

Model	HCL-1	HCL-2	HCL-3
Operating temperature Range	-70°C to +100°C		
Temperature control accuracy	±0.5°C		
Temperature display	LED/LCD		
Temperature display resolution	0.1		
Internal/jacket Temperature sensor	3-wire RTD PT-100 sensor		
External/ process sensor required	3-wire RTD PT-100 sensor		
Controller type	PID		
Communication/ interface	RS-485 mod bus (optional)		
Alarm message	Indicative		
Type of cooling	Refrigerated		
Refrigerant	R-404a, CFC free		
Cooling power with	Methanol		
@ 0°C	0.4kW	1.1kW	1.5kW
@ -40°C	0.3kW	0.8kW	1.2kW
@ -60°C	0.2kW	0.4kW	0.6kW
Type of heating	Electrical		
Heating power	1kW	2kW	3kW
Machine standard version	Air-cooled		
Circulation pump maximum flow	14~16 l/min		30~35 l/min
Circulation pump maximum pressure	0.4 bar		0.7 bar
Machine end connection	M16 x 1 male		M24 x 1.5 male
Machine overall dimension ( W x D x H)	610 x 700 x 1150 mm		700 x 700 x 1300 mm
MOC	Complete SS-304 construction		
Power supply	1-phase, 230V AC, 50 Hz		3-phase, 420V AC, 50 Hz
Maximum current	15A	20A	15A
Ambient temperature condition	10°C~35°C		
Standard safety features			
Oil level in bath	Cut-off, Indication/message, Auto reset		
Phase reversal prevention	NA		Cut-off, Indication/message, manual reset
Over temperature protection	Cut-off, Indication/message, Auto reset		
Compressor over pressure	Cut-off, Indication/message, manual reset		
Compressor overheat	Cut-off, Indication/message, Auto reset		

• Since Development is a continuous process, above specifications can change without prior notice.

• The temperature mentioned above is at outlet of the machine hence temperature inside the process/ load may vary due to various factors like process design, distance, head, insulation etc.