



MMC HVAC SoLution

Hot Water Fired
absorption CHiller



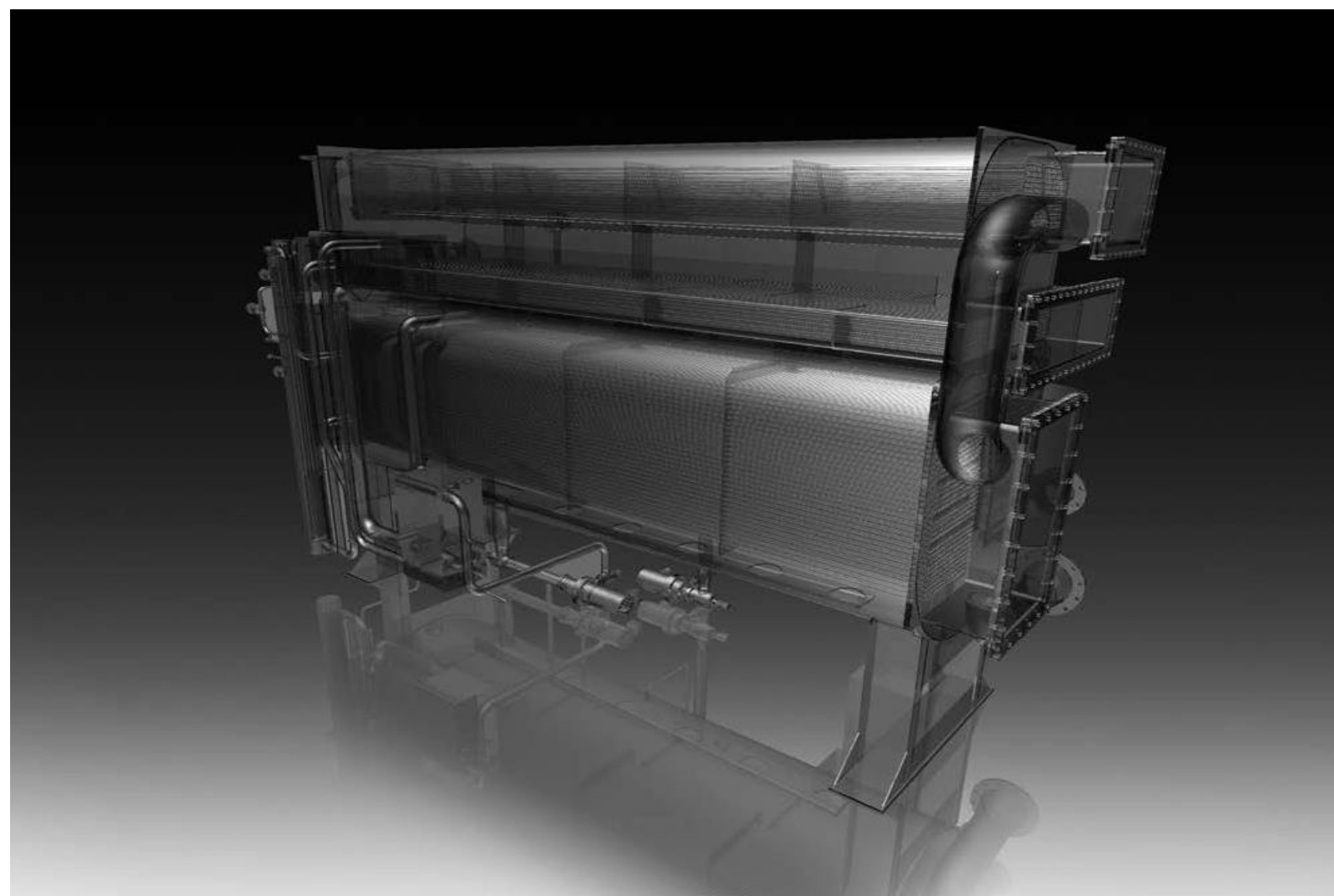
CÔNG TY CỔ PHẦN MIMICO

Tòa nhà SCETPA, số 19A Cộng Hòa, Phường 12, Quận Tân Bình, Tp. Hồ Chí Minh

Tel : 028 6292 5250 / 024 3232 2639

Website : www.mimico.com.vn

Email : Info@mimico.com.vn



Contents

Model Label 4

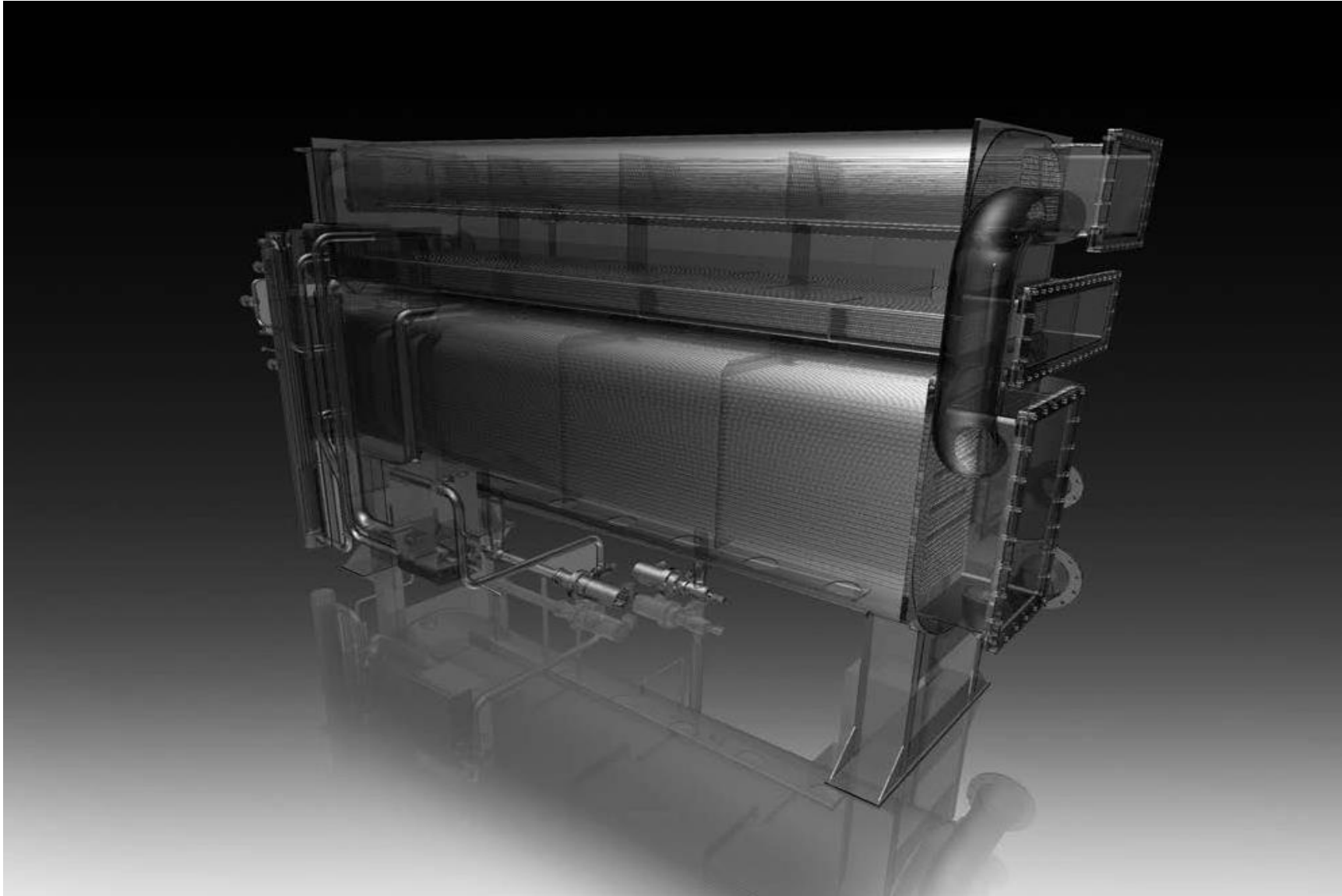
Key Features 4

Operating Principle 5

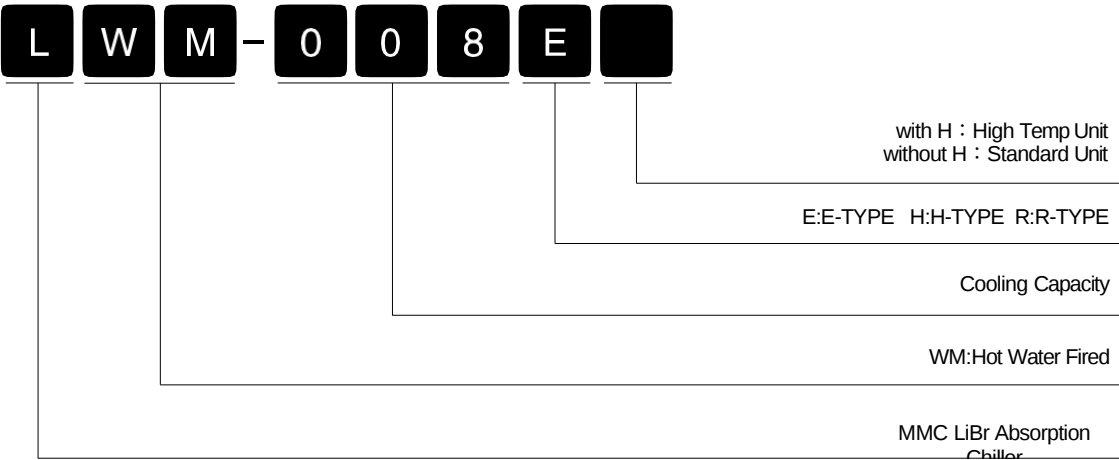
Product Specification Table (Standard) 6

Product Specification Table (High Temp).....8

Foundation Schematic 10



Model Label



principle of operation

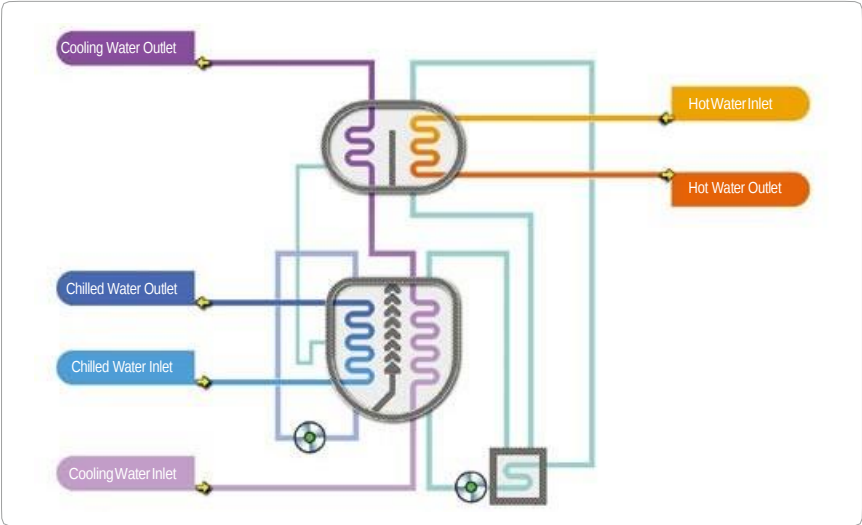
Operating Principle of Cooling

The body of the chiller consists of the lower shell assembly, upper shell assembly, heat exchanger, solution pump, refrigerant pump and purging system. The lower shell assembly includes evaporator(EVAP) and absorber(ABSO); the upper shell assembly includes condenser(COND) and generator(GEN). When the chiller is running, the whole body is in a vacuum state. In EVAP, the low temp refrigerant from COND will absorb the heat of the chilled water from user, and at the same time, the refrigerant gets evaporated and turns to refrigerant steam. In ABSO, the strong solution will absorb the refrigerant steam from EVAP and turns to weak solution. Then the weak solution will be sent to GEN being heated after the heat exchanger. In GEN, the weak solution will turn to strong solution after being heated by hot water and at the same time a great deal of high temp refrigerant steam emerges. The strong solution exchanges heat with the low temp weak solution from ABSO, and finally enters ABSO. In the meantime, the refrigerant steam turns to refrigerant liquid in COND, and returns EVAP again after throttling and so a completed circulation is finished.

Key Features

- Microcomputer full-automatic control system with MMC patent and powerful remote monitoring software;
- The most advanced control system —— PID, realizes high precision of temperature control in the range of $\pm 0.1^{\circ}\text{C}$, which can reduce the time reaching the rated refrigerating capacity and save energy sharply.
- The chiller can adjust the running status parameters automatically by the solution concentration monitor, which can be combined with the melting-crystal device to avoid crystallization.
- Self-cleaning refrigerate drop device is non-electricity and non-clog which can avoid the cooling capacity attenuation. The perpetual-use technology of solution guarantees much lower maintenance cost than other suppliers.
- The stepless adjustment of cooling capacity in the range of 10% to 100%.
- The imported key parts keep the chiller running steadily as long as 20 years.
- The compact-optimized structural design with smaller size and weight.
- Low requirements for installation: indoor, outdoor, rooftop, basement and so on.
- Stable performance, low noise, small vibration and even foundation bolt is unnecessary.
- Double-purging system by automatic injector makes purging convenient and thorough.

Operating Schematic of Cooling



Product Specification Table (Standard)

Model		UNITS	LWM-008E	LWM-012E	LWM-015E	LWM-020E	LWM-025E	LWM-030E	LWM-035E	LWM-040E	LWM-045E	LWM-055E	LWM-060E	
Cooling Capacity		USRT	26	40	50	66	83	99	116	132	149	182	198	
		10 ⁴ kcal/h	8	12	15	20	25	30	35	40	45	55	60	
		kW	91	141	176	232	292	348	408	464	524	640	696	
Chilled Water Data	Temperature	℃	12→7											
	Water Flow rate	m³/h	16	24	30	40	50	60	70	80	90	110	120	
	Pressure Drop	mAq	2.2	2.9	5.3	11.0	11.4	10.0	9.1	10.0	10.3	9.9	9.6	
	Connection size	A	65			80		100				125		
Cooling Water Data	Temperature	℃	31→36.5											
	Water Flow rate	m³/h	33.4	51.3	64.1	84.7	106.5	127.0	148.8	169.3	191.2	233.5	254.0	
	Pressure Drop	mAq	2.5	3.6	6.3	2.8	3.4	5.3	5.6	4.0	4.5	8.6	9.0	
	Connection size	A	80			125				150		200		
Hot Water Data	Temperature	℃	95→80											
	Water Flow rate	m³/h	7.0	10.8	13.4	17.7	22.3	26.6	31.2	35.5	40.1	48.9	53.2	
	Pressure Drop	mAq	1.1	1.2	2.6	0.5	0.5	1.1	1.0	1.1	1.2	2.5	2.1	
	Connection size	A	40		65			80				100		
	Hot Water Control Valve Connection size	A	40		50	65			80			100		
Power Supply	Standard Source	V	3Φ 380V 50Hz											
	Total Current	A	5.6			8.8						9.0	14.4	
	Wire Size	mm²	4.0											
Rated Power	Power	KVA	3.7			5.8						5.9	9.5	
	NO.1 Absorbent Pump	KW (A)	0.8(2.7A)			2.0(5.9A)							3.0(11.0A)	
	NO.2 Absorbent Pump	KW (A)	*****											
	Refrigerant Pump	KW (A)	0.2(1.3A)									0.4(1.8)	0.4(1.8A)	
	Purge Pump	KW (A)	0.4(1.1A)											
Dimension	Length	mm	2020		2520	2550		3600		3650		4700		
	Width	mm	1450			1500				1700				
	Height	mm	2000			2200				2370				
Weight	Operating	Ton	2.1	2.3	2.7	4.1	4.3	5.3	5.7	6.9	7.2	8.4	8.9	
	Total Shipping	Ton	1.8	1.9	2.3	3.5	3.7	4.6	4.9	5.8	6.1	7.1	7.5	
	Transport Form	—	Whole Transport											
Clearance For Tube Removal		mm	2000		2400			3400				4500		

- NOTE: 1.1USRT=3024kcal/h=3.517kW, 1mAq=9.8KPa。
2. Standard chilled water inlet/outlet TEMP is 12℃→7℃
3. Standard cooling water inlet/outlet TEMP is 31℃→36.5℃
4. Standard hot water inlet/outlet TEMP is 95℃→80℃
5. Standard chilled water,cooling water.hot water system the highest pressure:30–50USRT is 5kg/cm²G, more than 65USRT is 8kg/cm²G。
6. Currents & Electricity Consumptions are based on 3Φ 380V 50Hz
7. Total Shipping weight = REF.weight + SOLUTION weight + UNIT weight
8. The specifications are subject to change without prior notice

LWM-070E	LWM-080E	LWM-090E	LWM-100E	LWM-110E	LWM-125E	LWM-140E	LWM-155E	LWM-175E	LWM-190E	LWM-210E	LWM-230E	LWM-250E	WM-275E	LWM-300E	LWM-350E	
231	265	298	331	364	413	463	513	579	628	694	761	827	909	992	1157	
70	80	90	100	110	125	140	155	175	190	210	230	250	275	300	350	
812	932	1048	1164	1280	1452	1628	1804	2036	2209	2441	2676	2908	3197	3489	4069	
12→7																
140	160	180	200	220	250	280	310	350	380	420	460	500	550	600	700	
10.3	9.5	10.1	10.1	3.2	4.4	5.9	3.8	5.1	6.4	4.4	5.7	7.3	5.0	7.6	11.4	
150				200						250			300			
31→36.5																
296.4	340.0	382.3	424.6	467.0	529.8	594.0	658.1	742.8	805.7	890.3	976.3	1061.0	1166.2	1272.6	1484.3	
7.1	7.4	7.9	8.7	6.3	8.7	11.5	7.1	9.5	11.8	6.2	7.8	9.9	4.7	11.1	16.7	
200		250		300			350			400					450	
95→80																
62.1	71.2	80.1	89.0	97.8	111.0	124.5	137.9	155.6	168.8	186.5	204.6	222.3	244.3	266.6	311.0	
2.5	2.3	2.2	2.3	0.9	1.3	1.7	1.3	1.9	2.3	0.7	0.8	1.0	1.3	1.3	1.9	
100		125		150			200									
100		125				150				200				150*2		
3Φ 380V 50Hz																
14.4				19.8		20.8		21.8			30.3		34.7			37.2
4.0				6.0						30.3		10.0				
9.5				13.0		13.7		14.3			19.9		22.8			24.5
3.0(11.0A)							3.7(12A)				5.5(16.4A)				5.5(16.4A)	
*****				1.8(5.4A)		1.8(6.4A)				3.7(12A)						
0.4(1.8A)										1.1(3.9A)				1.8(6.4A)		
0.4(1.1A)										0.75(1.9A)						
4800				4950	5500	6000	5650	6150	6650	6150	6670	7170	6800	7300	8400	
1850		1950		2100			2350			2750			2910		3000	
2770		3050		3250			3700			3900			4100			
10.8	11.3	13.4	14.0	19.3	20.9	22.0	27.5	29.5	31.7	35.7	38.2	40.5	44.5	47.4	55.3	
9.1	9.5	11.2	11.7	16.2	17.6	18.5	22.7	24.4	26.3	30.1	32.3	34.2	37	39.8	46.4	
Whole Transport																
4500				4600	5200	5700	5200	5700	6200	5800	6300	6800	6500	7000	8000	

Product Specification Table (High Temp)

Model		UNITS	LWM-010EH	LWM-015EH	LWM-020EH	LWM-025EH	LWM-032EH	LWM-040EH	LWM-045EH	LWM-050EH	LWM-060EH	LWM-070EH	LWM-080EH	
Cooling Capacity		USRT	33	50	66	83	106	132	149	165	198	231	265	
		10 ⁴ kcal/h	10	15	20	25	32	40	45	50	60	70	80	
		kW	116	176	232	292	373	464	524	580	696	812	932	
Chilled Water Data	Temperature	℃	12→7											
	Water Flow rate	m³/h	20	30	40	50	64	80	90	100	120	140	160	
	Pressure Drop	mAq	2.9	3.8	6.9	5.9	6.8	8.0	7.0	6.6	7.7	5.6	6.2	
	Connection size	A	65			80		100				125		
Cooling Water Data	Temperature	℃	31→38											
	Water Flow rate	m³/h	33.3	50.4	66.5	83.7	106.8	133.1	150.2	166.3	199.6	232.8	267.1	
	Pressure Drop	mAq	3.3	4.7	8.2	4.5	5.6	9.2	9.2	6.3	7.9	13.6	15.5	
	Connection size	A	80			125				150		200		
Hot Water Data	Temperature	℃	130→90											
	Water Flow rate	m³/h	3.3	5.0	6.7	8.4	10.7	13.3	15.0	16.6	20.0	23.3	26.7	
	Pressure Drop	mAq	1.1	1.2	2.6	0.1	0.1	0.3	0.3	0.3	0.3	0.6	0.6	
	Connection size	A	32			40				65				
	Hot Water Control Valve Connection size	A	25	32		40		50			65			
Power	Standard Source	V	3Φ 380V 50Hz											
	Total Current	A	5.6			8.8						9.0	14.4	
Supply	Wire Size	mm²	4.0											
	Power	KVA	3.7			5.8						5.9	9.5	
Rated Power	NO.1 Absorbent Pump	KW (A)	0.8(2.7A)			2.0(5.9A)							3.0(11.0A)	
	NO.2 Absorbent Pump	KW (A)	*****											
	Refrigerant Pump	KW (A)	0.2(1.3A)									0.4(1.8A)		
	Purge Pump	KW (A)	0.4(1.1A)											
Dimension	Length	mm	2020		2520	2550		3600		3650		4700		
	Width	mm	1450			1500				1700				
	Height	mm	2000			2200				2370				
Weight	Operating	Ton	2.1	2.3	2.7	4.1	4.3	5.3	5.7	6.9	7.2	8.4	8.9	
	Total Shipping	Ton	1.8	1.9	2.3	3.5	3.7	4.6	4.9	5.8	6.1	7.1	7.5	
	Transport Form	—	Whole Transport											
Clearance For Tube Removal		mm	2000		2400			3400				4500		

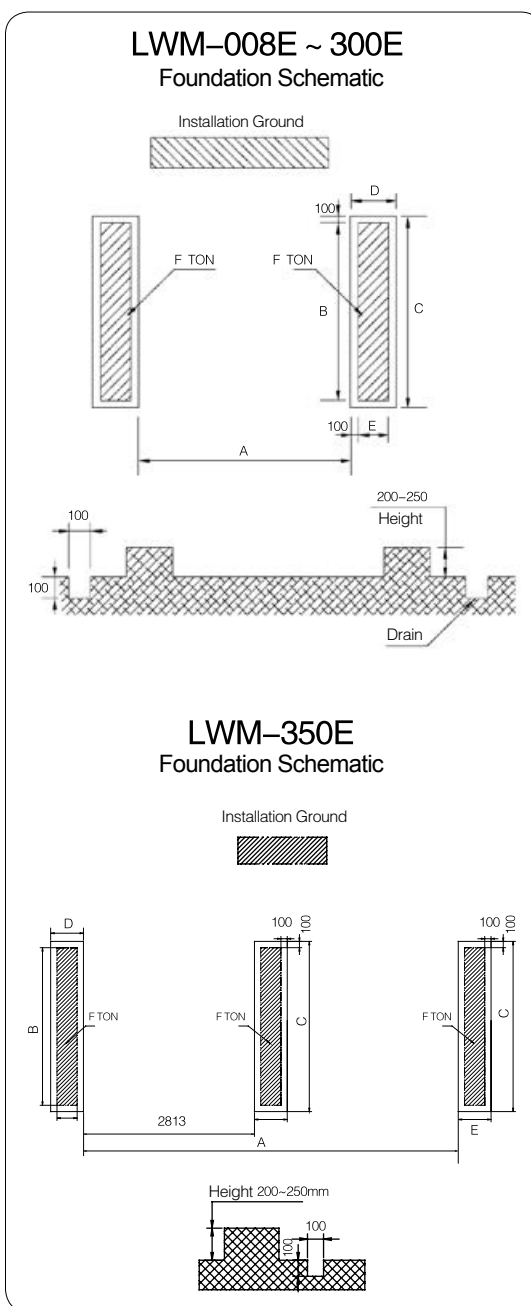
- NOTE: 1. 1USRT=3024kcal/h=3.517kW, 1mAq=9.8KPa.
2. Standard chilled water inlet/outlet TEMP is 12℃→7℃
3. Standard cooling water inlet/outlet TEMP is 31℃→36.5℃
4. Standard hot water inlet/outlet TEMP is 95℃→80℃
5. Standard chilled water,cooling water.hot water system the highest pressure:30–50USRT is 5kg/cm²G, more than 65USRT is 8kg/cm²G
6. Currents & Electricity Consumptions are based on 3Φ 380V 50Hz
7. The specifications are subject to change without prior notice

LWM—090EH	LWM—105EH	LWM—115EH	LWM—130EH	LWM—145EH	LWM—165EH	LWM—180EH	LWM—200EH	LWM—230EH	LWM—250EH	LWM—270EH	LWM—300EH	LWM—325EH	WM—360EH	LWM—390EH	LWM—455EH	
298	347	380	430	479	546	595	661	761	827	893	992	1075	1190	1290	1505	
90	105	115	130	145	165	180	200	230	250	270	300	325	360	390	455	
1048	1220	1336	1512	1685	1920	2093	2325	2676	2908	3141	3489	3781	4185	4537	5293	
12→7																
180	210	230	260	290	330	360	400	460	500	540	600	650	720	780	910	
5.8	5.8	5.1	5.2	5.3	7.4	9.4	5.3	7.4	9.4	7.1	9.3	11.9	8.1	12.3	18.6	
150				200						250			300			
31→38																
300.4	349.8	383.0	433.4	482.8	550.4	599.8	666.3	767.1	833.6	900.1	999.9	1083.6	1199.5	1300.3	1517.0	
11.3	12.3	12.7	14.4	10.8	14.8	18.6	11.6	16.0	19.9	10.0	13.0	16.1	7.9	18.3	27.0	
200		250		300			350			400				450		
130→90																
30.0	35.0	38.3	43.3	48.3	55.0	60.0	66.6	76.7	83.4	90.0	100.0	108.4	120.0	130.0	151.7	
0.6	0.6	0.6	0.6	0.3	0.4	0.5	0.4	0.5	0.6	0.2	0.2	0.3	0.4	0.3	0.6	
80				100						125			150			
80				100				125				150				
3Φ 380V 50Hz																
14.4				19.8		20.8		21.8			30.3		34.7			37.2
4.0				6.0						10.0						
9.5				13.0		13.7		14.3			19.9		22.8			24.5
3.0(11.0A)							3.7(12A)				5.5(16.4A)				5.5(16.4A)	
*****				1.8(5.4A)		1.8(6.4A)				3.7(12A)						
0.4(1.8A)										1.1(3.9A)				1.8(6.4A)		
0.4(1.1A)										0.75(1.9A)						
4800				4950	5500	6000	5650	6150	6650	6150	6670	7170	6800	7300	8400	
1850		1950		2100			2350			2750			2910		3000	
2770		3050		3250			3700			3900			4100			
10.8	11.3	13.4	14.0	19.3	20.9	22.0	27.5	29.5	31.7	35.7	38.2	40.5	44.5	47.4	55.3	
9.1	9.5	11.2	11.7	16.2	17.6	18.5	22.7	24.4	26.3	30.1	32.3	34.2	37	39.8	46.4	
Whole Transport																
4500				4600	5200	5700	5200	5700	6200	5800	6300	6800	6500	7000	8000	

Foundation Schematic (Standard)

LWM-008E ~ 350E

Size Model	A	B	C	D	E	F
LWM-008E	1276	1020	1220	195	95	1.10
LWM-012E	1276	1020	1220	195	95	1.15
LWM-015E	1776	1020	1220	195	95	1.35
LWM-020E	1586	1020	1220	340	140	2.05
LWM-025E	1586	1020	1220	340	140	2.15
LWM-030E	2606	1020	1220	340	140	2.65
LWM-035E	2606	1020	1220	340	140	2.85
LWM-040E	2346	1180	1380	470	270	3.45
LWM-045E	2346	1180	1380	470	270	3.60
LWM-055E	3466	1180	1380	470	270	4.20
LWM-060E	3466	1180	1380	470	270	4.45
LWM-070E	3466	1240	1440	470	270	5.40
LWM-080E	3466	1240	1440	470	270	5.65
LWM-090E	3366	1360	1560	470	270	6.70
LWM-100E	3366	1360	1560	470	270	7.00
LWM-110E	3366	1800	2000	470	270	9.65
LWM-125E	3908	1800	2000	470	270	10.45
LWM-140E	4406	1800	2000	470	270	11.00
LWM-155E	3808	2000	2200	520	320	13.75
LWM-175E	4306	2000	2200	520	320	14.75
LWM-190E	4831	2000	2200	520	320	15.85
LWM-210E	3906	2300	2500	520	320	17.85
LWM-230E	4431	2300	2500	520	320	19.10
LWM-250E	4931	2300	2500	520	320	20.25
LWM-275E	4431	2500	2700	520	320	22.25
LWM-300E	4931	2500	2700	520	320	23.70
LWM-350E	5946	2500	2700	520	320	18.40



- NOTE:**
1. Please dig the drain around the chiller.
 2. In order to protect the chiller, the ground should be waterproof.
 3. The surface of the foundation should be level. (Levelness within 2/1000)