

Auto Adaptation

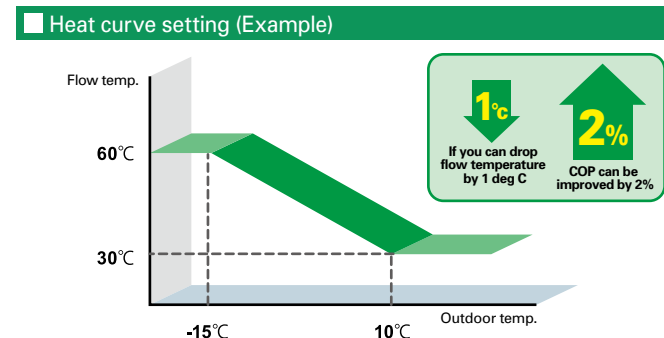
Ecodan – Maximize energy saving while keeping comfort at all times.

No need for complicated settings or adjustments

Aiming to realise further comfort and energy savings, Mitsubishi Electric is proud to introduce a new revolutionary system control. This is based on data indicating that a 1 °C drop in the flow temperature improves the coefficient of performance (COP) of the air-to-water (ATW) system by 2%. In simple terms, this means that comfort and energy savings are dramatically affected by controlling the flow temperature in the system.

In conventional system control, the flow temperature is determined based on the preset Heat curve depending on the actual outdoor temperature. However, this requires a complicated setting involving adjustments to achieve the optimal heat curve according to the heating load of each individual residence.

Compounding the issue, the heat load requirement, temperature and building interior conditions change continuously due to factors such as sunlight, lighting, use of electric appliances, opening/closing of windows and the number of room occupants. Trying to adjust and achieve the optimal flow temperature in response to changes such as these variables is difficult.



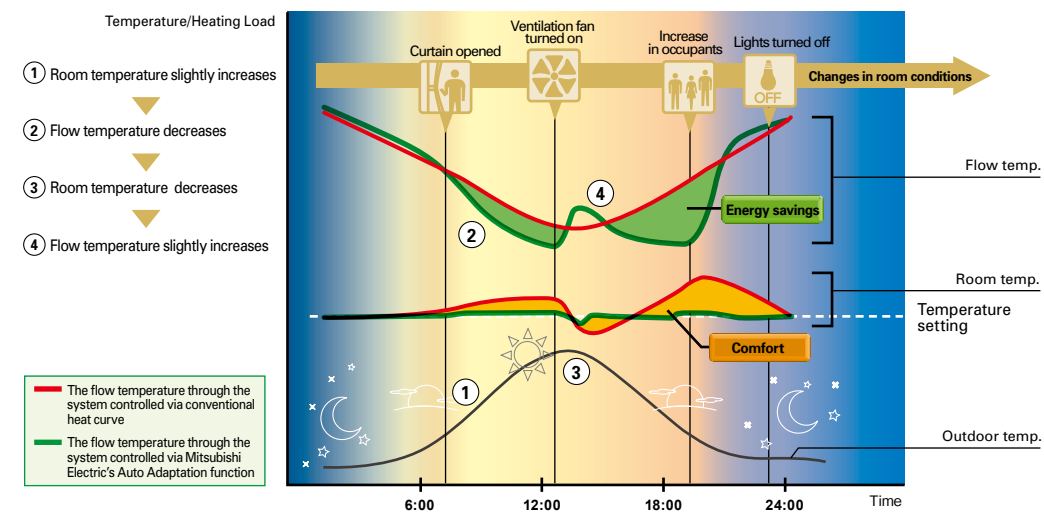
Mitsubishi Electric's Auto Adaptation function automatically tracks changes in the heating load and adjusts the flow temperature accordingly.

Our newly introduced Auto Adaptation function measures the room temperature and outside temperature, then calculates the required heating capacity for the room. Simply stated, the flow temperature is automatically controlled according to the required heating capacity, while optimal room temperature is maintained at all times, ensuring the appropriate heating capacity and preventing wasted energy.

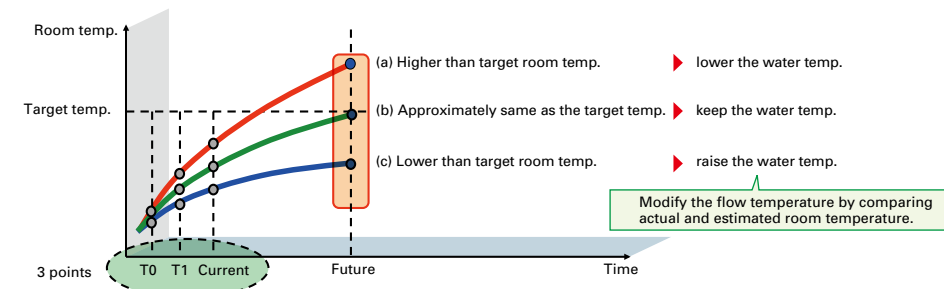
Furthermore, by estimating future changes in room temperature, the system works to prevent unnecessary increases in the flow temperature. Accordingly, room temperature can be kept stable, enhance energy-saving and optimum room comfort can be achieved simultaneously.

Auto Adaptation function maximizes both comfort and energy savings without the need for complicated settings.

Two Controls simulation on a day



Future Room temperature. estimation



Specifications

Indoor unit

Model name	EHST20C-VM6HA	EHST20C-VM9HA	Cylinder unit				Hydro box	
			EHST20C-VM6A	EHST20C-VM9A	EHST20C-VM6SA	EHST20C-VM9SA	EHSC-VM6A	EHSC-VM9A
Heat exchanger	X	X	X	X	X	X	X	X
Domestic hotwater tank	X	X	X	X	X	X	X	X
Booster heater	X	X	X	X	X	X	X	X
Immersion heater	X	X	X	X	X	X	X	X
Solar circuit	-	-	-	-	X	-	-	-
Dimensions (H x W x D)	mm 1600-595-680	mm 1600-595-680	mm 1600-595-680	mm 1600-595-680	mm 1600-595-680	mm 1600-595-680	mm 800-530-360	mm 800-530-360
Casing	RAL 9001	RAL 9001	RAL 9001	RAL 9001	RAL 9001	RAL 9001	RAL 9001	RAL 9001
Material	Pre-coated metal	Pre-coated metal	Pre-coated metal	Pre-coated metal	Pre-coated metal	Pre-coated metal	Pre-coated metal	Pre-coated metal
Product weight (empty)	kg 131	kg 131	kg 130	kg 130	kg 131	kg 131	kg 54	kg 54
Type of Installation	Floor standing	Floor standing	Floor standing	Floor standing	Floor standing	Floor standing	Wall mounted	Wall mounted
Power supply (V / Phase / Hz)	230 / Single / 50	230 / Single / 50	230 / Single / 50	230 / Single / 50	230 / Single / 50	230 / Single / 50	230 / Single / 50	230 / Single / 50
Heater	Booster heater	Booster heater	Booster heater	Booster heater	Booster heater	Booster heater	Booster heater	Booster heater
Capacity	kW 6 (2/4/6)	kW 9 (3/6/9)	kW 6 (2/4/6)	kW 9 (3/6/9)	kW 6 (2/4/6)	kW 9 (3/6/9)	kW 6 (2/4/6)	kW 9 (3/6/9)
Current	A 26	A 32	A 26	A 32	A 26	A 32	A 13	A 13
Breaker	A 32	A 32	A 32	A 32	A 32	A 32	A 16	A 16
Immersion heater	Immersion heater	Immersion heater	Immersion heater	Immersion heater	Immersion heater	Immersion heater	Immersion heater	Immersion heater
Capacity	kW 3	kW 3	kW 3	kW 3	kW 3	kW 3	kW 3	kW 3
Current	A 13	A 13	A 13	A 13	A 13	A 13	A 13	A 13
Breaker	A 16	A 16	A 16	A 16	A 16	A 16	A 16	A 16
Heat exchanger	Primary circuit water	Primary circuit water	Primary circuit water	Primary circuit water	Primary circuit water	Primary circuit water	Primary circuit water	Primary circuit water
Coil Surface area	m ² 11*2	m ² 11*2	m ² 11*2	m ² 11*2	m ² 11*2	m ² 11*2	m ² 14*14 (Solar)	m ² 14*14 (Solar)
Coil Length	m 14*2	m 14*2	m 14*2	m 14*2	m 14*2	m 14*2	m 14*14 (Solar)	m 14*14 (Solar)
Coil Capacity	L 6.8*2	L 6.8*2	L 6.8*2	L 6.8*2	L 6.8*2	L 6.8*2	L 6.8*8 (Solar)	L 6.8*8 (Solar)
Coil Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Domestic hot water tank	Volume	L 200	L 200	L 200	L 200	L 200	L 200	L 200
Material	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)	Duplex stainless steel (EN10088)
Operating ambient condition *	°C 0-35	°C 0-35	°C 0-35	°C 0-35	°C 0-35	°C 0-35	°C 0-35	°C 0-35
Operating range	Heating	Room temperature °C 10-30	Room temperature °C 10-30	Room temperature °C 10-30	Room temperature °C 10-30	Room temperature °C 10-30	Room temperature °C 10-30	Room temperature °C 10-30
Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60	Flow temperature °C 25-60
DHW °C 40-60	DHW °C 40-60	DHW °C 40-60	DHW °C 40-60	DHW °C 40-60	DHW °C 40-60	DHW °C 40-60	DHW °C 40-60	DHW °C 40-60
Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70	Legionella prevention °C Max 70
Sound level (SPL)	dB(A) 28	dB(A) 28	dB(A) 28	dB(A) 28	dB(A) 28	dB(A) 28	dB(A) 28	dB(A) 28

Connectable outdoor unit

Model Name (PUHZ)	RP35VHA4	RP50VHA4	RP60VHA4	RP71VHA4	RP100VYKA	RP125VYKA	RP140VYKA	HRP71VHA2	HRP100VYHA2	HRP125VYHA2
Heating (A7/W35)	Capacity kW 4.10	6.00	7.00	8.00	11.20	14.00	16.00	8.00	11.20	14.00
COP	4.14	3.73	4.29	4.21	4.31	4.24	4.10	4.40	4.26	4.22
Power input kW	0.99	1.61	1.63	1.90	2.60	3.30	3.90	1.82	2.63	3.20
Heating (A2/W35)	Capacity kW 4.10	5.00	6.80	7.50	10.50	11.50	11.80	8.00	11.20	14.00
COP	2.93	2.50	2.94	2.92	2.90	2.70	2.78	3.24	3.02	2.70
Power input kW	1.40	2.00	2.31	2.57	3.62	4.26	4.24	2.47	3.71	5.19
Noise level (SPL)	dB 46	46	48	48	51	52	52	52	52	52
Dimensions	Height mm 600	600	643	643	1338	1338	1338	1350	1350	1350
Width mm	800	800	850	850	1050	1050	1050	850	850	850
Depth mm	300*23	300*23	330*30	330*30	330*30	330*30	330*30	330*30	330*30	330*30

Note: Based on EN14511. It may differ according to the system configuration.

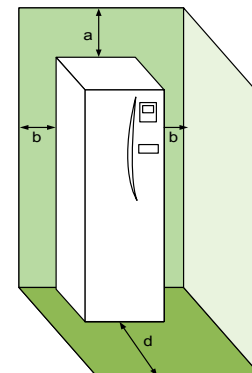
Optional parts

Parts name	Model name	Specification	Cylinder unit				Hydro box	
			EHST20C-VM6HA	EHST20C-VM9HA	EHST20C-VM6A	EHST20C-VM9A	EHSC-VM6A	EHSC-VM9A
IMMERSION HEATER	PAC-IH03V-E	1Ph 3kW	-	-	X	X	X	-
WIRELESS REMOTE CONTROLLER	PAR-WT40R-E		X	X	X	X	X	X
WIRELESS RECEIVER	PAR-WR41R-E		X	X	X	X	X	X
REMOTE SENSOR	PAC-SE41TS-E		X	X	X	X	X	X
JOINT PIPE	PAC-SH50RJ-E	φ15.88—φ12.7	X	X	X	X	X	X
JOINT PIPE	PAC-SH30RJ-E	φ9.52—φ6.35	X	X	X	X	X	X

Service access diagrams

Cylinder unit

Parameter	Dimension(mm)
a	300
b	150
c (distance behind unit)	10
d	500

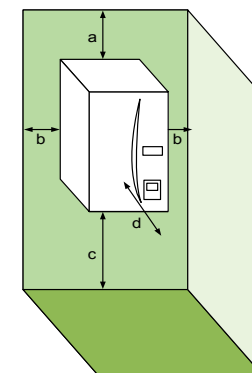


Sufficient space MUST be left for the provision of discharge pipework as detailed in national local building regulations.

The cylinder unit must be located indoors and in a frost-free environment, for example in a utility room, to minimise heat loss from stored water.

Hydro box

Parameter	Dimension(mm)
a	200
b	150
c	500
d	500

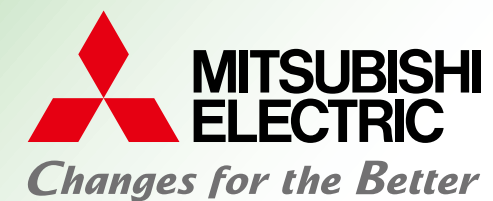


Sufficient space MUST be left for the provision of discharge pipework as detailed in national local building regulations.

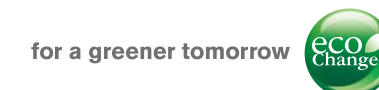
The hydro box must be located indoors, for example in a frost free utility room.

MITSUBISHI ELECTRIC CORPORATION

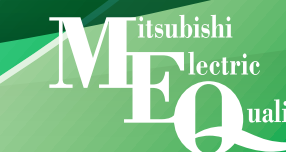
HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN
http://Global.MitsubishiElectric.com

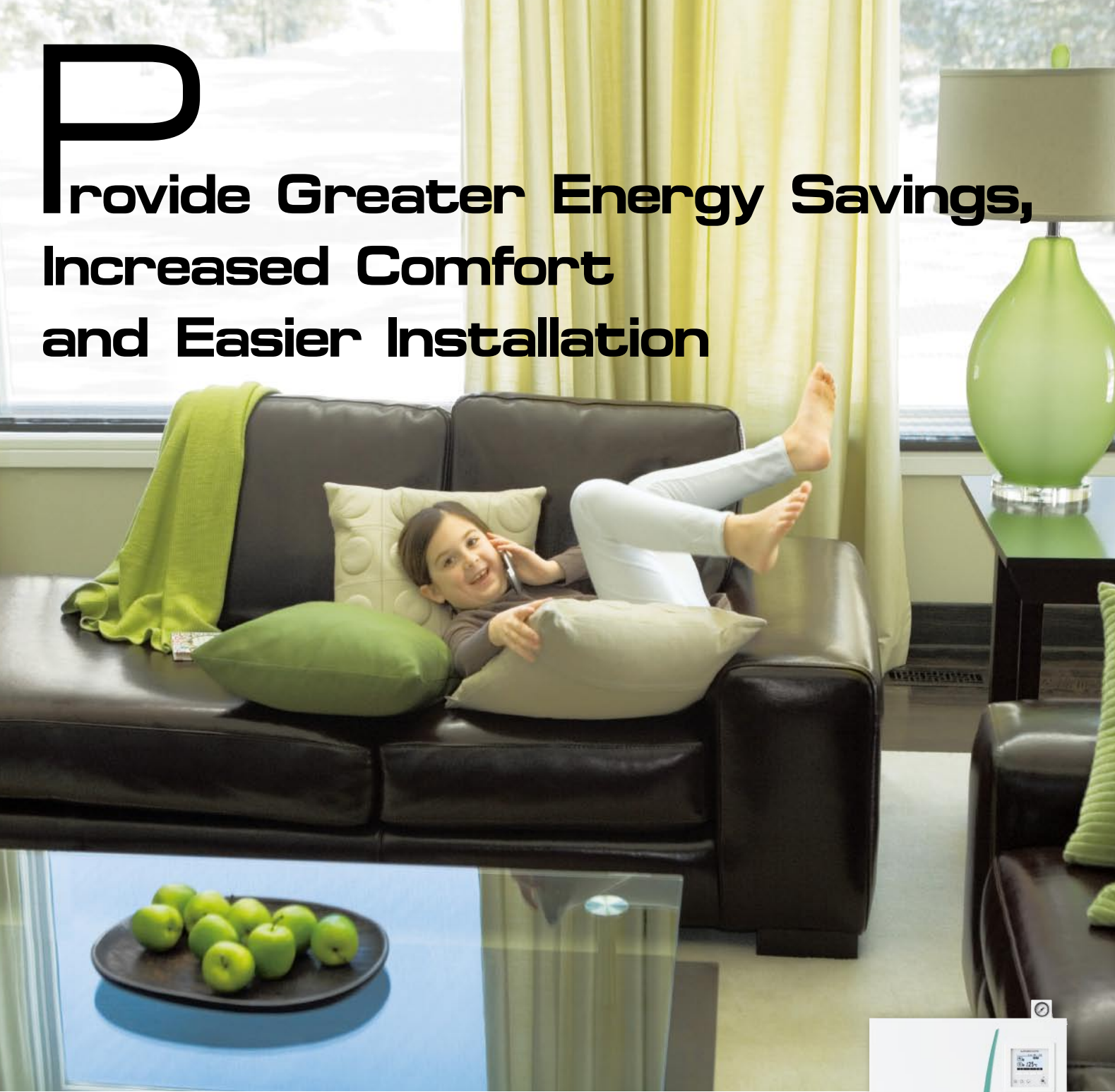


Air-to-water Heat Pump Systems



for a greener tomorrow





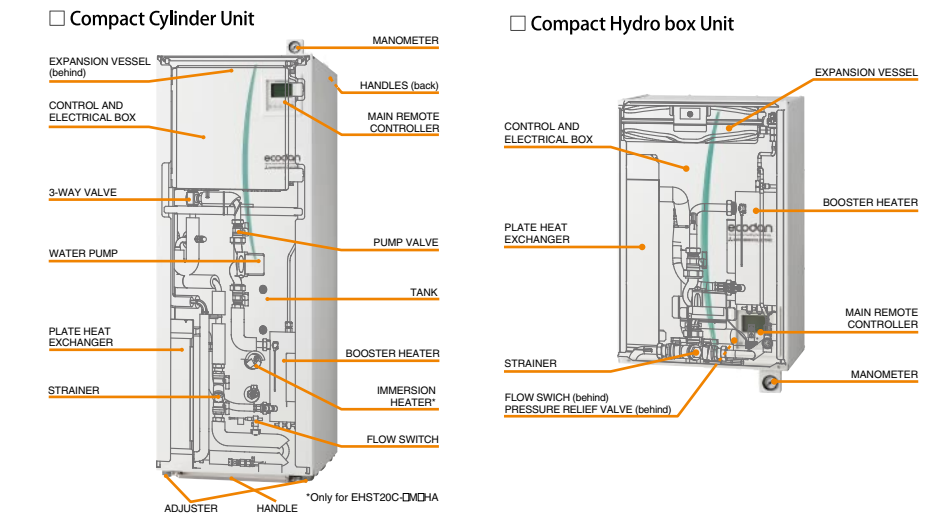
Provide Greater Energy Savings, Increased Comfort and Easier Installation

**User-friendly Operation
Fast, Simple Installation**

All-in-one & Compact

Small overall size contributes to easy transportation, installation and maintenance

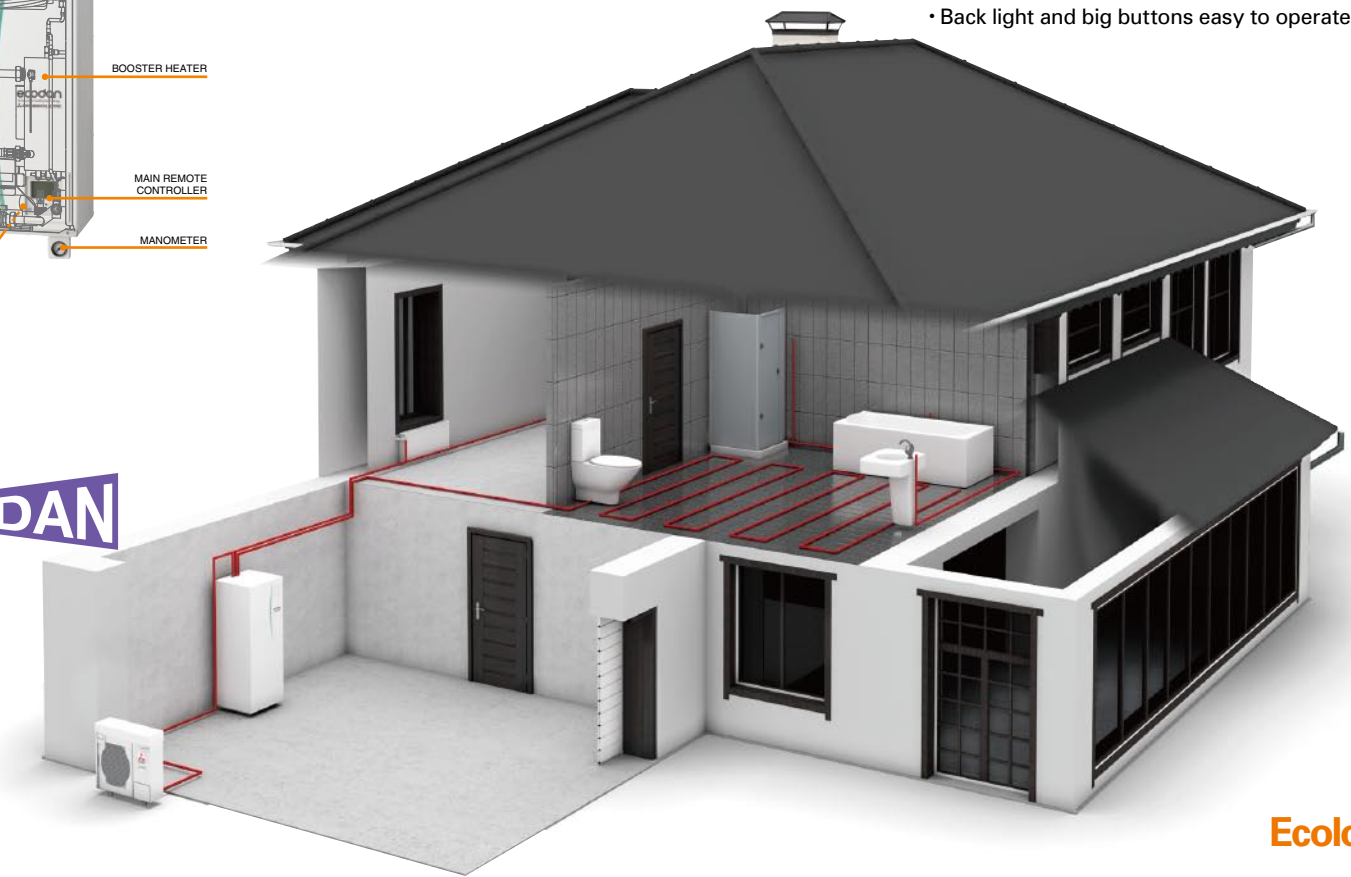
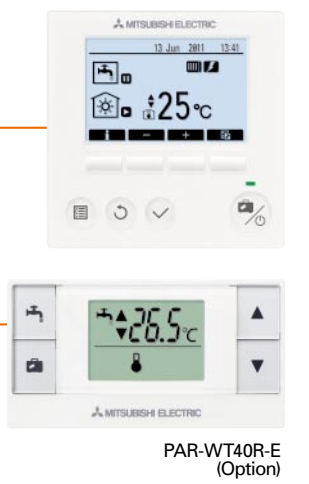
- Simplified: All key functional components are incorporated into the unit.
- Easy servicing: Relevant parts located at the front of the unit
- Compact Cylinder Unit Design: 595x1,600x680mm (WxHxD)
- Compact Hydro box Unit Design: 530x800x360mm (WxHxD)
- Installation is possible in low-ceiling basements and within the standard size for home appliances. Only 0.405 m³ required.
- Easy to transport and install using the attached handle (Cylinder unit) and a back plate (Hydro box unit)



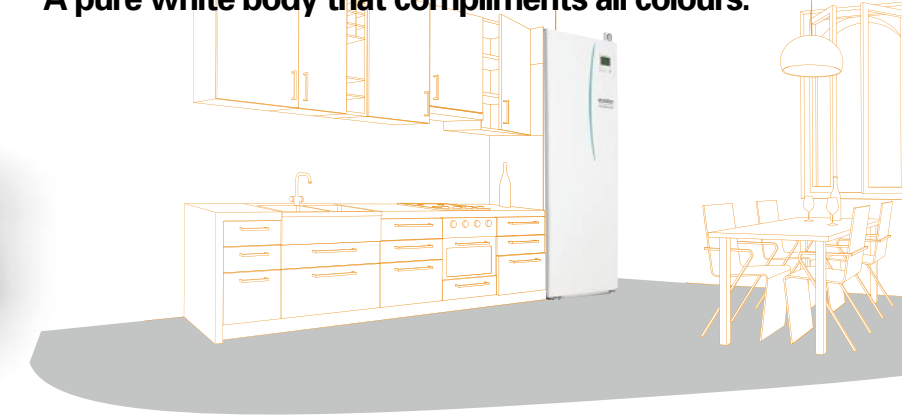
Remote Controller

Attractive, easy-to-read advanced LCD and trouble-free interface

- User-friendly, intuitive operation through simple layout of buttons and easy to understand icons.
- Pure white design matches virtually any interior.
- ★ Main remote controller
 - Large screen and back light for excellent visibility, even when it is dark
 - Eleven languages supported
 - Can be removed from the main unit and installed in remote location (up to 500m)
 - Wide range of convenient functions in response to user demand
 - Weekly timer - Holiday mode - Legionella prevention - Error code and data for servicing
- ★ Wireless remote controller (optional)
 - Built-in room temperature sensor; easy to place in the best position to detect room temperature
 - Wiring work eliminated - Simple design, easy to operate
 - Remote control from any room without the need to choose an installation location
 - Back light and big buttons easy to operate



Stylish
A simple, modern design that naturally blends into surroundings.
A pure white body that compliments all colours.



Hi-Power ZUBADAN

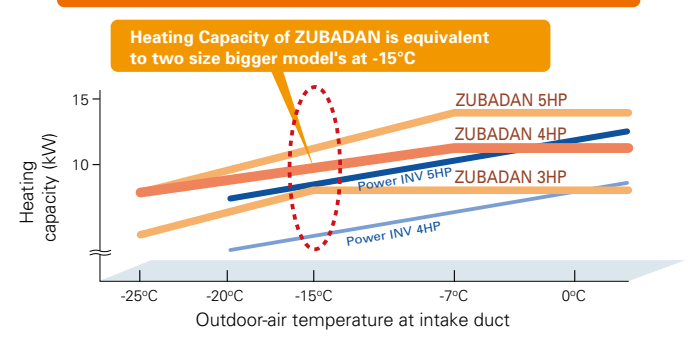
Even at the very low ambient temperature, our ZUBADAN can provide powerful heating.

- Our unique flash injection circuit enables the nominal capacity to be maintained to -7°C.
- The guaranteed operating range of the heating mode is extended to -25°C.

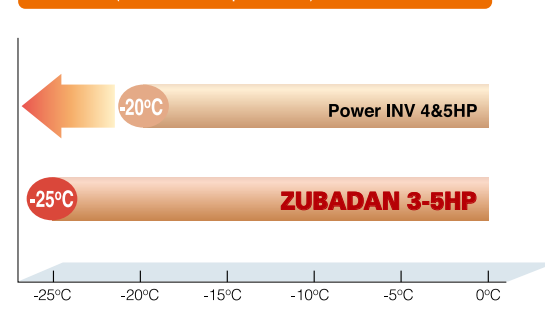
ecodan
Renewable Heating Technology



Flash Injection Circuit



Guaranteed heating operation range extended to -25°C (outdoor temperature)



Ecological and Economical. Ecodan is the Logical Choice.
Next-generation hot water supply system.

The secret behind our impressive heat pump efficiency is capturing the heat that is already in the air.

