

Single Effect Hot Water Driven Absorption Chiller



Performance Data

Model		Unit	L30HH	L40HH	L50HH	L60HH	L75HH	L90HH	L110HH	L135HH	L155HH	L180HH	L210HH	L240HH	L270HH	L300HH	
Cooling Capacity		kW	105	141	176	211	264	316	387	475	545	633	738	844	949	1,055	
		usRT	30	40	50	60	75	90	110	135	155	180	210	240	270	300	
Chilled Water	Inlet Temp./Outlet Temp.	°C	13 / 8														
	Flow rate	m ³ /h	18.1	24.2	30.2	36.3	45.4	54.4	66.5	81.6	93.7	109	127	145	163	181	
	P. Drop	mH ₂ O	4.6	5.2	5.9	6.5	6.7	6.9	4.6	4.9	4.5	4.5	9.9	9.7	10.2	10.2	
	Connection	mm	65		80		80		100		125			150			
Cooling Water	Inlet Temp./Outlet Temp.	°C	31 / 36.5														
	Flow rate	m ³ /h	36.6	48.9	61.1	73.3	91.6	110	134	165	189	220	256	293	330	366	
	P. Drop	mH ₂ O	4.2	4.2	6.2	6.5	6.2	6.6	8.2	8.9	8.8	8.7	7.1	6.8	6.9	7.0	
	Connection	mm	100			125			150			200					
Hot Water	Inlet Temp./Outlet Temp.	°C	95 / 80														
	Flow rate	ton/h	7.3	9.8	12.2	14.6	18.3	21.9	26.8	32.9	37.8	43.9	51.2	58.5	65.8	73.1	
		m ³ /h	7.6	10.1	12.7	15.2	19.0	22.8	27.9	34.2	39.3	45.6	53.2	60.8	68.4	76.0	
	P.Drop	Shell	mH ₂ O	2.2	2.8	3.1	4.0	2.0	2.3	4.8	5.4	2.3	2.6	4.1	4.1	3.9	4.1
		Control Valve	mH ₂ O	2.2	2.8	2.5	2.4	3.7	2.1	3.2	1.9	2.5	3.4	2.8	2.4	3.0	2.2
	Connection	mm	50			65			80			100					
Control Valve	mm	40	40	50		65		80			100						
Electric	Power source	-	3PH 400V, 50Hz														
	Abs. Pumps	kW(A)	1.5(5.4)						1.8(6.2)			1.9(6.2)		2.4(7.9)			
	Ref. Pump	kW(A)	0.2(1.1)						0.3(1.4)			0.3(1.4)					
	Purge Pump	kW(A)	0.4 (1.4)														
	Control Panel	kW(A)	0.2 (0.5)														
	Total kW	kW	2.3						2.7			2.8		3.3			
	Total Ampere @400V	A	8.4						9.5			9.5		11.2			
Size	Length (L)	mm	2110		2610		2658		3678		3728		4748		4854		
	Width (W)	mm	1,112										1,250		1,363		
	Height (H)	mm	2,091				2,473				2,705				2,781		
Weight	Rigging	ton	2.1	2.2	2.6	2.7	3.6	3.7	4.6	4.8	5.5	5.8	6.8	7.1	8.8	9.2	
	Operation	ton	2.3	2.5	2.9	3.1	4.1	4.2	5.2	5.5	6.4	6.8	7.9	8.4	10.4	10.9	
Space for Tube Replacement	mm	1,900			2,400				3,400				4,600				
Water Volume of Machine	Chilled Water Side	ℓ	60	67	77	80	111	123	142	159	216	237	258	286	324	348	
	Cooling Water Side	ℓ	167	188	218	228	315	343	404	446	579	632	714	785	959	1,026	
	Hot Water Side	ℓ	60	68	79	83	107	117	137	153	181	199	221	245	305	326	

Note

- Working pressure of each water side is based on 1.0MPa (150psig)
- Fouling factor 0.0001 m².hr.°C/Kcal for Absorber, Condenser and Evaporator.
- Min. outlet temp. of chilled water: 5°C
- Min. allowable inlet temp. of cooling water: 20°C.
- Controllable range shall be 0~100%.
- Standard Power source is 3ph, 400V, 50Hz and available 220, 380, 440V and 460V power source.
- Each water flow can be adjusted within 50~120%.

LHH Series

Single Effect Hot Water Driven Absorption Chiller

Performance Data

Model		Unit	L340HH	L375HH	L420HH	L470HH	L525HH	L580HH	L630HH	L750HH	L820HH	L900HH	L975HH	L1050HH	L1125HH	L1300HH	
Cooling Capacity		kW	1,196	1,319	1,477	1,653	1,846	2,039	2,215	2,637	2,883	3,165	3,428	3,692	3,956	4,571	
		usRT	340	375	420	470	525	580	630	750	820	900	975	1,050	1,125	1,300	
Chilled Water	Inlet Temp./Outlet Temp.	°C	13 / 8														
	Flow rate	m ³ /h	206	227	254	284	318	351	381	454	496	544	590	635	680	786	
	P. Drop	mH ₂ O	9.2	9.7	4.4	5.9	5.6	7.4	9.2	7.1	9.1	6.9	8.6	5.2	6.4	9.5	
	Connection	mm	200						250			300					
Cooling Water	Inlet Temp./Outlet Temp.	°C	31 / 36.5														
	Flow rate	m ³ /h	415	458	513	574	641	708	769	916	1001	1099	1191	1282	1374	1588	
	P. Drop	mH ₂ O	7.1	7.1	6.1	8.2	6.6	8.6	10.8	8.7	11.0	8.3	10.3	7.1	8.7	10.4	
	Connection	mm	250				300			350			400				
Hot Water	Inlet Temp./Outlet Temp.	°C	95 / 80														
	Flow rate	ton/h	82.9	91.4	102	115	128	141	154	183	200	219	238	256	274	317	
		m ³ /h	86.2	95.0	106	119	133	147	160	190	208	228	247	266	285	329	
	P.Drop	Shell	mH ₂ O	3.9	4.0	2.7	3.6	3.5	4.5	5.7	1.8	2.3	3.7	4.7	3.6	4.4	2.5
		Control Valve	mH ₂ O	2.9	2.2	2.8	3.5	2.8	2.4	2.8	3.6	4.3	1.7	2.0	2.3	2.7	3.6
	Connection	mm	125				150				200						
	Control Valve	mm	100	125				150				200					
Electric	Power source	-	3PH 400V, 50Hz														
	Abs. Pumps	kW(A)	2.4(8.0)		2.8(8.5)		4.5(12.3)			4.5(13.3)		5(15.2)		6.7(20)			
	Ref. Pump	kW(A)	0.4(1.4)						1.5(4.0)								
	Purge Pump	kW(A)	0.4(1.4)						0.75(2.2)								
	Control Panel	kW(A)	0.2 (0.5)														
	Total kW	kW	3.4		3.8		5.5			6.6		7.0		7.5		9.2	
	Total Ampere @400V	A	11.3		11.8		15.6			19.2		20.0		21.9		26.7	
Size	Length (L)	mm	4872		5414	5912	6012	6537	7037	6639	7139	6749	7249	6966	7466	8466	
	Width (W)	mm	1,561		1,583		1,833			2,272		2,548		2,930			
	Height (H)	mm	2,947				3,168			3,474		3,937		4,000			
Weight	Rigging	ton	10.5	10.9	12.3	13.7	17.2	19.0	20.6	23.9	26.0	28.5	30.8	33.1	35.4	40.0	
	Operation	ton	12.5	13.1	14.8	16.4	20.8	22.9	24.9	29.0	31.6	34.6	37.5	40.3	43.2	49.0	
Space for Tube Replacement	mm	4,600		5,200		5,700		6,200	6,700	6,200	6,700	6,200	6,700	6,300	6,800	7,800	
Water Volume of Machine	Chilled Water Side	ℓ	465	485	526	563	656	701	744	1,004	1,060	1,355	1,423	1,795	1,890	2,079	
	Cooling Water Side	ℓ	1,289	1,363	1,462	1,554	2,024	2,147	2,264	2,841	2,993	3,732	3,915	5,664	5,893	6,350	
	Hot Water Side	ℓ	375	400	438	473	559	599	637	825	878	1,023	1,089	1,317	1,397	1,586	

Option

1. Non-standard cooling capacity.
2. Higher working pressure (230psig = 1.6MPa, 300psig = 2.0MPa)
3. Special tubes (material) & thickness.
4. Various temp. conditions (CHW, CW, HW)
5. Outdoor installation.
6. The specifications above are subject to change without prior notice for an improvement of the chiller.

Single Effect Hot Water Driven Absorption Chiller



Performance Data

Model		Unit	L30H	L40H	L50H	L60H	L75H	L90H	L110H	L135H	L155H	L180H	L210H	L240H	L270H	L300H			
Cooling Capacity		kW	105	141	176	211	264	316	387	475	545	633	738	844	949	1,055			
		usRT	30	40	50	60	75	90	110	135	155	180	210	240	270	300			
Chilled Water	Inlet Temp./Outlet Temp.	°C	13 / 8																
	Flow rate	m ³ /h	18.1	24.2	30.2	36.3	45.4	54.4	66.5	81.6	93.7	109	127	145	163	181			
	P. Drop	mH ₂ O	4.9	5.5	6.2	7.5	6.4	6.8	9.6	10.6	9.5	10.2	9.7	10.1	10.3	10.6			
	Connection	mm	65			80			100			125			150				
Cooling Water	Inlet Temp./Outlet Temp.	°C	31 / 36.5																
	Flow rate	m ³ /h	37.3	49.8	62.2	74.6	93.3	112	137	168	193	224	261	299	336	373			
	P. Drop	mH ₂ O	4.1	4.4	6.6	8.4	6.7	7.0	3.4	3.8	3.9	4.1	7.8	7.7	7.8	7.7			
	Connection	mm	100			125			150			200							
Hot Water	Inlet Temp./Outlet Temp.	°C	95 / 80																
	Flow rate	ton/h	7.6	10.1	12.6	15.1	18.9	22.7	27.7	34.0	39.1	45.4	52.9	60.5	68.0	75.6			
		m ³ /h	7.9	10.5	13.1	15.7	19.6	23.6	28.8	35.4	40.6	47.2	55.0	62.9	70.7	78.6			
	P.Drop	Shell	mH ₂ O	0.2	0.4	0.6	0.8	0.3	0.4	0.6	0.7	0.7	0.8	1.3	1.3	1.3	1.3		
		Control Valve	mH ₂ O	2.4	3.0	1.8	2.6	4.0	2.3	3.5	2.1	2.7	3.7	2.0	2.6	3.3	4.0		
	Connection	mm	50			65			80			100							
Control Valve	mm	40		50		65		80		100									
Electric	Power source	-	3PH 400V, 50Hz																
	Abs. Pumps	kW(A)	1.4(5.2)			1.6(5.1)			1.6(5.3)			1.9(6.2)			1.9(6.3)			2.4(8.0)	
	Ref. Pump	kW(A)	0.2(1.1)						0.3(1.4)						0.4(1.4)				
	Purge Pump	kW(A)	0.4 (1.4)																
	Control Panel	kW(A)	0.2 (0.5)																
	Total kW	kW	2.2			2.4			2.5			2.8			2.9			3.4	
	Total Ampere @400V	A	8.2			8.1			8.6			9.5			9.6			11.3	
Size	Length (L)	mm	2095		2600		2634		3680		3728		4748		4788				
	Width (W)	mm	1,062		1,095		1,229				1,472				1,480				
	Height (H)	mm	1,880			2,255			2,257			2,540							
Weight	Rigging	ton	2.1	2.2	2.6	2.7	3.6	3.7	4.6	4.8	5.5	5.8	6.8	7.1	8.8	9.2			
	Operation	ton	2.3	2.5	2.9	3.1	4.1	4.2	5.2	5.5	6.4	6.8	7.9	8.4	10.4	10.9			
Space for Tube Replacement	mm	1,900			2,400			3,400			4,600								
Water Volume of Machine	Chilled Water Side	ℓ	49	56	66	69	106	116	138	153	210	225	253	274	316	337			
	Cooling Water Side	ℓ	140	162	188	198	313	345	433	480	644	698	715	787	915	993			
	Hot Water Side	ℓ	51	62	71	79	98	107	127	142	170	189	214	239	278	303			

Note

- Working pressure of each water side is based on 1.0MPa (150psig)
- Fouling factor 0.0001 m².hr.°C/Kcal for Absorber, Condenser and Evaporator.
- Min. outlet temp. of chilled water: 5°C
- Min. allowable inlet temp. of cooling water: 20°C.
- Controllable range shall be 0~100%.
- Standard Power source is 3ph, 400V, 50Hz and available 220, 380, 440V and 460V power source.
- Each water flow can be adjusted within 50~120%.

LH Series

Single Effect Hot Water Driven Absorption Chiller

Performance Data

Model		Unit	L340H	L375H	L420H	L470H	L525H	L600H	L675H	L750H	L825H	L900H	L975H	L1050H	L1125H	L1300H	
Cooling Capacity		kW	1,196	1,319	1,477	1,653	1,846	2,039	2,215	2,637	2,883	3,165	3,428	3,692	3,956	4,571	
		usRT	340	375	420	470	525	580	630	750	820	900	975	1,050	1,125	1,300	
Chilled Water	Inlet Temp./Outlet Temp.	°C	13 / 8														
	Flow rate	m ³ /h	206	227	254	284	318	351	381	454	496	544	590	635	680	786	
	P. Drop	mH ₂ O	9.4	9.8	9.5	4.3	5.8	3.4	4.6	6.1	5.5	7.0	8.8	5.2	6.4	9.5	
	Connection	mm	200				250				300				350		
Cooling Water	Inlet Temp./Outlet Temp.	°C	31 / 36.5														
	Flow rate	m ³ /h	423	466	522	585	653	746	840	933	1026	1120	1213	1306	1399	1617	
	P. Drop	mH ₂ O	7.5	7.6	6.6	9.0	12.1	4.2	5.6	7.4	6.3	8.1	10.0	6.7	8.2	10.9	
	Connection	mm	250			300			350			400					
Hot Water	Inlet Temp./Outlet Temp.	°C	95 / 80														
	Flow rate	ton/h	85.7	94.5	106	118	132	151	170	189	208	227	246	265	284	328	
		m ³ /h	89.1	98.2	110	123	138	157	177	196	216	236	255	275	295	341	
	P.Drop	Shell	mH ₂ O	1.3	1.3	1.4	1.8	2.5	1.6	2.1	2.8	2.1	2.7	3.4	2.8	3.5	5.2
		Control Valve	mH ₂ O	2.0	2.4	3.0	2.4	3.0	2.7	3.2	3.9	1.6	1.8	2.2	2.5	2.9	3.9
	Connection	mm	125				150				200						
Control Valve	mm	125				150				200							
Electric	Power source	-	3PH 400V, 50Hz														
	Abs. Pumps	kW(A)	2.4(8.0)		3.7(11.0)			4.2(12.9)			5.2(16.2)			7.5(23.3)			
	Ref. Pump	kW(A)	0.4(1.4)				1.5(4.0)				1.5(4.3)						
	Purge Pump	kW(A)	0.4(1.4)						0.75(2.2)								
	Control Panel	kW(A)	0.2 (0.5)														
	Total kW	kW	3.4		4.7			6.3			7.7			10.0			
	Total Ampere @400V	A	11.3		14.3			18.8			22.9			30.3			
Size	Length (L)	mm	4876	4998	5540	6038	5644	6142	6667	6246	6771	7271	6860	7360	8360		
	Width (W)	mm	1,597		1,836			2,208			2,379			2,929			
	Height (H)	mm	2,832		3,174			3,600			3,867			4,000			
Weight	Rigging	ton	10.5	10.9	14.7	16.0	17.2	19.3	21.6	23.9	26.2	28.5	30.8	33.1	35.4	40.0	
	Operation	ton	12.5	13.1	17.8	19.4	20.8	23.3	26.1	29.0	31.8	34.6	37.5	40.3	43.2	49.0	
Space for Tube Replacement	mm	4,600			5,200	5,700	5,200	5,700	6,200	5,700	6,200	6,700	6,300	6,800	7,800		
Water Volume of Machine	Chilled Water Side	ℓ	456	479	553	599	642	946	1,008	1,074	1,136	1,241	1,313	1,381	1,767	1,862	
	Cooling Water Side	ℓ	1,291	1,370	1,871	2,006	2,131	2,763	2,932	3,111	3,280	3,735	3,939	4,134	5,741	5,988	
	Hot Water Side	ℓ	334	365	407	448	485	677	729	784	837	806	870	932	1,067	1,138	

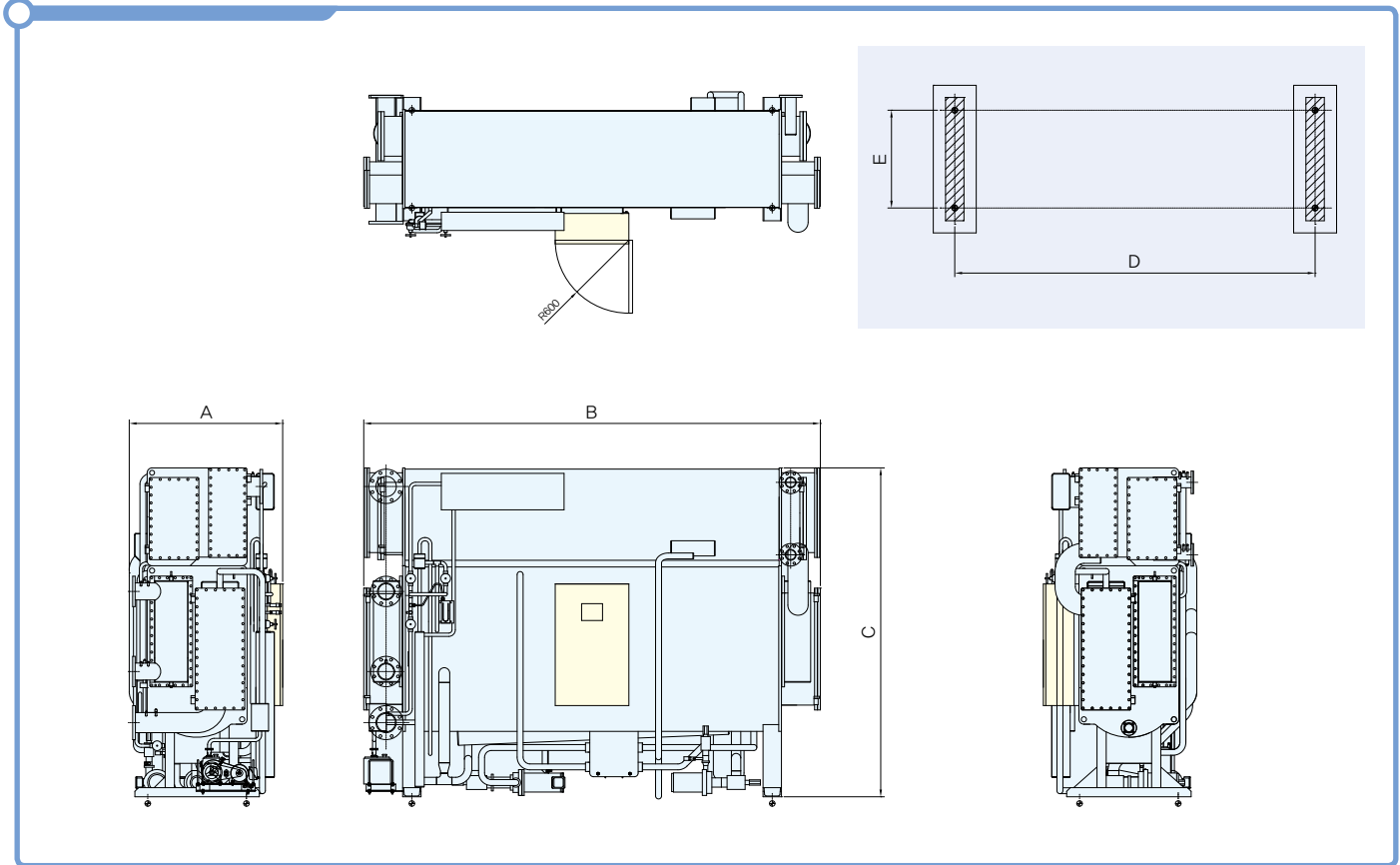
Option

1. Non-standard cooling capacity.
2. Higher working pressure (230psig = 1.6MPa, 300psig = 2.0MPa)
3. Special tubes (material) & thickness.
4. Various temp. conditions (CHW, CW, HW)
5. Outdoor installation.
6. The specifications above are subject to change without prior notice for an improvement of the chiller.

Single Effect Hot Water Driven Absorption Chiller

COP
0.827

Outline_Foundation



	L30HH	L40HH	L50HH	L60HH	L75HH	L90HH	L110HH	L135HH	L155HH	L180HH	L210HH	L240HH	L270HH	L300HH	
A	1.076			1.112				1.250			1.363				
B	2.095	2.600		2.648		3.668		3.720		4.740		4.866			
C	2.091			2.473				2.705			2.781				
D	1.421	1.921		1.941		2.961		2.936		3.956		3.906			
E	740			650				804			890				
	L340HH	L375HH	L420HH	L470HH	L525HH	L580HH	L630HH	L750HH	L820HH	L900H	L975HH	L1050HH	L1125HH	L1300HH	
A	1.561		1.659		1.833			2.272		2.548		2.930			
B	4.872	5.508	6.006	6.012	6.617	7.117	6.639	7.139	6.771	7.271	7.010	7.510	8.510		
C	2.947				3.168			3.474		3.937		4.000			
D	3.906	3.856	4.398	4.896	4.328	4.826	5.351	4.846	5.371	5.871	4.200	4.700	5.700		
E	990				1.140			1.540		1.790		2.490			

LHH Series

Single Effect Hot Water Driven Absorption Chiller

Thermal Insulation

1. Use only Non-inflammable or flame retardant insulation materials.
2. Do not insulate motor of refrigerant pump.
3. Total insulation area is including pipings.
4. Do not cover components such as service valves, diaphragm valves, sight glass, control valves, thermometers or sensor.
5. Use the standard insulation material and thickness as the recommendation

6. For the information of insulation area, please refer to the Table below.
7. The water box sections should be worked to be disassembled for the cleaning or repairing.

Note

HOT Surface insulation

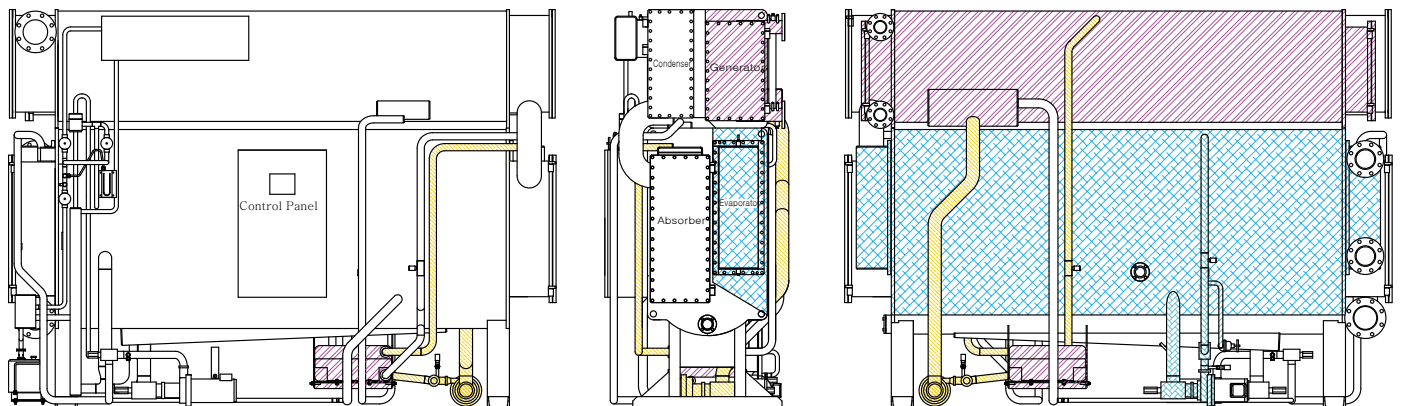
- Material of insulation : Inflammable polymer sponge usable at 120°C
- Thickness of insulation : 19mm [3/4 inch], 10mm [3/8 inch] when polymer sponge is used

COLD Surface insulation

- Material of insulation : Closed cell type Inflammable polymer sponge
- Thickness of insulation : 19mm [3/4 inch], 10mm [3/8 inch]

Model	Hot Surface(m ²)		Cold Surface(m ²)	
	19(mm)	10(mm)	19(mm)	10(mm)
L30HH	3.7	0.9	3.6	0.4
L40HH	3.7	0.9	3.6	0.4
L50HH	4.4	0.9	4.2	0.5
L60HH	4.4	1.0	4.2	0.5
L75HH	4.6	1.1	4.3	0.5
L90HH	4.6	1.1	4.3	0.5
L110HH	6.2	1.2	5.8	0.5
L135HH	6.2	1.3	5.8	0.5
L155HH	6.5	1.6	6.6	0.7
L180HH	6.5	1.7	6.6	0.9
L210HH	8.3	1.8	8.0	0.9
L240HH	8.5	1.9	8.2	0.9
L270HH	9.8	2.1	8.9	0.9
L300HH	9.8	2.1	8.9	0.9

Model	Hot Surface(m ²)		Cold Surface(m ²)	
	19(mm)	10(mm)	19(mm)	10(mm)
L340HH	10.9	2.1	10.6	0.9
L375HH	10.9	2.2	10.6	0.9
L420HH	12.2	2.6	14.6	1.1
L470HH	13.5	2.7	16.2	1.2
L525HH	15.0	2.8	17.3	1.2
L580HH	20.3	3.4	17.6	2.1
L630HH	21.9	3.5	19.3	2.1
L750HH	23.7	3.6	21.0	2.1
L820HH	24.2	3.8	21.1	2.3
L900HH	26.0	3.9	22.9	2.3
L975HH	27.6	4.0	27.8	2.3
L1050HH	35.8	5.3	12.4	2.6
L1125HH	37.5	5.4	13.1	2.6
L1300HH	40.6	5.5	14.4	2.6



Hot Surfaces

- 19mm [3/4 in] : Generator with Water Box
- 10mm [3/8 in] : Heat Exchanger Body with Piping

Cold Surfaces

- 19mm [3/4 in] : Evaporator Body with Water Box
- 10mm [3/8 in] : Inlet and Outlet Piping of Refrigerant Pump