410A)	g	1.350	1.810	2.450	3.385
Heating capacity (system water 35 °C)	kW	5,76	7,16	11,86	15,00
Heating capacity (system water 45 °C)	kW	5,76	7,36	12,91	14,50
Flow temperature range (CH)	°C	20 - 60	20 - 60	20 - 60	20 - 60
Outside air temperature range (CH)	°C	- 20/30	- 20/30	- 20/30	- 20/30
COP (system water 35 °C)		4,28	3,97	3,95	4,20
COP (system water 45 °C)		3,05	3,19	3,03	3,30
Heating min/max (system water 35 °C)	kW	1,08 / 6,14	1,34 / 8,00	3,61 / 15,45	3,44 / 17,41
Heating min/max (system water 45 °C)	kW	1,06 / 6,04	1,32 / 7,92	3,47 / 12,95	3,07 / 16,52
Cooling capacity (system water 18 °C)	kW	7,04	7,84	13,54	16,00
Cooling capacity (system water 7 °C)	kW	4,73	5,84	10,24	13,00
Flow temperature range (cooling)	°C	4 - 18	4 - 18	4 - 18	4 - 18
Outside air temperature range (cooling)	°C	46 - 5	46 - 0	46 - 0	46 - 0
EER (system water 18 °C)		3,70	3,99	3,66	3,81
EER (system water 7 °C)		3,00	2,98	2,96	2,91
Cooling min/max (system water 18 °C)	kW	1,20 / 7,49	0,97 / 8,44	5,88 / 16,12	5,72 / 17,31
Cooling min/max (system water 7 °C)	kW	0,73 / 5,33	0,50 / 5,80	3,83 / 11,67	3,75 / 13,55
System circuit max pressure	bar	3	3	3	3
Expansion vessel	l	2	2	3	3
Power supply	V - Hz	230 - 50	230 - 50	230 - 50	400 - 50
Maximum power absorbed	W	2.000	2.700	3.850	6.500
Nominal absorbed current	A	11	14,5	20,7	11,1
Electric protection index	IP	X4	X4	X4	X4
Weight	kg	61	69	104	116

Refer to the following conditions:
heating water/air temperature 30°-35°/7°-6 °C and 40°-45 °C/7°-6 °C
cooling water/air temperature 12°-7 °C/35 °C and 23°-18 °C/35 °C
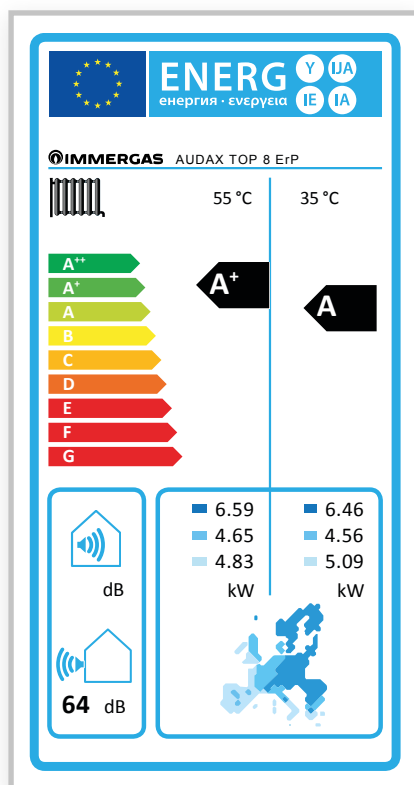
AUDAX TOP 6 ErP

In accordance with the ELD directive (in conformity with regulation 811/2013), we include the label of each heat pump to enable customers to evaluate the products. The labels are shown in the documentation accompanying the units as well as on the immergas.com website in each product's page.
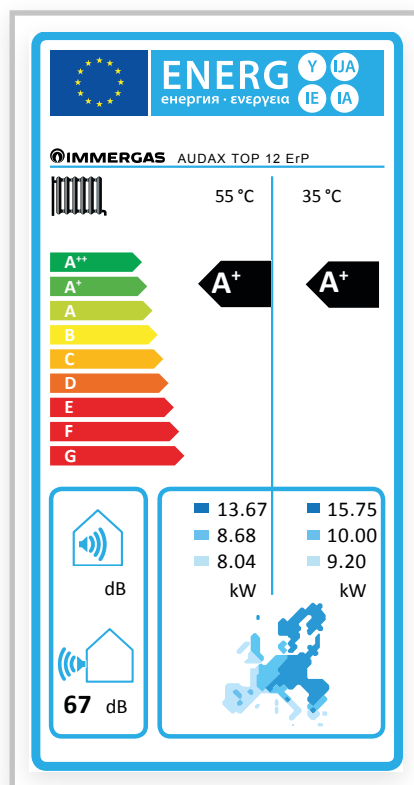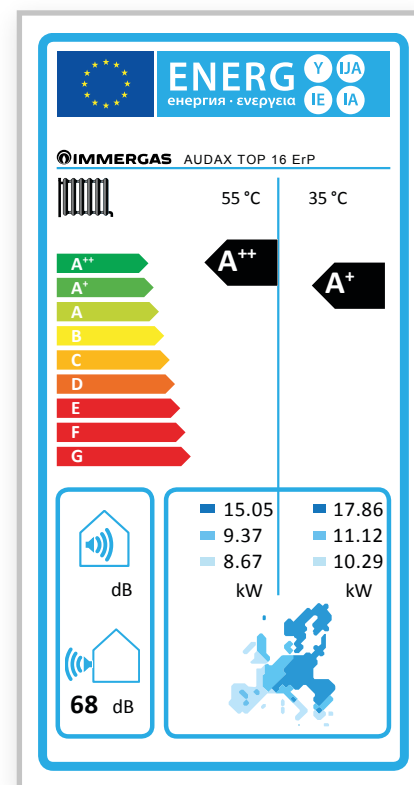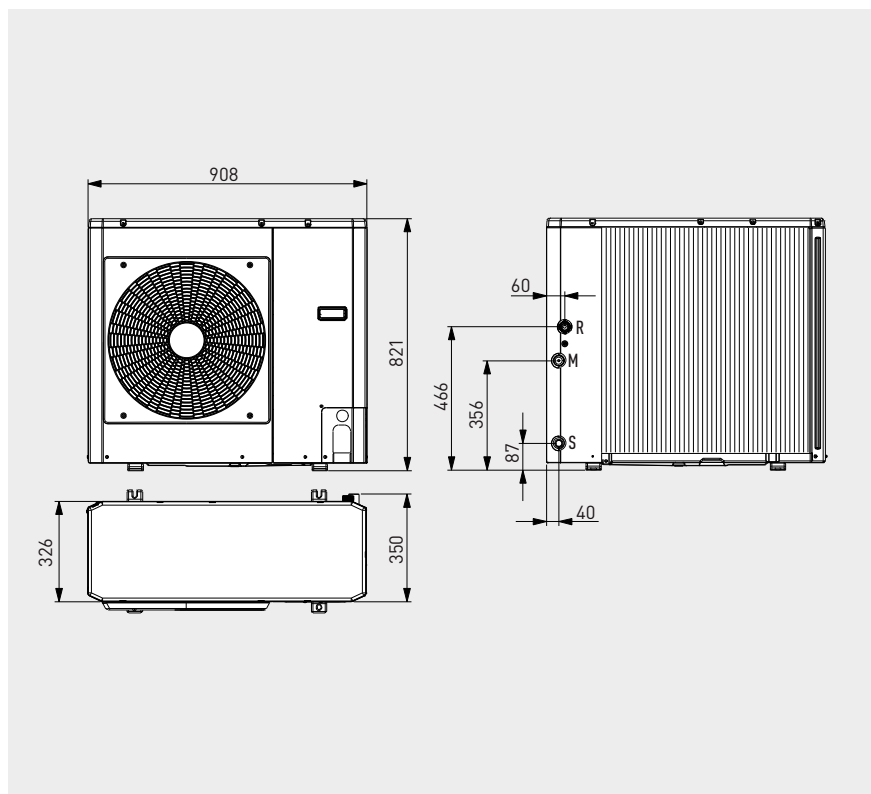
AUDAX TOP 8 ErP
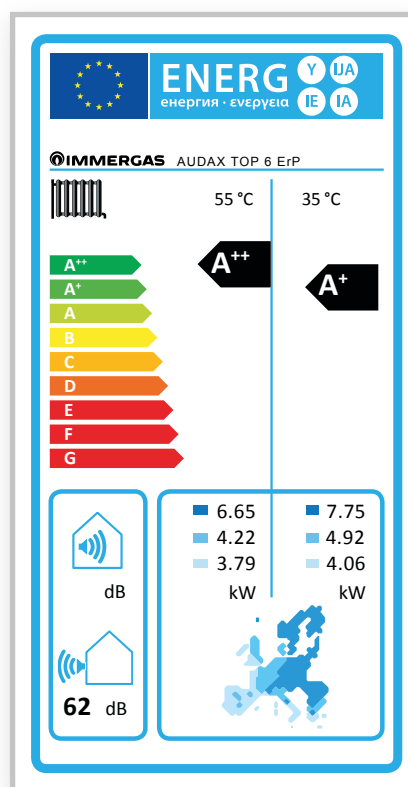
AUDAX TOP 12 ErP

AUDAX TOP 16 ErP

AUDAX TOP 6/8 ErP

Key

R	Water inlet
M	Water outlet
S	Water drain

Connections

Water inlet	Water outlet	Drain
R	M	S
1" M	1" M	16 mm

AUDAX TOP 12/16 ErP
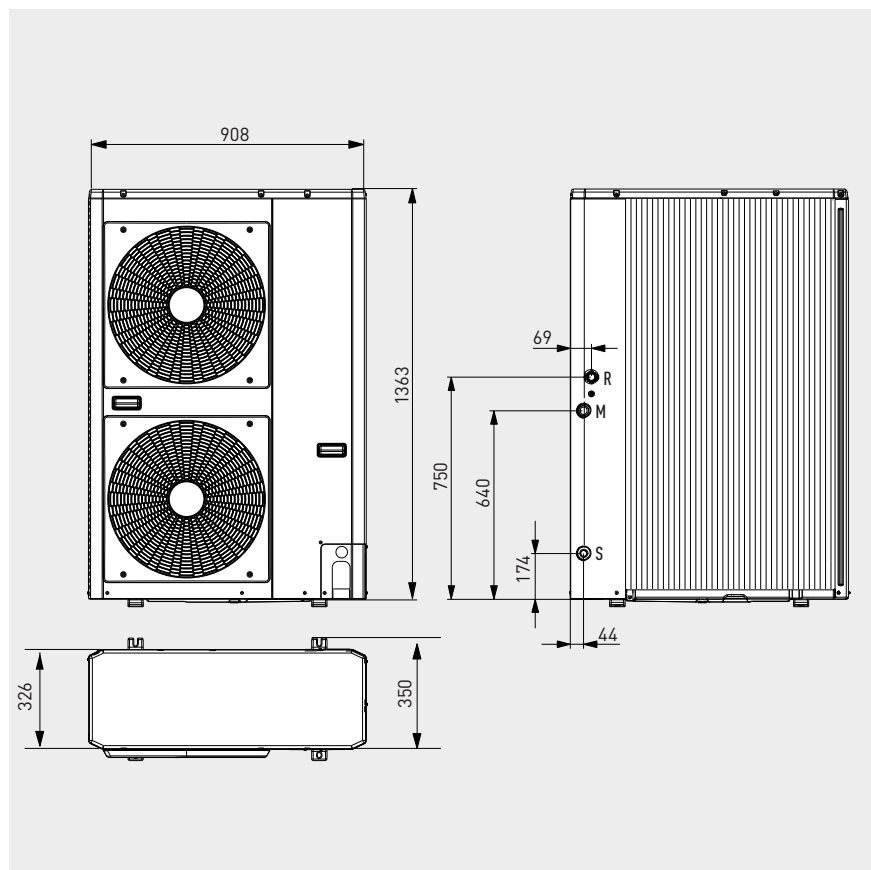
Key

R	Water inlet
M	Water outlet
S	Water drain

Connections

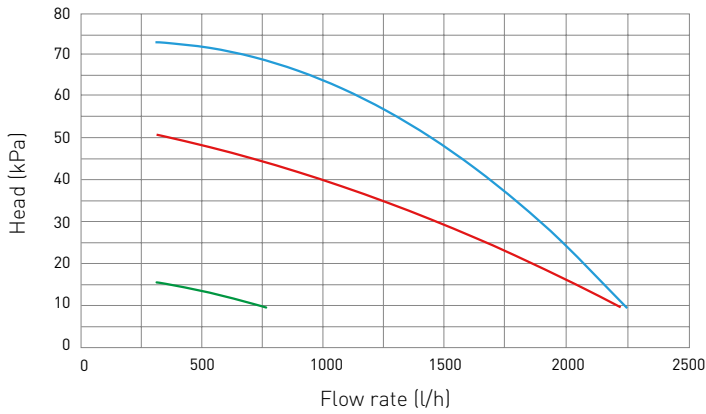| Water inlet	Water outlet	Drain
R	M	S
1" M	1" M	16 mm

Flow rate/head graph
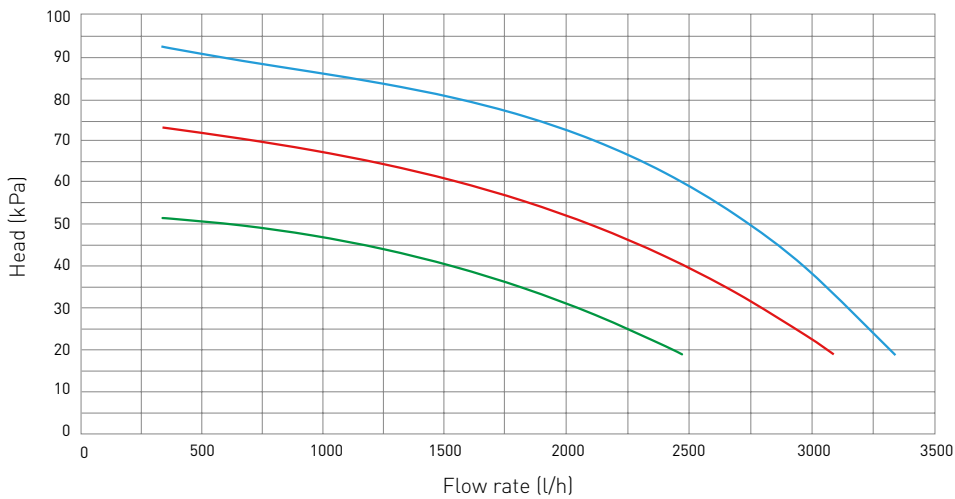## AUDAX TOP 6 ErP
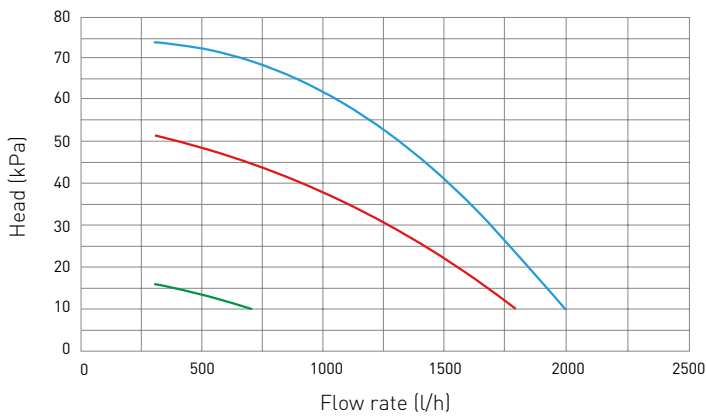
Available head in the system:

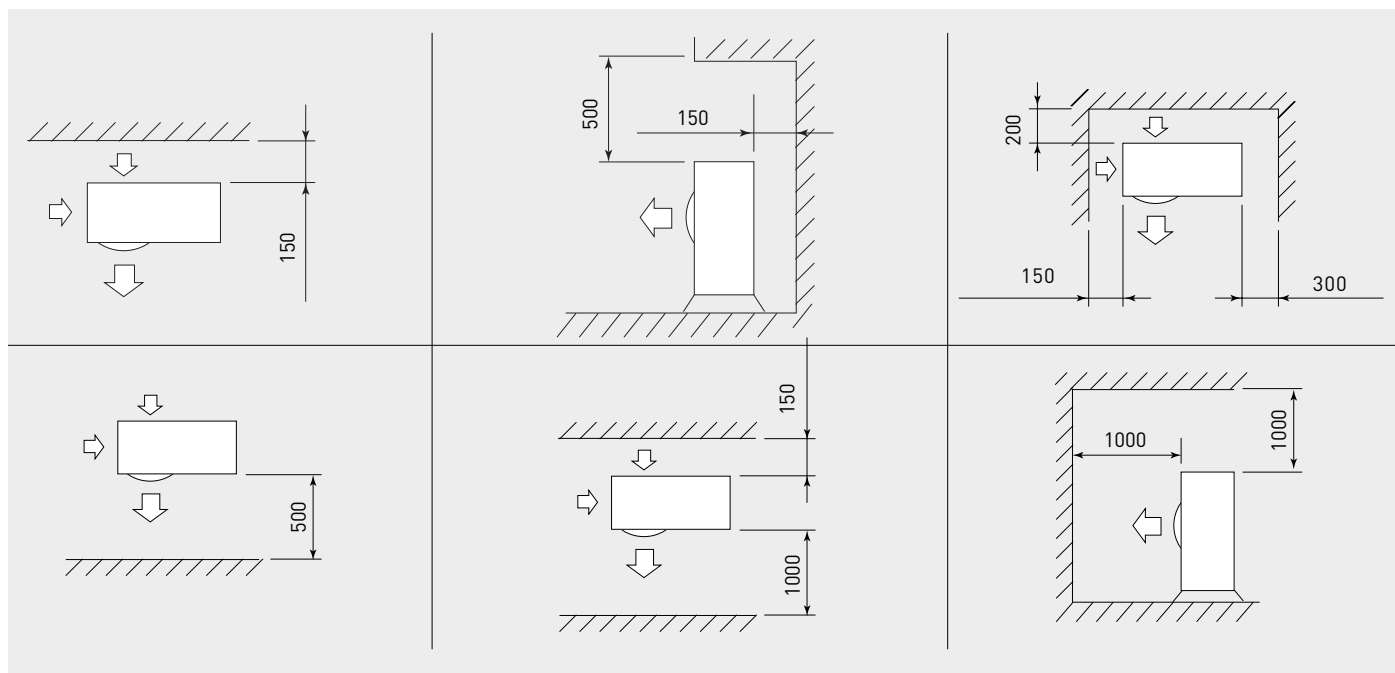— minimum
— medium
— maximum

Flow rate/head graph
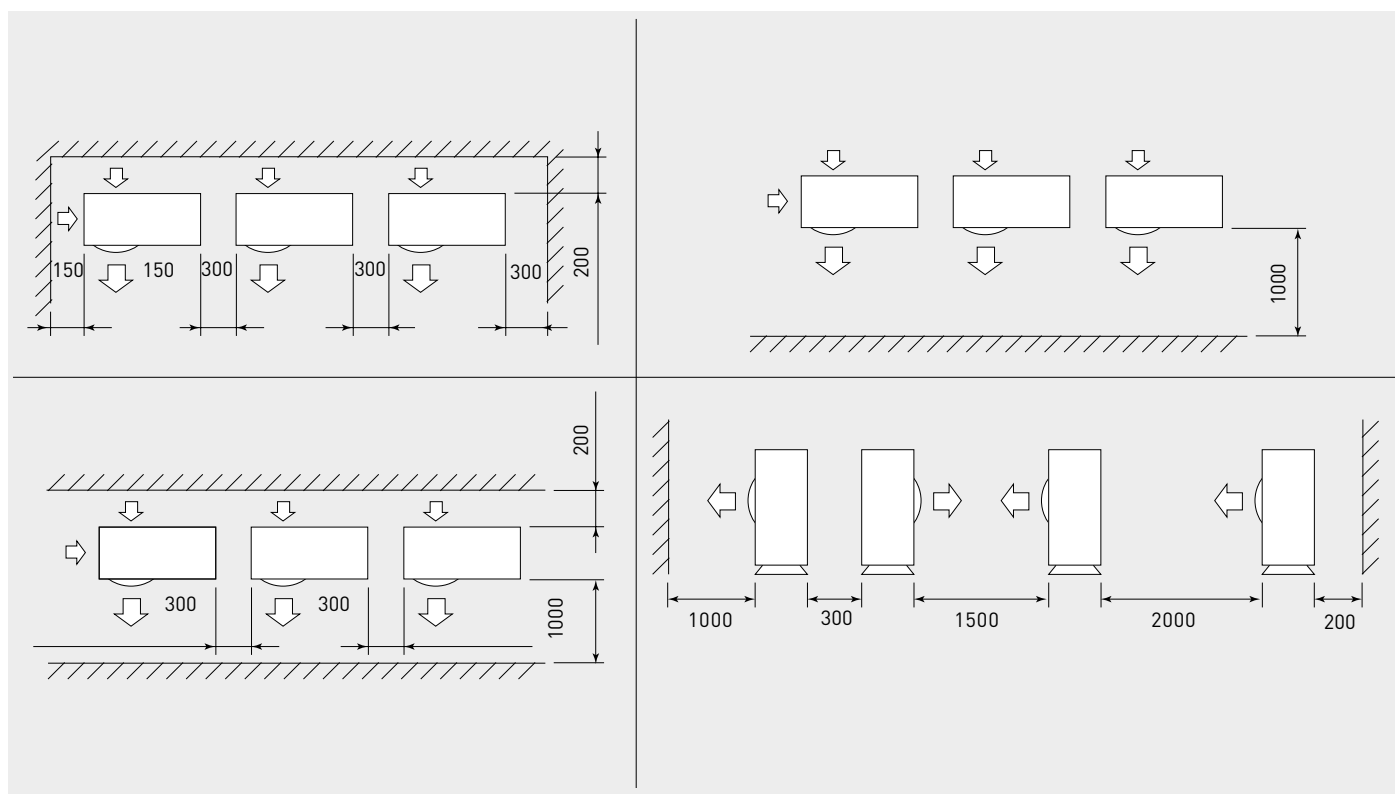## AUDAX TOP 8 ErP

Flow rate/head graph
AUDAX TOP 12/16 ErP

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Minimum distances for AUDAX TOP ErP installation

Minimum distances installation in cascade

CLIMATIC REGULATION

Type	Code	See page
System controller	3.021522	33
System controller expansion kit *	3.021547	33
Remote control kit	3.023364	33
Temperature/humidity active sensor kit	3.021524	34
Room hygrostat**	3.023302	34
CRONO 7 (weekly digital chronothermostat)	3.021622	33
CRONO 7 WIRELESS (wireless weekly digital chronothermostat)	3.021624	33
Storage tank NTC probe *	3.019375	34
Solar collector probe	3.019374	34
EMR 12 VDC relay kit	3.023945	34
SSR 6 VDC relay kit	3.023946	34

* Standard accessory in the hydraulic kits code 3.021527 and 3.021528.
* * To be used with radiant systems that also work in cooling mode.

OPTION KITS

	Code	See page
Distribution manifold kit for 1 direct and 2 mixed temperature zones **	3.021527	35
Distribution manifold kit for 2 mixed temperature zones	3.021528	35
Safety thermostat kit for code 3.021527 and 3.021528	3.013794	34
Horizontal buffer tank with capacity of 25 litres	3.025061	37
Horizontal buffer tank with capacity of 75 litres	3.025062	37
Horizontal buffer tank with capacity of 100 litres	3.025063	37
Horizontal buffer tank with capacity of 200 litres	3.025064	37
Dehumidifier kit (only for recessed installation with codes 3.022146 and 3.022147)*	3.021529	37
Dehumidifier back frame kit*	3.022146	37
Dehumidifier front grille kit*	3.022147	37
Return temperature increase 3-way valve kit	3.020632	35
12 litres system expansion vessel kit	3.011679	35
Integration electric resistance kit 2, 4 or 6 kW for heating system	3.021525	36
Additional 5 kW electric resistance kit for UB 1000/1500 ErP and UB 750 ErP (Thermal solar system)	3.020862	36
Additional 2 kW electric resistance kit for UB 200/300/500 ErP and UB 550/750 ErP (Thermal solar system)	3.020861	36
Wall mounting brackets for AUDAX TOP 6/8 ErP	3.022154	36
Connection kit 1" with anti-vibration flexible pipes and shut-off knobs	3.025954	37

* Useful for radiant systems that work also in cooling.
**Direct zone means a zone operating at maximum temperature of AUDAX TOP ErP or MAGIS PRO ErP set.