

Recirculating Coolers (Chillers)

Recirculating Coolers (Low Temp. Models)

Powerful recirculating coolers, the HL Models provide a wide range of cooling capacities with temperature reliability.

Innovative control system, with a dynamic pumping capacity, and ideal for external temp. applications. Broad range of models to choose from based on working temperature range.



Operating Features

- Temperature range is from -20°C to 40°C .
- Bright LED water level indicator can be easily identified.
- Low fluid level and dry-running protection when triggered shows an error symbol on the display and an audible sound.
- If the equipment operates at 40°C or above due to the external environment, user can simply identify the error with a visual or an audible sound.
- Designed to simplify operation with a touch screen type display.
 - Easy-to-read VFD display with interactive touch keys.
 - Setting and resolution indication $0.1^{\circ}\text{C}/^{\circ}\text{F}$.
 - Quick keypad lock prevents accidental parameter changes.
 - Signal indicator for operation status.

Constructional Features

- The refrigerating system is designed to reduce energy consumption and to maximize in refrigerating efficiency.
- Eco-friendly R-404A / R507 refrigerant is used to prevent environmental pollution. Double service valve is used to prevent refrigerant leakage.
- Removable gridded vent for reducing condenser contamination and to facilitate cleanliness.
- A wide ($\varnothing 120\text{mm} / 4.72"$) solution inlet is for easy and safe pouring of solution into the recirculating cooler.
- Pressure gauge comes standard for observing the pump pressure.
- The refrigeration system can be observed easily to diagnostic at a glance by high / low pressure gauges. (HL-25H, 35H, 45H, 55H Models)
- Wheels allow for easy mobility.
- The beautifully designed and compact.
- Different types of pumps come standard with the recirculating cooler to provide versatility.
- Warning alarm/monitoring system.
 - Over temperature.
 - Lack of bath solutions.

Testing in accordance with DIN EN 12876

Optional Accessories
 ➔ see page 104-105

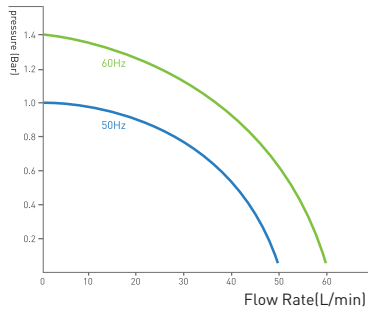
- Fittings, Adapters
- Tubing, Insulations
- Tube Clamps
- Bath Fluid

Recirculating Coolers (Chillers)

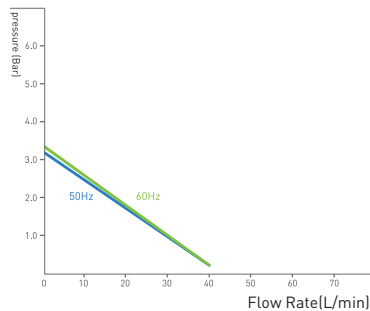
Recirculating Coolers (Low Temp. Models)

Pumping Capacities (Bath fluid : ethylene glycol mix 1:1 water)

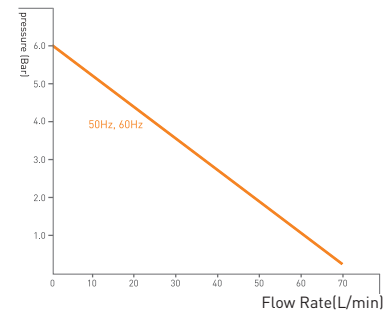
Submersible Pump



• HL-05, 10, 15, 20



• HL-15H, 20H, 25H, 35H



• HL-45H, 55H

Specifications & Ordering Information



Model		HL-05	HL-10	HL-15	HL-20	HL-15H	HL-20H	HL-25H	HL-35H	HL-45H ²⁾	HL-55H ²⁾
Temperature ¹⁾ (Bath fluid : ethylene glycol mix 1:1 water)	Working Temperature Range (°C / °F)	-20 to 40 / -4 to 104									
	Temperature Stability at 15°C, (±°C / °F)	1 / 1.8									
Cooling Capacity (bath fluid : ethylene glycol mix 1:1 water)	at 20°C (kw)	0.6	0.7	1.45	1.8	1.45	1.8	2.5	3.3	6.5	7.1
	at 10°C (kw)	0.5	0.6	1.15	1.5	1.15	1.5	1.8	2.3	4.5	6
	at 0°C (kw)	0.35	0.42	0.86	1.15	0.86	1.15	1.1	1.7	3	4.1
	at -10°C (kw)	0.18	0.32	0.62	0.85	0.62	0.85	0.65	1	2.1	2.5
	at -20°C (kw)	0.04	0.14	0.3	0.40	0.3	0.4	0.4	0.55	1.2	1.5
Pump	Max. Flow Rate (L / min, gal / min)	50 / 13.2				40 / 10.57				70 / 18.49	
	Max. Pressure (bar / psi)	1 / 14.5				2.8 / 40.6				6 / 87	
Dimension	Max., Filling Capacity (L, cu ft)	7.5 / 0.26		13.5 / 0.47				25 / 0.88		39 / 1.37	
	ForTubing Dia (mm / inch)	20 / 0.8									
	Overall (WxLxH, mm / inch)	405×620×710 / 15.9×24.4×28		515×715× 835 / 20.3×28.1×32.9				550×900×1140 / 21.7×35.4×44.9		605×1045×1300 / 23.8×41.4×51.2	
	Net Weight (kg / lbs)	62.85 / 138.6	64.85 / 143	86.5 / 190.7	87.35 / 192.9	91.8 / 202.4	92.65 / 204.3	141.3 / 310.9	146.3 / 321.9	171 ±10 / 377 ±22	176 ±10 / 388 ±22
Electric Requirement (230V, 60Hz)		5A	5.5A	6.5A	7.5A	6.5A	7.5A	9.5A	13.5A		
Cat. No.		AAH65001K	AAH65011K	AAH65021K	AAH65031K	AAH65121K	AAH65131K	AAH65141K	AAH65151K	-	-
Electric Requirement (230V, 50Hz)		4.5A	5A	6A	7A	6A	7A	7.5A	12.5A		
Cat. No.		AAH65002K	AAH65012K	AAH65022K	AAH65032K	AAH65122K	AAH65132K	AAH65142K	AAH65152K	-	-
Electric Requirement (120V, 60Hz)		10A	11A	13A	15A						
Cat. No.		AAH65003U	AAH65013U	AAH65023U	AAH65033U	-	-	-	-	-	-
Electric Requirement (380V, 60Hz)										5.5A	7A
Cat. No.		-	-	-	-	-	-	-	-	AAH65169K	AAH65179K
Electric Requirement (380V, 50Hz)										5A	6A
Cat. No.		-	-	-	-	-	-	-	-	AAH65168K	AAH65178K

1) Technical data according to DIN 12876.

2) Only HL-45H, 55H is recorded by 380V, 60Hz.

※ Above specification value is recorded by 50Hz.

※ The performance values refer to +20°C(68°F) ambient temperature.

※ Product performance may be affected by ambient temperatures.