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**FAIRLAND®**  
HEATPUMP SPECIALIST

**1st**  
Full-inverter™  
Technology



# ***Inverter-Plus***

The Most Efficient Full-Inverter  
Pool Heatpump



**PAY 1KW, UP TO 16KW HEAT IN RETURN**  
(TÜV proved performance)



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& operated

# 1st Full-inverter™ Technology

## Pay 1kW, up to 16kW heat in return

Fairland Inverter-plus HP is the 1st Full-inverter™ pool HP, it is stepless inverter powered by unique Full-inverter™ technology, which adjusts the compressor speed hertz by hertz, and the fan speed round by round. It matches pool temperature intelligently with continuous & optimal efficiency.

The Inverter-plus HP allows the heating capacity to run from 25% to 100% automatically according to pool demand, but most of the time, it only runs on middle & low speed for maximum efficiency and super silence.

**COP up to 16, double energy saving compared with normal On/Off Heatpump.**



*Proved by TÜV Rheinland.*

**COP** means **Coefficient of Performance**, it is a ratio of heat output to power input.

### Running principle in 180 days pool season.

In the first 5 days, it runs at 100% capacity like a quality On/Off HP, and heats the pool to the set temperature.

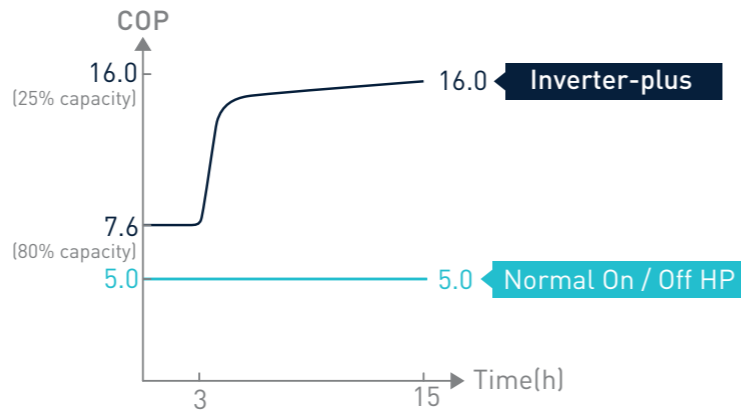
In next 175 days, it runs on average at 50% capacity to maintain the pool temperature, the average COP is double of normal On/Off HP.

	First 5 Days	Next 175 Days
Running capacity	100%	Average 50% (mainly 25%~80%)

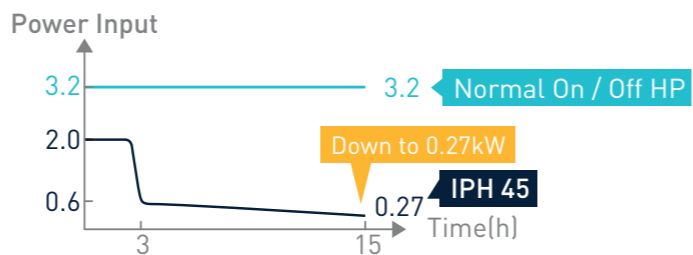
### The COP is up to 16 (Air 26°C / Water 26°C / Humidity 80%)

MODEL	IPH25	IPH35	IPH45	IPH55	IPH70	IPH100T
COP at 25% capacity	16.0	16.0	16.1	16.0	16.2	16.4
COP at 50% capacity	11.3	11.1	11.5	11.2	11.8	12.0
COP at 100% capacity	6.7	6.7	6.6	6.4	6.6	6.7

### COP in 15 hours' heating per day (when maintaining pool temperature)

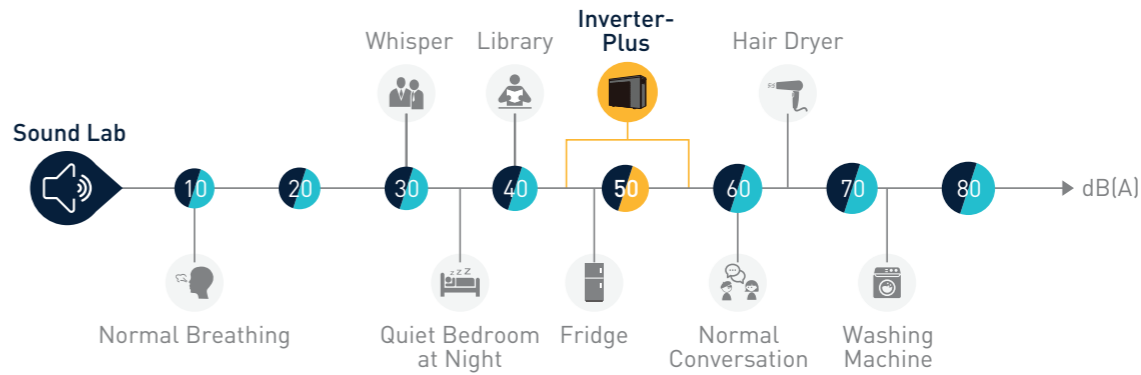


### Power input in 15 hours' heating per day (when maintaining pool temperature)



# 10 Times Quieter.

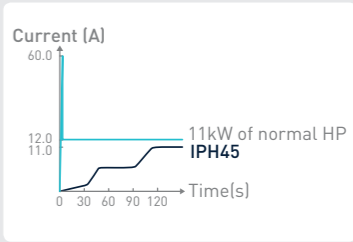
The Mitsubishi DC inverter compressor and DC ventilation system are powered by a unique Full-inverter™ control system, which offers you a 10 times quieter swimming environment when maintaining the pool temperature.



\*\*In sound level calculation, 1 dB(A) difference means 1 time difference.

## Features

- ✓ **Classic Aluminium alloy Casing**  
Classic Aluminium alloy casing and hidden screws, simple outlooking, life-time anti-rusting.
- ✓ **Soft starter to guarantee the safety of the house electricity system**  
When Inverter-plus HP turns on, the current will start from 0 A and slowly increase to rated current in 2 minutes. It will not affect the house electricity system, while the start current of normal On/Off HP is 5 times the rated current, it is a burden to the electricity system.
- ✓ **Above -7°C design**  
Maximize your pool season
- ✓ **Twin-rotary Mitsubishi DC inverter compressor**  
Based on "Twin mechanism" innovative solution, two rotors operate together to balance the torque for anti-shaking. It leads to highest efficiency, extremely low vibration & quiet operation.
- ✓ **DC brushless fan motor**  
Low noise & low power consumption.



# Think Bigger.

When choosing an Inverter-plus HP, we suggest to choose a bigger model based on its max heating capacity in silence mode, it will bring you more benefits:

- ✓ **20% more energy saving**
- ✓ **Enjoy more silence**
- ✓ **Quicker heating**

MODEL	IPH25	IPH35	IPH45	IPH55	IPH70	IPH100T
Max heating capacity (kW) in silence mode Air 26°C/ Water 26°C/ Humidity 80%	8.0	10.6	14.0	17.0	22.1	29.2
Advised pool volume (m³) *	16~32	24~48	32~60	40~76	52~96	72~135

\* The advised pool volume indicated applies under following conditions: Swimming pool is well covered; system runs at least 15 hours per day; heating season from 15th April to the 15th October. If these conditions are not met, please kindly ask for the professional advice.

# Specifications

## Inverter-Plus Heat Pump Specs (R410A)

MODEL	IPH25	IPH35	IPH45	IPH55	IPH70	IPH100T
Advised pool volume (m3)	25~45	35-65	40-75	50-95	65-120	90-160
Operating air temperature (°C)			-7~43			
Performance Condition: Air 26°C / Water 26°C / Humidity 80%						
Heating capacity (kW)	10.0	13.5	17.5	21.0	27.5	35.5
COP	16.2~7.3	16.3~6.7	16.6~6.2	16.1~6.0	16.2~6.5	16.5~5.8
COP at 50%	11.3	11.2	11.4	11.0	11.5	11.2
Sound pressure at 1m dB(A)	38.6~49.9	41.3~54.0	43.1~53.8	40.9~54.2	43.5~54.9	42.6~54.7
Sound pressure of 50% Capacity at 1m dB(A)	43.3	46.0	46.5	46.4	48.4	45.8
Sound pressure at 10m dB(A)	18.6~29.9	21.3~34.0	23.1~33.8	20.9~34.2	23.5~34.9	22.6~34.7
Compressor			Twin-rotary Mitsubishi DC-inverter			
Heat exchanger			Spiral titanium tube in PVC			
Casing			Aluminum-alloy			
Power supply			230V/1 Ph/50Hz			400V/3 Ph/50Hz
Rated input power at air 15°C (kW)	0.21~1.4	0.27~2.1	0.3~2.6	0.36~3.3	0.53~3.8	0.63~5.15
Rated input current at air 15°C (A)	0.91~6.1	1.17~9.1	1.3~11.3	1.57~14.3	2.3~16.5	0.91~7.4
Max Input Current (A)	8.5	11.0	13.0	17.0	20.0	9.5
Circuit breaker (A)	11.0	13.5	16.0	21.0	24.0	12.0
Power cord (mm²)	3 x 2.5	3 x 2.5	3 x 2.5	3 x 4	3 x 6	5 x 2.5
Advised water flux (m³/h)	3~4	5~7	6.5~8.5	8~10	10~12	12~18
Water pipe in-out size (mm)				50		
Net dimension L x W x H (mm)	894×359×648	954×359×648	954×429×648	954×429×755	1084×429×948	1154×539×948
Net weight (kg)	49	52	63	68	90	117
Qty per 20'FT / 40'HQ (sets)	102 / 216	90 / 198	78 / 165	52 / 165	44 / 100	34 / 72

### TÜV Rheinland Certified COP, Heating Capacity & Sound Pressure.

\*The advised pool volume indicated applies under following conditions: Swimming pool is well covered; system runs at least 15 hours per day;

\*The final specs will be in accordance with the specs on the product.



*EcoSprings products are manufactured to the highest possible standard using the most current technologies, so you can enjoy the benefits year after year.*



### Warranty

✓ 10 year warranty on compressor.

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