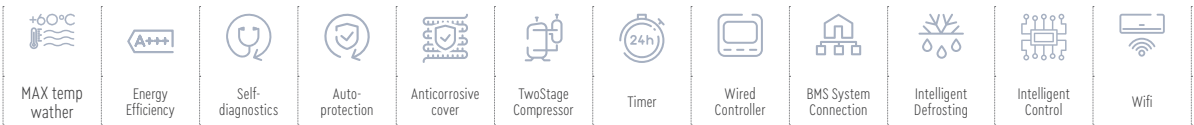


UNITHERM 3 ALL-IN-ONE



INVERTER

R32



			CH-HP6.0WTSIRK3	CH-HP8.0WTSIRK3	CH-HP10WTSIRK3	CH-HP12WTSIRK3	CH-HP14WTSIRK3	CH-HP16WTSIRK3
Capacity*	Cooling	kW	5.80	7.00	8.50	11.00	12.60	13.00
	Heating	kW	6.00	8.00	9.50	12.00	14.00	15.50
Power input*	Cooling	kW	1.32	1.75	2.24	2.50	3.41	3.60
	Heating	kW	1.20	1.70	2.07	2.40	2.98	3.44
EER *			4.40	4.00	3.80	4.40	3.70	3.60
COP*			5.00	4.70	4.60	5.00	4.70	4.50
Capacity*	Cooling	kW	4.09	5.30	6.50	10.59	11.07	11.51
	Heating	kW	5.90	8.00	9.50	12.40	14.48	16.09
Power input*	Cooling	kW	1.28	1.73	2.27	3.79	4.18	4.49
	Heating	kW	1.51	2.14	2.64	3.29	3.93	4.44
EER **			3.20	3.00	2.90	2.79	2.65	2.57
COP **			3.90	3.70	3.60	3.77	3.68	3.62
Refrigerant charge volume		kg	1.00	1.60	1.60	1.84	1.84	1.84
Power supply			~220-240V/50 Hz/1 Ph					
Sound pressure level	Cooling	dB (A)	52	55			68	
	Heating	dB (A)	52	55			68	
Dimensions (W×D×H)	Indoor unit	mm	600×600×1756					
	Outdoor unit	mm	975×396×702	982×427×787			940×460×820	
Net weight	Indoor unit	kg	210					
	Outdoor unit	kg	55	82			110	
Water circulating pipe inlet/outlet, DHW			1" Male BSP					
Diameter of pipe	Liquid	Inch (mm)	1/4" (6.35)					
	Gas	Inch (mm)	1/2" (12.7)					

			CH-HP12WTSIRM3	CH-HP14WTSIRM3	CH-HPWT16SIRM3
Capacity*	Cooling	kW	11.00	12.60	13.00
	Heating	kW	12.00	14.00	15.50
Power input*	Cooling	kW	2.50	3.41	3.60
	Heating	kW	2.40	2.98	3.44
EER *			4.40	3.70	3.60
COP *			5.00	4.70	4.51
Capacity*	Cooling	kW	10.65	11.24	11.52
	Heating	kW	12.29	14.44	16.13
Power input**	Cooling	kW	3.74	4.13	4.38
	Heating	kW	3.09	3.63	4.16
EER **			2.85	2.72	2.63
COP **			3.98	3.98	3.88
Refrigerant charge volume		kg	1.84	1.84	1.84
Power supply			~380-415V/50 Hz/3 Ph		
Sound pressure level	Cooling	dB (A)	62		
	Heating	dB (A)	58		
Dimensions (W×D×H)	Indoor unit	mm	600×600×1756		
	Outdoor unit	mm	940×460×820		
Net weight	Indoor unit	kg	210		
	Outdoor unit	kg	110		
Water circulating pipe inlet/outlet, DHW			1" Male BSP		
Diameter of pipe	Liquid	Inch (mm)	1/4" (6.35)		
	Gas	Inch (mm)	5/8" (15.6)		

UNITHERM SERIES



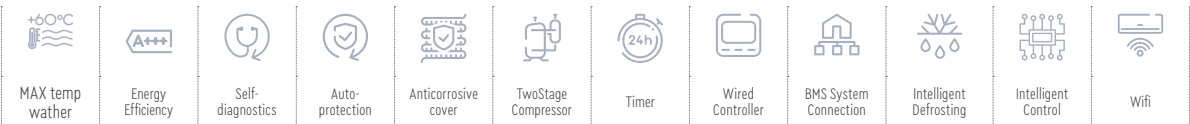
HEAT PUMP FOR AIR CONDITIONING, HEATING, AND HOT WATER SUPPLY

- ▶ Efficient inverter HP class A fully compliant to EU directive ErP. HP controls working frequency depending on real workload for precise temperature control.
- ▶ Inverter ventilator can accurately regulate airflow for efficient and stable operation.
- ▶ Plate heat exchanger Alpha Laval and 2-stage compressor improve performance of HP.
- ▶ Can be used with various types of heating devices: radiators, warm floors, fancoils, solar collectors, etc.
- ▶ Wired controller with 5" LCD touch screen display. Built-in WiFi for remote management. Modbus interface for remote monitoring and integration with BMS system.
- ▶ Intelligent management. Various modes of operation: weather-dependent mode, sleep mode, on-off timer, etc. Multilevel protection.
- ▶ Weather-dependent mode.
- ▶ New intelligent defrosting algorithm:
 - Defrosting on demand;
 - Defrosting when necessary;
 - Prolong defrosting when outdoor is heavily frost;
 - Short defrosting.

❄️ +10°C ... +48°C
☀️ -25°C ... +35°C



INVERTER R32



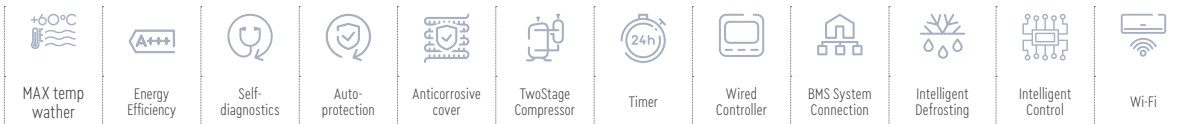
			CH-HP4.0MIRK	CH-HP6.0MIRK	CH-HP8.0MIRK	CH-HP10MIRK	CH-HP12MIRK
Capacity*	Cooling	kW	3.8	5.8	6.8	8.8	11
	Heating	kW	4	6	7.5	10	12
Power input*	Cooling	kW	0.82	1.32	1.55	1.96	2,56
	Heating	kW	0.78	1.2	1.63	2.15	2,64
EER			4.65	4.4	4.4	4.5	4,2
COP			5.1	5	4.6	4.65	4,55
Power supply			~220~240V/50 Hz/1 Ph				
Capacity**	Cooling	kW	3	4	5	7.8	9,5
	Heating	kW	4	6	7.5	10	12
Power input**	Cooling	kW	0.94	1.27	1.56	2.48	3,11
	Heating	kW	0.98	1.56	2	2.67	3,48
EER*2			3.2	3.15	3.2	3.15	3,05
COP*2			4.1	3.85	3.75	3.75	3,6
Refrigerant charge volume		kg	0.87			2.2	
Sound pressure level	Cooling	dB (A)	56			59	
	Heating	dB (A)	58			61	
Dimensions (W×D×H)		mm	1150×345×758			1200×460×878	
Weight		kg	96			151	
Water circulating pipe inlet/outlet			1" Male BSP				

			CH-HP12MIRM	CH-HP14MIRK	CH-HP14MIRM	CH-HP16MIRK	CH-HP16MIRM
Capacity*	Cooling	kW	11	12.5	12.5	14.5	14.5
	Heating	kW	12	14	14	15.5	15.5
Power input*	Cooling	kW	2.56	3.05	3.05	3.82	3.82
	Heating	kW	2.64	3.22	3.22	3.6	3.6
EER			4.2	4	4.2	3.7	4
COP			4.5	4.35	4.55	4.3	4.35
Power supply			~380~415V/50 Hz/3 Ph	~220~240V/50 Hz/1 Ph	~380~415V/50 Hz/3 Ph	~220~240V/50 Hz/1 Ph	~380~415V/50 Hz/3 Ph
Capacity**	Cooling	kW	9.5	12	12	13	13
	Heating	kW	12	14	14	15.5	15.5
Power input**	Cooling	kW	3.11	4.14	4.14	4.73	4.73
	Heating	kW	3.48	4.18	4.18	4.7	4.7
EER*2			3	2.9	3.05	2.75	2.9
COP*2			3.5	3.55	3.6	3.4	3.55
Refrigerant charge volume		kg	2,2				
Sound pressure level	Cooling	dB (A)	59				
	Heating	dB (A)	61				
Dimensions (W×D×H)		mm	1200×460×878				
Weight		kg	151				
Water circulating pipe inlet/outlet			1" Male BSP				

*Efficiency and performance measured under the following conditions: cooling - water inlet/outlet 23°C/18°C, outdoor temperature 23°C DB/24°C WB heating - water inlet/outlet 30°C/35°C, outdoor temperature 7 °C DB/6 °C WB
**Efficiency and performance measured under the following conditions: cooling - inlet/outlet water 12°C/7°C, outdoor air temperature 35°C DB/24°C WB heating - inlet/outlet water 40°C/45°C, outdoor air temperature 7°C DB/6°C WB



INVERTER R32



Model			CH-HP4.0SIRK4	CH-HP6.0SIRK4	CH-HP8.0SIRK4	CH-HP10SIRK4	CH-HP12SIRK4
Capacity*	Cooling	kW	3.80	5.80	7.00	8.50	11.00
	Heating	kW	4.00	6.00	8.00	9.50	12.00
Power input*	Cooling	kW	0.80	1.32	1.75	2.24	2.50
	Heating	kW	0.78	1.20	1.70	2.07	2.40
EER*1			4.75	4.40	4.00	3.80	4.40
COP*1			5.10	5.00	4.70	4.60	5.00
Capacity**	Cooling	kW	3.15	4.09	5.30	6.50	10.59
	Heating	kW	4.00	5.90	8.00	9.50	12.40
Power input**	Cooling	kW	0.92	1.28	1.73	2.27	3.79
	Heating	kW	1.02	1.51	2.14	2.64	3.29
EER (Floor cooling)**			3.40	3.20	3.00	2.90	2.79
COP (Floor heating)**			3.90	3.90	3.70	3.60	3.77
Refrigerant charge volume		kg	1.00	1.00	1.60	1.60	1.84
Power supply			~220~240V/50Hz/1Ph				
Sound Pressure Level	Cooling	dB(A)	52	52	55	55	68
	Heating	dB(A)	52	52	55	55	68
Dimensions (WxDxH)	Indoor unit	mm			460×318×860		
	Outdoor unit	mm	975×396×702		982×427×787		940×460×820
Net weight	Indoor unit	kg			62		
	Outdoor unit	kg	55	55	82	82	110
Water circulating pipe inlet/outlet, DHW			1" Male BSP				
Diameter of pipe	Liquid	inch (mm)					1/4" (6.35)
	Gas	inch (mm)	1/2" (12.7)				5/8" (15.6)

Model			CH-HP14SIRK4	CH-HP16SIRK4	CH-HP12SIRM4	CH-HP14SIRM4	CH-HP16SIRM4
Capacity*	Cooling	kW	12.60	13.00	11.00	12.60	13.00
	Heating	kW	14.00	15.50	12.00	14.00	15.50
Power input*	Cooling	kW	3.41	3.60	2.50	3.41	3.60
	Heating	kW	2.98	3.44	2.40	2.98	3.44
EER*1			3.70	3.60	4.40	3.70	3.60
COP*1			4.70	4.50	5.00	4.70	4.51
Capacity**	Cooling	kW	11.07	11.51	10.65	11.24	11.52
	Heating	kW	14.48	16.09	12.29	14.44	16.13
Power input**	Cooling	kW	4.18	4.49	3.74	4.13	4.38
	Heating	kW	3.93	4.44	3.09	3.63	4.16
EER (Floor cooling)**			2.65	2.57	2.85	2.72	2.63
COP (Floor heating)**			3.68	3.62	3.98	3.98	3.88
Refrigerant charge volume		kg	1.84	1.84	1.84	1.84	1.84
Power supply			~220~240V/50Hz/1Ph		~380~415V/50Hz/3Ph		
Sound Pressure Level	Cooling	dB(A)					62
	Heating	dB(A)					58
Dimensions (WxDxH)	Indoor unit	mm					460×318×860
	Outdoor unit	mm					940×460×820
Net weight	Indoor unit	kg					62
	Outdoor unit	kg					110
Water circulating pipe inlet/outlet, DHW							1" Male BSP
Diameter of pipe	Liquid	inch (mm)					1/4" (6.35)
	Gas	inch (mm)					5/8" (15.9)

*Efficiency and performance measured under conditions: cooling - inlet/outlet water 23°C/18°C, outdoor tempreture 23°C DB/24°C WB heating - inlet/outlet water 30°C/35°C, outdoor tempreture 7°C DB/6°C WB
**Efficiency and performance measured under conditions: cooling - inlet/outlet water 12°C/7°C, outdoor tempreture 35°C DB/24°C WB heating - inlet/outlet water 40°C/45°C, outdoor tempreture 7°C DB/6°C WB



HEAT PUMPS FOR SWIMMING POOLS

AIR-TO-WATER



INVERTER

R32



- ▶ Titanium heat exchanger;
- ▶ Ozone-safe refrigerant R32;
- ▶ 5-inch touch control panel;
- ▶ High efficiency;
- ▶ Wi-Fi remote control;
- ▶ Vertical air release;
- ▶ Low noise level;
- ▶ Intelligent defrosting system;
- ▶ High accuracy of temperature maintenance;
- ▶ Operating temperature range from -15 °C to +43 °C;
- ▶ It is used for pools up to 136 m³.

☀ -15°C ... +43°C

									
Titanium heat exchanger	Self-diagnostics	Auto-protection	Anti-corrosive Coating	DC-Inverter Compressor	Timer	Touch Screen Control	Intelligent Defrosting	Intelligent Control	Wi-Fi

		CH-HP050LTIRK	CH-HP050LTIRM	CH-HP060LTIRK	CH-HP060LTIRM	CH-HP070LTIRK	CH-HP070LTIRM	CH-HP080LTIRM
Recommended pool volume	m³	42-84	42-84	50-100	50-100	58-116	60-120	68-136
Working conditions: Air 27°C / Water 26°C / Humidity 80%								
Heating capacity	kW	4.9~21.0	5.1~21.6	5.9~24.6	5.8~24.4	6.7~28.6	7.0~29.5	8.2~34.7
	Btu	16660~71400	17340~73440	20060~83460	19720~82960	22780~97240	23800~100300	27880~117980
Power input	kW	0.43~4.08	0.43~4.29	0.47~4.94	0.47~4.65	0.53~5.4	0.55~5.6	0.66~6.9
COP		5.15~11.4	5.03~11.86	4.98~12.55	5.25~12.34	5.3~12.64	5.27~12.7	5.03~12.42
Working conditions: Air 15°C / Water 26°C / Humidity 62%								
Heating capacity	kW	3.8~16.2	3.9~16.3	4.8~18.4	4.5~19.0	5.50~23.40	5.8~24.6	6.5~27.7
	Btu	12920~55080	13090~55420	16252~62560	15198~64600	18700~79560	19652~83640	22100~94180
Power input	kW	0.57~3.86	0.59~3.82	0.73~4.64	0.68~4.39	0.82~5.40	0.99~4.53	0.97~6.46
COP		4.2~6.67	4.27~6.53	3.96~6.55	4.33~6.57	4.33~6.71	4.53~5.84	4.29~6.7
Working conditions: Air 10°C / Water 26°C / Humidity 70%								
Heating capacity	kW	3.44~14.1	3.5~14.0	4.3~18.2	4.0~17.0	4.9~20.9	4.9~20.9	6.1~25.9
	Btu	11696~47940	11798~47600	14552~61880	13600~57800	16660~71060	16660~71060	20740~88060
Power input	kW	0.62~3.52	0.62~3.59	0.74~4.35	0.70~4.10	0.86~5.05	0.84~4.93	1.07~6.32
COP		4.01~5.55	3.90~5.60	4.18~5.78	4.15~5.71	4.14~5.70	4.24~5.83	4.1~5.7
Power supply		230V/1 Ph/50 Hz	400V/3 Ph/50 Hz	230V/1 Ph/50 Hz	400V/3 Ph/50 Hz	230V/1 Ph/50 Hz	400V/3 Ph/50 Hz	400V/3 Ph/50 Hz
Corpus material		ABS plastic						
Refrigerant		R32						
Number of fans		1						
Fan speed	RPM	500-750	500-750	600-800	600-800	600-800	600-800	500-800
Noise level from 1m	dB(A)	48-58	48-58	48-58	48-58	49-60	49-60	50-61
Noise level from 1m (min.)	dB(A)	48	48	50	50	53	53	55
Noise level from 10m	dB(A)	28-38	28-38	30-40	30-40	33-43	33-43	35-45
Noise level from 10m (min.)	dB(A)	28	28	30	30	33	33	35
Piping inlet/outlet	inch	2						
Water flow	m³/h	6,8	7,1	8,3	8,1	9,5	9,8	11,5
Water pressure loss	kPa	4	4	11	11	16	16	20
Dimensions (LxWxH)	mm	770×990×970				920×960×1025		

INVERTER

R32



- ▶ Titanium heat exchanger;
- ▶ Ozone-safe refrigerant R32;
- ▶ Touch control panel 5 inches;
- ▶ High efficiency;
- ▶ Wi-Fi remote control;
- ▶ High accuracy of temperature maintenance;
- ▶ Operating temperature range from -15 °C to +43 °C;
- ▶ It is used for pools up to 120 m³.

☀ -15°C ... +43°C

									
Titanium heat exchanger	Self-diagnostics	Auto-protection	Anti-corrosive Coating	DC-Inverter Compressor	Timer	Touch Screen Control	Intelligent Defrosting	Intelligent Control	Wi-Fi

		CH-HP050LBIRK	CH-HP060LBIRK	CH-HP075LBIRK	CH-HP095LBIRK	CH-HP095LBIRM	CH-HP120LBIRM
Recommended pool volume	m³	25-50	30-60	40-75	50-95	50-95	65-120
Working conditions: Air 27°C / Water 26°C / Humidity 80%							
Heating capacity	kW	2.15~9	2.85~12	3.77~17	4.6~19.5	4.6~19.5	5.7~24.2
	Btu	7310~30600	9690~40800	12818~57800	15640~66300	15640~66300	19380~82280
Power input	kW	0.16~1.6	0.21~2.12	0.3~3.02	0.37~3.94	0.37~3.94	0.46~4.8
COP		13.44~5.63	13.57~5.66	12.57~5.63	12.43~4.95	12.43~4.95	12.39~5.04
Working conditions: Air 15°C / Water 26°C / Humidity 62%							
Heating capacity	kW	1.75~7.4	2.25~9.7	2.92~12.4	3.84~15.4	3.84~15.4	4.68~19.9
	Btu	5950~25160	7650~32980	9928~42160	13056~52360	13056~52360	15912~67660
Power input	kW	0.25~1.6	0.32~2.08	0.44~2.86	0.6~3.81	0.6~3.81	0.72~4.74
COP		7~4.63	7.03~4.66	6.64~4.34	6.4~4.04	6.4~4.04	6.5~4.2
Working conditions: Air 10°C / Water 26°C / Humidity 70%							
Heating capacity	kW	1.42~6.1	1.88~8	2.5~10.7	3.38~14.4	3.38~14.4	4.2~17.8
	Btu	4828~20740	6392~27200	8500~36380	11492~48960	11492~48960	14280~60520
Power input	kW	0.25~1.5	0.33~1.95	0.45~2.64	0.62~3.62	0.62~3.62	0.75~4.4
COP		5.68~4.07	5.7~4.1	5.56~4.05	5.45~3.98	5.45~3.98	5.6~4.05
Power supply		~220-240V/50 Hz/1 Ph				~380-415V/50 Hz/3 Ph	
Corpus material		ABS plastic					
Refrigerant		R32					
Number of fans		1					2
Fan speed	RPM	400-800	400-800	500-750	500-900	500-900	400-800
Noise level from 1m	dB(A)	40-50	42-52	44-53	45-56	45-56	46-57
Noise level from 1m (min.)	dB(A)	40	42	44	45	45	46
Noise level from 10m	dB(A)	20-30	22-32	24-33	25-36	25-36	26-37
Noise level from 10m (min.)	dB(A)	20	22	24	25	25	26
Piping inlet/outlet	inch	2					
Water consumption	m³/h	3,5	4,7	5,4	6,7	6,7	8,5
Pressure loss (max.)	kPa	4	4,5	5	6	6	11
Dimensions (LxWxH)	mm	950×400×620			1110×480×870		1165×470×1275



- ▶ Titanium heat exchanger;
- ▶ Ozone-safe refrigerant R32;
- ▶ Convenient control panel;
- ▶ High efficiency;
- ▶ Operating temperature range from -7°C to +43°C;
- ▶ It is used for pools up to 58 m³.

 -7°C ... +43°C



		CH-HP010LERK	CH-HP015LERK	CH-HP020LERK	CH-HP030LERK	CH-HP035LERK
Recommended pool volume	m³	17	25	35	45	58
Operating temperature range	°C	-7 ~ 43				
WORKING CONDITIONS: AIR 27°C / WATER 26°C / HUMIDITY 80%						
Heating capacity	kW	3.40	5.00	8.00	11.00	12.30
	Btu	11560	17000	27200	37400	41820
Power input	kW	0.66	0.96	1.55	2.16	2.33
COP		5.15	5.20	5.16	5.10	5.28
WORKING CONDITIONS: AIR 24°C / WATER 26°C / HUMIDITY 62%						
Heating capacity	kW	2.90	4.40	7.00	9.50	10.50
	Btu	9860	14858	23800	32300	35700
Power input	kW	0.60	0.91	1.45	2.00	2.24
COP		4.83	4.80	4.83	4.75	4.68
WORKING CONDITIONS: AIR 15°C / WATER 26°C / HUMIDITY 70%						
Heating capacity	kW	2.60	3.40	5.20	7.60	8.40
	Btu	8840	11560	17680	25840	28560
Power input	kW	0.77	0.9	1.33	1.97	2.27
COP		3.40	3.78	3.90	3.85	3.70
Power supply				~220-240 V / 50 Hz / 1 Ph		
Corpus material				Metal		
Refrigerant				R32		
Number of fans				1		
Piping inlet/outlet	mm	50				
Fan speed	RPM	870			810	
Noise level from 1 m	dB (A)	49	51	53	54	55
Dimensions (LxWxH)	mm	805×300×545			850×320×700	