

HP BOX

HYDRO BOX

The Hydro Box is an integrated hydraulic indoor unit for air-to-water heat pump systems. It combines buffer storage, an expansion vessel, an electric backup heater, and hydraulic distribution (direct and mixed circuits) into a compact, pre-configured solution for simplified installation and commissioning.



ALL-IN-ONE

Buffer tank, expansion vessel, electric backup heater, hydraulic components, and control interface integrated into one unit.



EASY INSTALLATION

Pre-configured hydraulic design for simplified water pipe installation and reduced installation time.



SAFETY

Integrated safety components, including dirt separator, pressure relief valve, and filling and refill unit.



INTELLIGENT

Integrated Wi-Fi and LAN communication for system monitoring and cloud connectivity.



TECHNICAL SPECIFICATIONS

MODEL		HP3 Box-E-WL	HP1 Box-E-WL
Power supply		380-415V 3N-50Hz	220-240V ~ 50Hz
Rated input [W]		9510	3510
Rated current [A]		14.5	16.1
Dimensions (W*H*D) [mm]		650*1600*560	650*1600*560
Packaging dimensions (W*H*D) [mm]		920*1800*630	920*1800*630
Net weight [kg]		145	145
Gross weight [kg]		171	171
Electric heater [kW]		9	3
Internal water volume [L]		50	50
Monitoring module		Wi-Fi, LAN	Wi-Fi, LAN
Communication port		RS485	RS485
Display		Wired controller, App, Website	Wired controller, App, Website
Max. water pressure	Heating/cooling circuit [MPa(g)]	0.3	0.3
Pump for outdoor unit	Type	DC inverter	DC inverter
	Max. head [m]	9	9
	Power input [W]	2 ~ 90	2 ~ 90
Pump for Zone 1	Type	DC	DC
	Max. head [m]	7.5	7.5
	Power input [W]	5 ~ 60	5 ~ 60
BA filling combination	Function	BA backflow preventer & pressure reducing valve	BA backflow preventer & pressure reducing valve
	Max. inlet pressure [bar]	10	10
	Outlet pressure [bar]	1.5 ~ 3.0	1.5 ~ 3.0
	Outlet pressure (factory setting) [bar]	1.5	1.5
	Max. inlet temperature [°C]	30	30
	Max. outlet temperature [°C]	65	65
Refill water treatment unit	Capacity*1 at 420 µS/cm to < 100 µS/cm [L]	115	115
Expansion vessel for heating/cooling circuit	Volume [L]	20	20
	Max. operating pressure [MPa(g)]	0.3	0.3
	Pre-charge pressure [MPa(g)]	0.15	0.15
Buffer tank	Volume [L]	50	50
	Max. operating pressure [MPa(g)]	0.3	0.3
	Drain connection	G 3/4"	G 3/4"
Connections	Heating flow from outdoor unit	G 1"	G 1"
	Heating return to outdoor unit	G 1"	G 1"
	Flow to heating circuit 1	G 1"	G 1"
	Return from heating circuit 1	G 1"	G 1"
	Flow to pump group of heating circuit 2	G 1"	G 1"
	Return from pump group of heating circuit 2	G 1"	G 1"
	Flow to DHW tank	G 1"	G 1"
	Return from DHW tank	G 1"	G 1"
	Tap water	G 3/4"	G 3/4"
Operating range	Ambient temperature [°C]	5 ~ 45	5 ~ 45
	Heating/cooling water pressure [MPa(g)]	0.1 ~ 0.3	0.1 ~ 0.3

*1 Depending on the feed water quality, temperature, deviations may occur.