# **INVERTER-PLUS**

The Most Efficient Full-inverter Pool HP

AVERAGE COP 11.5 at 50% capacity

AVERAGE 10 times quieter





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# **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)

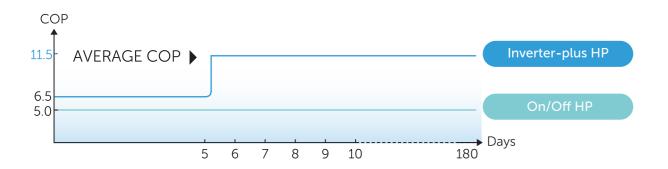
### Half running cost (in 180 days swimming season)

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	ІРН70Т	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

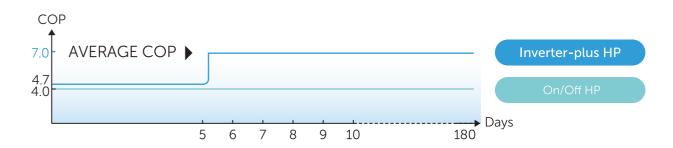
Inverter-plus HP vs On/Off HP (in 180 days swimming season)



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

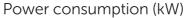
Capacity COP	IPH15	IPH20	IPH25	IPH30	IPH35	IPH45	IPH55	IPH70	IPH70T	IPH100T
20% capacity	8.1	7.7	8.1	7.8	8.2	8.2	8.1	8.5	8.5	8.4
AVERAGE 50% capacity	7.0	6.8	7.0	6.5	6.8	6.6	6.5	7.0	7.0	7.2
100% capacity	4.8	5.0	4.8	4.5	4.6	4.5	4.4	4.8	4.8	4.7

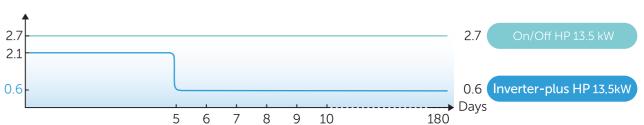
Inverter-plus HP vs On/Off HP (in 180 days swimming season)



### ○ AVERAGE power consumption (in 180 days swimming season)

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



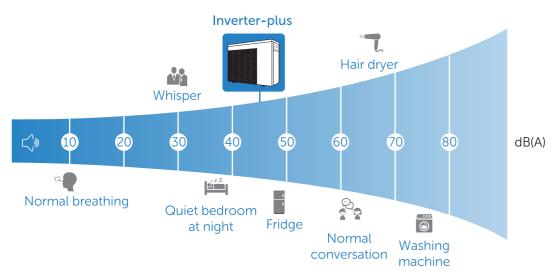


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## **2 AVERAGE 10 Times Quieter**

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.



<sup>\* 1</sup>dB lower, 1 time quieter.

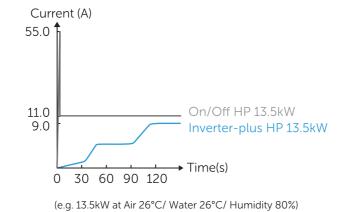
### AVERAGE sound pressure at 1m dB(A)

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



### **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:





### **INVERTER-PLUS HEAT PUMP SPECS (R32)**

Model	ן ופעופער /י	1011030	/ IDLIDGE /	\	// 10/10/0 //	1 1011045 /	IDLIDEE //	1011070	LDLIDZOT	\ IDLIDAGOT		
Model	\ IPHR15 \	\ IPHR20 \	\\ IPHR26 \	N IPHR33	\\ IPHR40 \	\ IPHR45 \	\ IPHR55 \	\ IPHR70 \	\ IPHR70T \	N IPHR100T		
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	Performance Condition: Air 26°C / Water 26°C / Humidity 80%											
Heating capacity (kW)	6.5	8.5	10.5	13.0	15.0	17.5	20.5	27.5	27.3	35.8		
COP	14.7~6.0	14.8~7.4	15.0~7.4	15.4~7.3	15.5~6.7	15.8~6.2	15.3~6.0	15.4~6.5	15.3~6.5	15.6~5.8		
COP at 50% capacity	10.5	10.9	11.0	11.0	10.9	11.1	10.7	11.2	11.2	10.9		
Performance Condition: Air 15°C / Water	26°C / Humidit	y 70%										
Heating capacity (kW)	4.8	6.3	7.3	8.7	10.5	11.5	14.0	18.0	18.0	24.5		
COP	7.3~4.5	7.4~5.0	7.7~4.8	7.7~4.8	7.8~4.6	7.8~4.5	7.7~4.4	8.1~4.8	8.1~4.8	8.0~4.7		
COP at 50% capacity	6.3	6.6	6.8	6.8	6.6	6.4	6.3	6.8	6.8	7.0		
Sound pressure at 1m dB(A)	37.8~47.2	38.8~48.2	38.6~49.9	42.1~50.7	41.3~55.0	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 d	B(A) 40.1	41.4	43.3	45.7	46.5	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	21.3~35.0	23.1~33.8	20.9~34.2	23.5~34.9	23.5~34.9	22.6~34.7		
Compressor	Compressor Twin-rotary Mitsubishi DC-inverter											
Heat exchanger				Spiral	titanium tube	in PVC						
Casing				A	Aluminum-allo	у						
Power supply	230V/1 Ph/50Hz									400V/3 Ph/50Hz		
Rated input power at air 15°C (kW)	0.13~1.06	0.17~1.2	0.19~1.5	0.23~1.81	0.27~2.2	0.30~2.6	0.36~3.18	0.55~3.8	0.55~3.9	0.61~5.2		
Rated input current at air 15°C (A)	0.56~4.60	0.74~5.2	0.83~6.5	1.00~7.87	1.17~9.6	1.3~11.3	1.57~13.8	2.4~16.5	0.79~5.6	0.88~7.4		
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	120		
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		

 $<sup>{}^{\</sup>star} \text{ The advised pool volume indicated applies under following conditions: Swimming pool is well covered; system runs at \ least 15 \ hours per \ day;}$ 



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 $<sup>^{\</sup>star}$  The final specs will be in accordance with the specs on the product.