

INVERTER-PLUS

The Most Efficient Full-inverter Pool HP

AVERAGE COP 11.5 at 50% capacity

AVERAGE 10 times quieter

Certified by TÜV Rheinland



HIGHEST AVERAGE COP

in pool heat pump industry

1 HALF Running Cost

AVERAGE COP 11.5 at 50% capacity, COP 16 at 20% capacity

— TÜV Rheinland Certified

(COP means Coefficient of Performance, it is a ratio of heating capacity to power consumption)

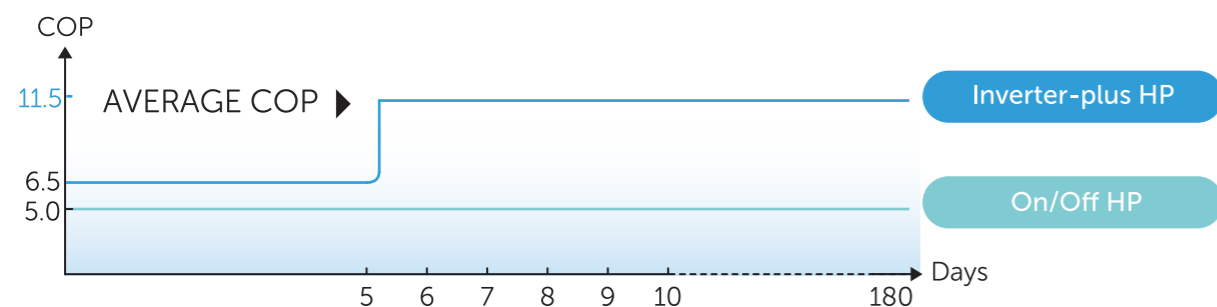
Half running cost (in 180 days swimming season)

In the first 5 days, Inverter-plus HP runs at 100% capacity, and heats up the pool to the set temperature. In the next 175 days, it runs at AVERAGE 50% capacity (AVERAGE COP 11.5) to maintain the desired pool temperature. So the AVERAGE COP is doubled compared with On/Off HP.

AVERAGE COP 11.5 (Air 26 °C / Water 26 °C / Humidity 80%)

| Capacity \ COP | Model | IPH15 | IPH20 | IPH25 | IPH30 | IPH35 | IPH45 | IPH55 | IPH70 | IPH70T | IPH100T |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|---------|
| 20% capacity | | 15.8 | 15.5 | 16.2 | 15.6 | 16.3 | 16.6 | 16.1 | 16.2 | 16.1 | 16.5 |
| AVERAGE 50% capacity | | 11.3 | 11.2 | 11.3 | 10.8 | 11.2 | 11.4 | 11.0 | 11.5 | 11.5 | 11.2 |
| 100% capacity | | 7.4 | 7.4 | 7.3 | 6.0 | 6.7 | 6.2 | 6.0 | 6.5 | 6.5 | 5.8 |

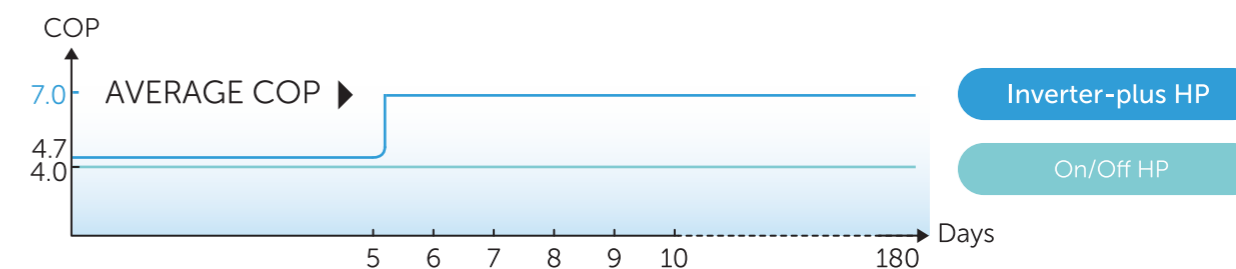
Inverter-plus HP vs On/Off HP (in 180 days swimming season)



AVERAGE COP 7 (Air 15 °C / Water 26 °C / Humidity 70%)

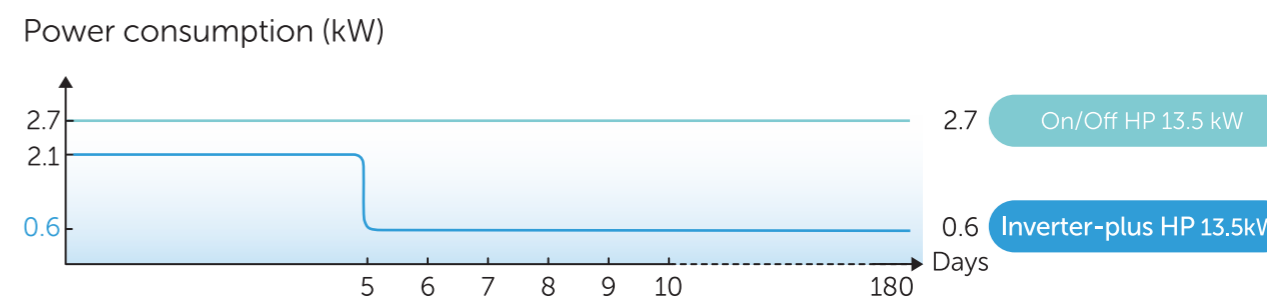
| Capacity \ COP | Model | IPH15 | IPH20 | IPH25 | IPH30 | IPH35 | IPH45 | IPH55 | IPH70 | IPH70T | IPH100T |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|---------|
| 20% capacity | | 8.1 | 7.7 | 8.1 | 7.8 | 8.2 | 8.2 | 8.1 | 8.5 | 8.5 | 8.4 |
| AVERAGE 50% capacity | | 7.0 | 6.8 | 7.0 | 6.5 | 6.8 | 6.6 | 6.5 | 7.0 | 7.0 | 7.2 |
| 100% capacity | | 4.8 | 5.0 | 4.8 | 4.5 | 4.6 | 4.5 | 4.4 | 4.8 | 4.8 | 4.7 |

Inverter-plus HP vs On/Off HP (in 180 days swimming season)



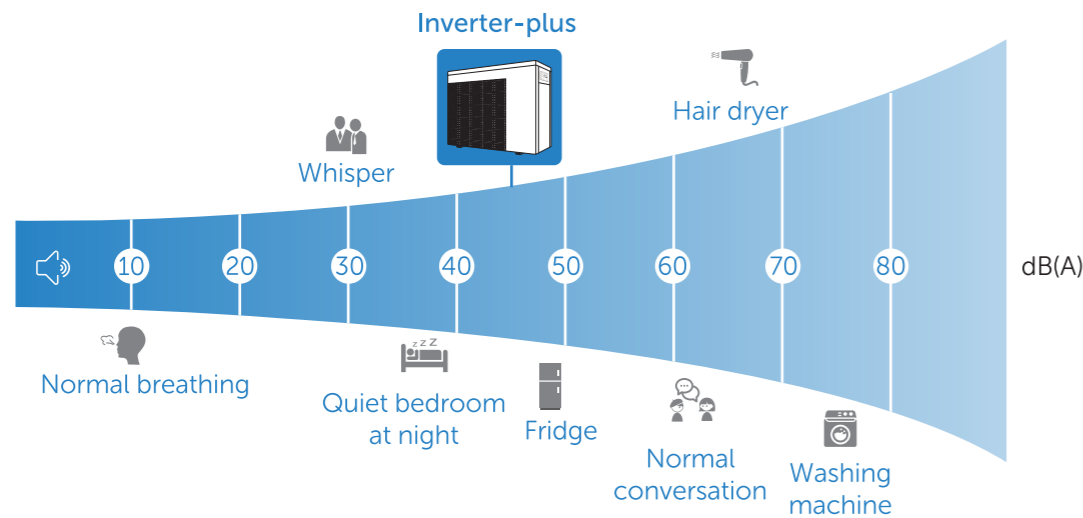
AVERAGE power consumption (in 180 days swimming season)

(e.g. 13.5kW at Air 26°C/ Water 26°C/ Humidity 80%)



2 AVERAGE 10 Times Quieter

When maintaining pool temperature at AVERAGE 50% capacity, AVERAGE sound pressure of a Inverter-plus HP can bring you 10 times quieter swimming environment and more friendly neighborhood than an On/Off HP.



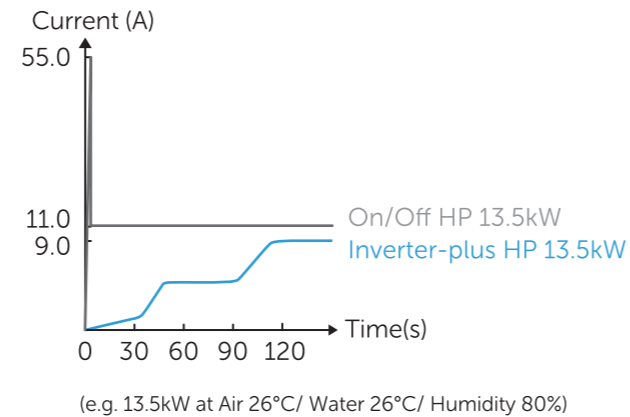
* 1dB lower, 1 time quieter.

AVERAGE sound pressure at 1m dB(A)

| Capacity | Model | IPH15 | IPH20 | IPH25 | IPH30 | IPH35 | IPH45 | IPH55 | IPH70 | IPH70T | IPH100T |
|----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|---------|
| 20% capacity | Sound pressure | 37.8 | 38.8 | 38.6 | 42.1 | 41.3 | 43.1 | 40.9 | 43.5 | 43.5 | 42.6 |
| AVERAGE 50% capacity | Sound pressure | 40.1 | 41.4 | 43.3 | 45.7 | 46.0 | 46.5 | 46.4 | 48.4 | 48.4 | 45.8 |
| 100% capacity | Sound pressure | 47.2 | 48.2 | 49.9 | 50.7 | 54.0 | 53.8 | 54.2 | 54.9 | 54.9 | 54.7 |

3 Soft Start Function

When Inverter-plus HP turns on, the current will start from 0 A and go up slowly to rated current in 2 minutes. It will not affect the house electricity system, while the frequent start current of On/Off HP is 5 times of rated current, it is a burden to the electricity system.



THINK BIGGER

When choosing a Inverter-plus HP, we suggest to choose a bigger model so that the HP will run at lower speed more time. It will bring you more benefits:



More silent swimming environment



More energy saving

INVERTER-PLUS HEAT PUMP SPECS (R410A)

| Model | IPH15 | IPH20 | IPH25 | IPH30 | IPH35 | IPH45 | IPH55 | IPH70 | IPH70T | IPH100T |
|---|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|----------------|--------------|
| Advised pool volume (m³) | 15~30 | 20~40 | 25~45 | 30~55 | 35~65 | 40~75 | 50~95 | 65~120 | 65~120 | 90~160 |
| Operating air temperature (°C) | -7~43 | | | | | | | | | |
| Performance Condition: Air 26°C / Water 26°C / Humidity 80% | | | | | | | | | | |
| Heating capacity (kW) | 6.5 | 8.1 | 10.0 | 12.1 | 13.5 | 17.5 | 21.0 | 27.5 | 27.3 | 35.5 |
| COP | 15.8~7.4 | 15.5~7.4 | 16.2~7.3 | 15.6~6.0 | 16.3~6.7 | 16.6~6.2 | 16.1~6.0 | 16.2~6.5 | 16.1~6.5 | 16.5~5.8 |
| COP at 50% capacity | 11.3 | 11.2 | 11.3 | 10.8 | 11.2 | 11.4 | 11.0 | 11.5 | 11.5 | 11.2 |
| Performance Condition: Air 15°C / Water 26°C / Humidity 70% | | | | | | | | | | |
| Heating capacity (kW) | 4.8 | 6.0 | 7.0 | 8.1 | 9.5 | 11.5 | 14.5 | 18.0 | 18.0 | 24.2 |
| COP | 8.1~4.8 | 7.7~5.0 | 8.1~4.8 | 7.8~4.5 | 8.2~4.6 | 8.2~4.5 | 8.1~4.4 | 8.5~4.8 | 8.5~4.8 | 8.4~4.7 |
| COP at 50% capacity | 7.0 | 6.8 | 7.0 | 6.5 | 6.8 | 6.6 | 6.5 | 7.0 | 7.0 | 7.2 |
| Sound pressure at 1m dB(A) | 37.8~47.2 | 38.8~48.2 | 38.6~49.9 | 42.1~50.7 | 41.3~54.0 | 43.1~53.8 | 40.9~54.2 | 43.5~54.9 | 43.5~54.9 | 42.6~54.7 |
| Sound pressure of 50% capacity at 1m dB(A) | 40.1 | 41.4 | 43.3 | 45.7 | 46.0 | 46.5 | 46.4 | 48.4 | 48.4 | 45.8 |
| Sound pressure at 10m dB(A) | 17.8~27.2 | 18.8~28.2 | 18.6~29.9 | 22.1~30.7 | 21.3~34.0 | 23.1~33.8 | 20.9~34.2 | 23.5~34.9 | 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) | 0.12~0.94 | 0.16~1.2 | 0.21~1.4 | 0.24~1.8 | 0.27~2.1 | 0.3~2.6 | 0.36~3.3 | 0.53~3.8 | 0.53~3.9 | 0.63~5.15 |
| Rated input current at air 15°C (A) | 0.52~4.1 | 0.7~5.2 | 0.91~6.1 | 1.04~7.8 | 1.17~9.1 | 1.3~11.3 | 1.57~14.3 | 2.3~16.5 | 0.76~5.6 | 0.91~7.4 |
| Net dimension LxWxH (mm) | 894×359×648 | 894×359×648 | 894×359×648 | 954×359×648 | 954×359×648 | 954×429×648 | 954×429×755 | 1084×429×948 | 1084×429×948 | 1154×539×948 |
| Net weight (kg) | 42 | 45 | 49 | 50 | 52 | 63 | 68 | 90 | 93 | 117 |
| Qty per 20'FT / 40'HQ (sets) | 102/216 | 102/216 | 102/216 | 90/198 | 90/198 | 78/165 | 52/165 | 44/100 | 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.

