





Company Profile



PT Bernadi Utama didirikan pada tanggal 2 Februari 1982, dimana PT Bernadi Utama telah berpengalaman lebih dari 35 tahun memberikan solusi untuk ketersediaan air panas di seluruh Indonesia.

Pada tahun 1992, PT Bernadi Utama membangun pabrik di daerah Cikarang untuk pabrikasi dan perakitan pembuatan alat pemanas air dengan menggunakan tenaga Matahari dengan lisensi dari Solahart – Australia.

Pada tahun 2000, PT. Bernadi Utama menambahkan aktivitasnya dengan memproduksi Handal Water Filter. Pada tahun 2015, menambah

Line Up productnya dengan menghadirkan Handal Eltera, electric water heater.

Jaringan distribusi penjualan, PT. Bernadi Utama dengan lebih dari 45 Dealer tersebar diseluruh Indonesia, menjamin penjualan dan layanan purna jual kepada pelanggan terjamin.

Sampai saat ini PT. Bernadi Utama telah menangani proyek proyek Rumah Sakit, Apartemen, dan Hotel-hotel diseluruh Indonesia, mulai dari puluhan hingga ratusan kamar.





Plunge Pool:

POOL HEAT PUMP

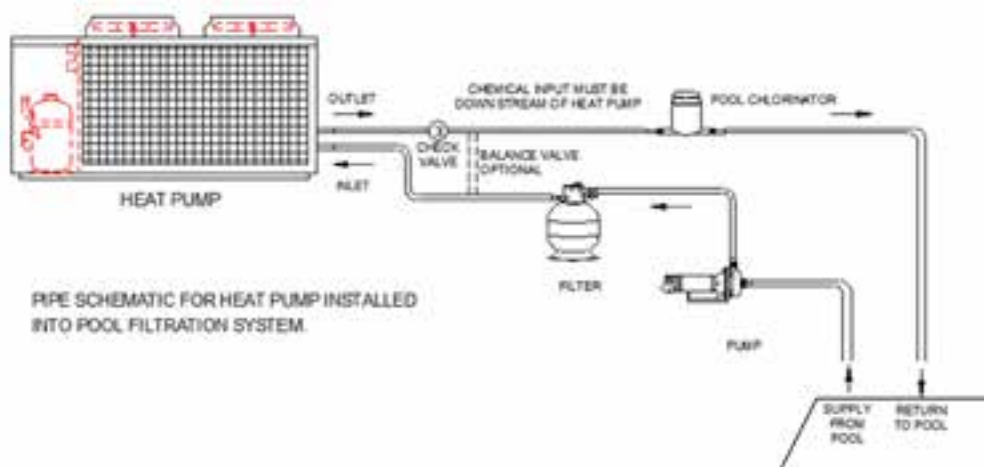
The Solahart heat pump can uniquely provide cooling to one application while rejecting heat to another. This is most commonly used for resorts, day spas and sports training centres to provide hot and cold plunge pools.

Solahart Pool Heat Pump (SHP Models) Specifications (larger models available on request)

Model	SHP036-1	SHP040-1	SHP068-3	SHP081-3	SHP108-3	SHP144-3	SHP190-3	SHP216-3
Voltage	220 - 240		380 - 415					
Phase o / Hertz	1Ph / 50Hz		3Ph / 50Hz					
Refrigerant	R407c							
Number of Compressors	1							
Brand and Type of Compressor	Siam Rotary	Copeland Scroll						
FLA (Full Load Amps)	10.6	18.6	12.48	15.96	18.96	24.2	36	35.6
Rated Load Amps 10°C SST /45°SCT	8.38	11.76	8.68	11.86	14.41	17.4	28.3	26.5
Max.Leaving Water temperature	42°C							
Ambient °C DB	25							
Relative humidity %	60 %							
Min CB Size	16	25	20	25	25	40	50	50
Heating KW	9.31	14.11	24.3	28.15	38.29	51.26	66.25	76.58
Power	1.90	2.46	4.29	5.29	6.73	9.36	13.55	13.58
COP	4.89	5.73	5.66	5.32	5.69	5.48	4.89	5.64
Number of Fans	1	2						
Airflow L/S	800	680	1600	2500		4500		
Water Flowrate L/S	1.53	1.53	2.8	2.8	2.8	2.8	2.8	5.6
Design TD °K	1.45	2.20	2.07	2.4	3.26	4.37	5.65	3.26
Heat Exchanger Shell and Tube	Titanium							
Design pressure drop k.p.a	40 kPa							
Maximum Operating pressure	300 kPa							
Minimum Ambient Temp	15°C							
PVC Water Connection Size	40mm							
Approximate Weight (kg)	70	80	110	140	170	300	300	400
Dimensions (mm) Length x Width x Height	1000 x 475 x 800	1000 x 475 x 1150	1150 x 565 x 980	1450 x 800 x 875	1750 x 800 x 875	1800 x 800 x 1220	1800 x 800 x 1220	1900 x 1000 x 1095

Design conditions Hot side 39°C water inlet, 45°C water outlet @ 51°C SCT, 25°C Ambient @ 10°C SST.

Typical Pool Installation





RAYPAK - GAS WATER HEATER



Gas Water Heater

Pool - Spa Residential &
Commercial Gas Water Heater

Gas Hot Water Boiler Type 280

- Material header terbuat dari bahan *bronze*.
- Pemanas air suhu tinggi (sampai dengan 90°C).
- Dasar konstruksi terbuat dari stainless steel.
- Casing dilapisi *powder coat 'ZAM'* yang tahan terhadap korosi.
- Biaya perawatan minim.



Type 280

Residential Pool & Spa Type 131

- Menggunakan pengendali pemanas digital.
- Instalasi yang simple.
- Header dari bahan polymer dengan usia pakai lebih lama.
- Tersedia *remote control (optional)*.
- *Australian made* dengan desain *excellence*.



Type 131



RAYPAK - GAS WATER HEATER

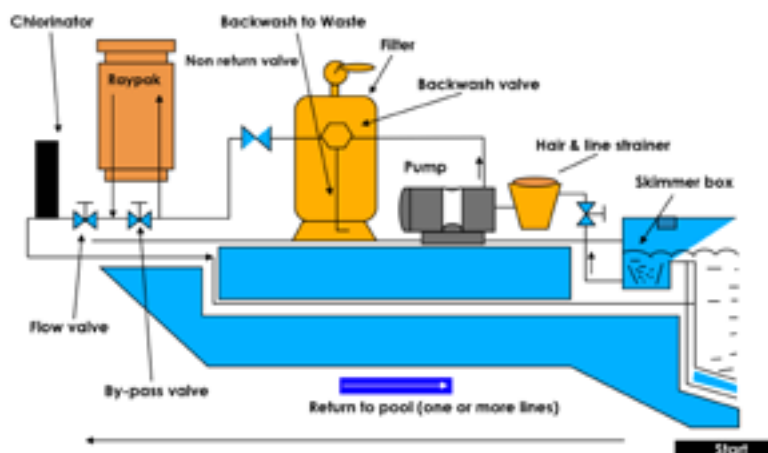
TECHNICAL SPESIFICATION

Technical Specification of Pool & Spa

Model	Nominal Rating				Connections	
	Natural	Gas	Propane	Gas	Gas	Water
	Input	Output	Input	Output	mm	mm
	MJ/h	kW	MJ/h	kW		
Spartan 131	120	24	120	24	20	40
127 Premium	110	25	103	23	20	40
167 Premium	164	36	154	34	20	40
200 Residential	196	44	185	41	20	50
280 Residential or Premium	278	62	261	58	20	50
350 Residential	343	76	323	72	20	50
430 Residential or Premium	420	94	396	88	20	50

Technical Specification of Commercial Boiler & Water Heater

Model			147	200	280	350	430	507	538	658	768	868	972	1142
Natural	Input	MJ/h	144	196	278	343	420	515	539	661	765	870	976	1142
	Output	kW	32	44	62	76	94	115	120	150	170	195	220	255
Propane	Input	MJ/h	135	185	261	323	396	485	505	620	720	820	933	1090
	Output	kW	30	41	58	72	88	108	115	140	160	180	205	240
Dimensions	A	mm	-	1625	1715	1715	1805	1805	-	-	-	-	2500	2395
	B	mm	-	465	570	655	745	835	830	955	1055	1160	1330	1510
	C		-	1955	2240	2035	2145	2145	2130	2255	2355	2355		
Weight		kg	71	91	93	103	107	115	195	200	250	260	360	385
Litres Recovery Per Hour at	30°C rise		917	1.25	1.769	2.187	2.683	3.297	3.44	4.3	4.873	5.59	6.307	7.31
	40°C rise		688	937	1.327	1.64	2.012	2.473	2.58	3.225	3.655	4.193	4.73	5.483
	50°C rise		550	750	1.061	1.312	1.61	1.978	2.064	2.58	2.924	3.354	3.784	4.386
	60°C rise		459	625	884	1.094	1.342	1.648	1.72	2.15	2.437	2.795	3.153	3.655
	65°C rise		423	577	816	1.01	1.238	1.522	1.588	1.985	2.249	2.58	2.911	3.374
	70°C rise		393	536	758	937	1.15	1.413	1.474	1.843	2.089	2.396	2.703	3.133
	75°C rise		-	500	708	875	1.073	-	1.376	1.72	1.946	2.236	2.523	2.924
	80°C rise		-	469	663	820	1.006	-	1.29	1.613	1.828	2.096	2.365	2.741
	85°C rise		-	441	624	772	947	-	1.214	1.518	1.72	1.973	2.226	2.58



Handal®





Company Profile

PT Bernadi Utama didirikan pada tanggal 2 Februari 1982, dimana PT Bernadi Utama telah berpengalaman lebih dari 30 tahun memberikan solusi untuk ketersediaan air panas bagi keluarga dan hotel yang tersebar di seluruh Indonesia.

Pada tahun 1992, PT Bernadi Utama membangun pabrik di daerah Cikarang untuk pabrikasi dan perakitan pembuatan alat pemanas air dengan menggunakan tenaga Matahari dengan lisensi dari Solahart – Australia.

Pada tahun 2000, PT. Bernadi Utama menambahkan aktivitasnya dengan memproduksi Handal Water Filter dan memasarkannya ke dealer-dealer di seluruh Indonesia. Dan pada tahun 2015, PT Bernadi Utama menambah Line Up productnya dengan menghadirkan Handal Eltera, electric water heater.

Di (dalam) jaringan distribusi penjualan, PT. Bernadi Utama menunjuk lebih dari 40 Dealer yang tersebar diseluruh Indonesia. Dealer tersebut bertanggung jawab terhadap penjualan dan After-Sales-Service kepada pelanggan.



SWIMMING POOL PIONEER SERIES

Compact Models



OVERVIEW

With complete range of models from 4kW to 23kW, Pioneer series is widely welcomed in global markets. In the working process of absorbing free heat from the air and transferring it to water, this series of heat pumps ensures constant and stable pool water temperature for you.

Model	SPP	SPP-8	SPP-11	SPP-17	SPP-23
Heating Capacity	kW	8,2	11,3	17	23
	Btu/h	27880	38420	57800	78200
Heating Power Input	kW	1,53	2,1	3,48	4,1
COP	-	5,36	5,38	4,89	5,61
Running Current	A	7	9,6	6,8	8
Max Current Input	A	9.2	14.3	9	9.5
Power Supply		230V~/50Hz		380V/3N~/50Hz	
Compressor Quantity	-	1			
Compressor Type	-	Rotary		Scroll	
Fan Quantity	-	1		2	
Fan Power Input	W	120		150	120x2
Fan Rotate Speed	RPM	850			
Fan Direction	-	Horizontal			
Noise	dB(A)	51	54	56	56
Water Connection	mm	50			
Water Flow Volume	m3/h	3	4,5	6	9
Water Pressure Drop (max)	kPa	0,6	1	2	2,8
Water Pressure Drop (max)	kPa	0,6	1	2	2,8
Net Weight (L/W/H)	kg	51	57	98	119
Net Dimensions (L/W/H)	mm	956 / 372 / 600		1115 / 470/870	1002 / 455 / 1250

Heating: Outdoor air temp (DB/WB): 24⁰C/19⁰C, Water temp (in): 26⁰C

The data above is only a reference, specific data please refer to the nameplate on the units.

Note : Handal reserves the right to discontinue, or change at any time, specifications or designs without notices and without incurring obligations.

SWIMMING POOL PIONEER SERIES

FEATURES

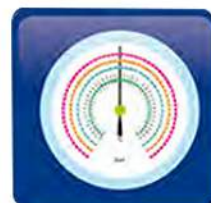


Titanium Coils Exchanger
Patented Two Titanium Coils
Heat Exchanger features extended
work area with higher efficiency



Electric Expansion Valve
Smartly adjust the refrigerant
flow rate, the unit are sure to
work with high efficiency at all time

Pressure Protection
With high/low pressure
protection, heat pump are
protected at bad working
condition



Water Flow Switch
The Water flow switches
designed Handal are with
high sensitivity feature



Cost Effective
The COP of this series is a high
as 5.3 at working condition
of 24°C/19°C (DB/WB),
which save you at least 80%
energy compared with traditional
electric swimming pool heating

COP5.3
at 24°C/19°C
(DB/WB)

Ripple Fin Air Exchanger
Heat exchanging surface
extended, heat exchanging
effect is improved and the risk
of frosting is reduced



Touch LCD Display
Equipped with LCD touch Display,
this series of pool heat pumps
provides users easy control experience
and provides the unit fine decorations



Multiple Models
Contains 9 models ranging from
4kW to 23kW, users can make
their favorite choice for a perfect
energy saving swimming



SWIMMING POOL HEAT PUMP

COMMERCIAL MODELS

Overview

1. Copeland with R417a or Daikin with R410a scroll compressor, high efficiency and stable functions.
2. Emerson ALCO thermal expansion valve, with accurate and stable throttling performance.
3. AI-mg fan motor with Nylon fan blades, low noise, low power consumption, big air blow volume.
4. Adopt Titanium Heat Exchanger, effectively erosion proof and durable.
5. Coated steel or SUS304# stainless steel case (upon request), avoiding rust and durable

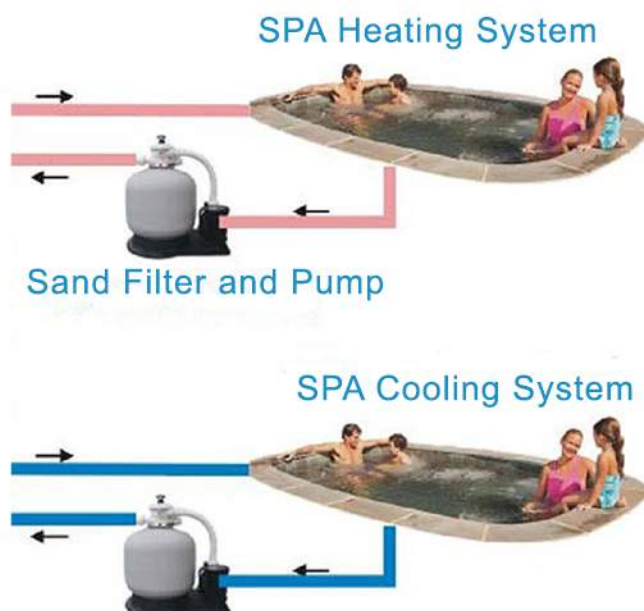


Model	HSP-39	HSP-62	HSP-74	HSP-117	HSP-156
Power Supply (V/ph/Hz)	380/3/50	380/3/50	380/3/50	380/3/50	380/3/50
Heating Capacity (kw)	39	62	74	117	156
Power Input (kw)	7.5	11.3	14.5	20.1	36
Refrigerant	R417a/R410a				
Max. current (A)	25	40	50	75	100
Rated water temp (°C)	28	28	28	28	28
Level against electric shock	I	I	I	I	I
Water-proof grade	IPX4	IPX4	IPX4	IPX4	IPX4
Net Weight (kg)	250	465	622	893	1500
Net size (mm)- (L*W*H)	1200x920x1220	2080x1100x1676	2000x1100x1790	2400x1300x2080	2400x1900x2080
Required water flow rate (m³/h)	15	25	30	45	60
Water Connection (mm)	63 mm	75 mm	75 mm	90 mm	110 mm
Operat on temp range (°C)	-10-45	-10-45	-10-45	-10-45	-10-45
Noise dB(A)	≤ 60	≤ 62	≤ 64	≤ 68	≤ 68
Test Condition	Ambient temp (DB/WB) : 20 °C/15 °C Water temp (Initial Final): 15°C/28 °C				

Note :Handal reserves the right to discontinue, or change at any time, specifications or designs without notices and without incurring obligations.

MULTIFUNCTION SWIMMING POOL HEATPUMP

at the same time cooling and heating



Multifunction Titanium Indoor Outdoor (Heating, cooling, domestic hot water)

Model	MFTIO	MFTIO-9	MFTIO-12	MFTIO-15	MFTIO-18
Rated Output Water	L/h	225	300	375	450
Rated Cooling Capacity	KW	7.5	10.0	12.5	15.0
	BTU/H	25600	34200	42700	51200
Rated Heating Capacity②	KW	9.0	12.0	15.0	18.0
	BTU/h	30800	41000	51200	61500
COP②	W/W	3.26	3.26	3.26	3.26
Rated Input Power(Heating)②	KW	2.76	3.68	4.60	5.52
Rated Input Current(Heating)②	A	12.5	5.6	7.0	8.4
Power Supply	V/PH/Hz	220/1/50	380/3/50		
Noise	dB(A)	52	54	54	55
Water Out let/Water In let	inch	1"	1"	1"	1"
Water Flow Volume	m³/h	2	2.5	3	3.5
Refrigerant Type		R410A/R407C/R134a			
Indoor Unit Net Dimensions (L/M/H)	mm	600/600/760	785/605/765	785/605/765	785/605/765
Indoor Unit Shipping Dimensions (	mm	650/730/810	830/730/810	830/730/810	730/730/810
Outdoor Unit Net Dimensions (L/M	mm	830/310/710	880/360/800	930/390/1270	930/390/1270
Outdoor Unit Shipping Dimensions	mm	940/410/760	1020/450/830	1080/480/1310	1080/480/1310
Indoor Unit Net Weight	kg	65	110	120	125
Indoor Unit Shipping Weight	kg	80	125	135	140
Outdoor Unit Net Weight	kg	30	35	50	50
Outdoor Unit Shipping Weight	kg	35	40	55	55

Note :

Heating: Outdoor air temp : 20℃/15℃ , water tank water temperature from 15℃ heating to 55℃;