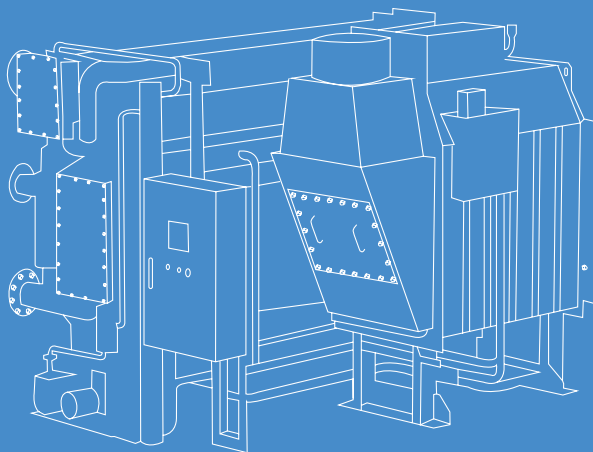


# KELVIN Clim KEG

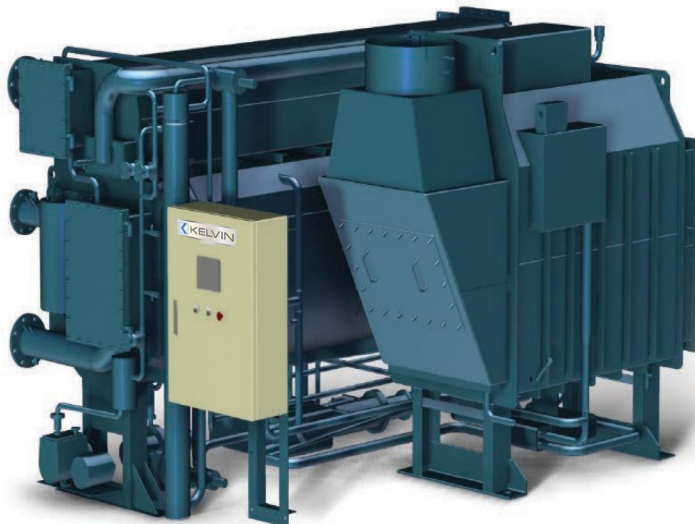
Cooling Capacity: 100 ~ 1500 USRT



Double Effect Exhaust Gas Absorption Chiller & Heater

# KELVIN Clim KEG

KELVIN Clim KEG : Double Effect Exhaust Gas Absorption Chiller & Heater  
 Cooling Capacity : 100 ~ 1500 USRT



## KELVIN AIRCONDITIONING



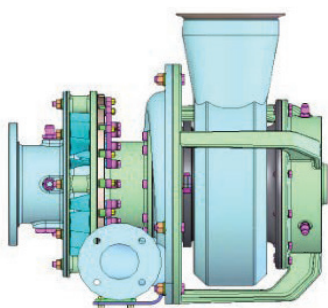
1. Waste exhaust gas can be used for drive heat source.
2. Convertible use of cooling and heating.
3. Energy saving product.
4. Increase in the efficiency of total energy.
5. No power overload in summer season.
6. Environment-friendly to use water as refrigerant.

### Development of diverter valve

- Working at high temp soot. Endurability
- Maximum flow for exhaust gas: 90kg/min

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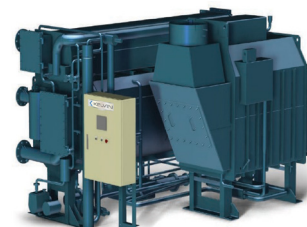


Exhaust gas  
576°C



Exhaust gas  
526°C

Chilled water : 12 → 7°C



150°C  
Exhaust Gas Outlet

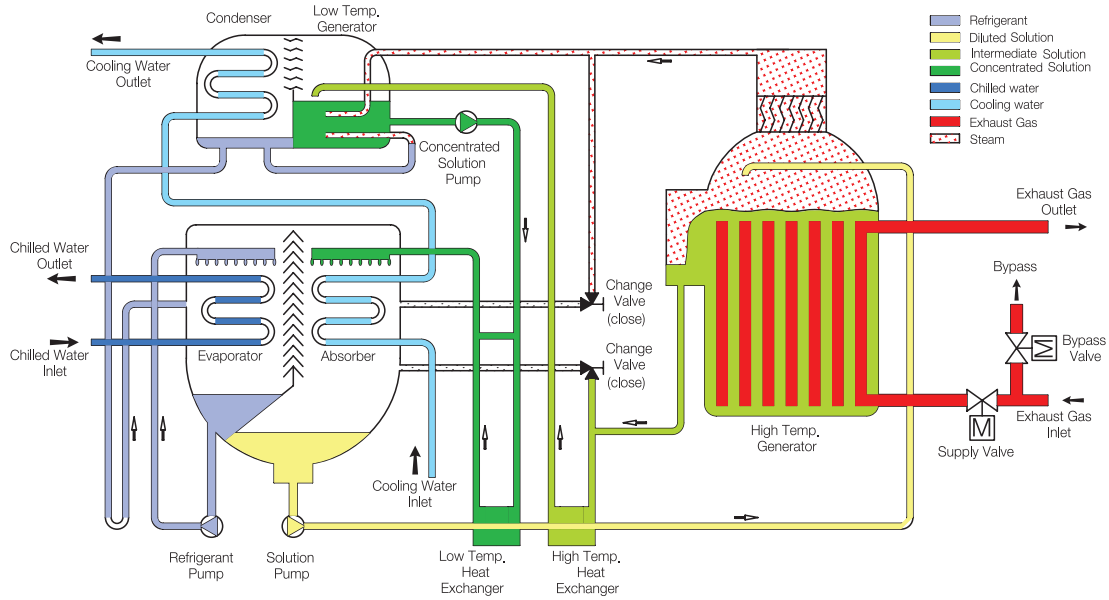
### High temp. generator

- Vertical water tube - Fin tube, 1 Pass
- UA
- Loss of pressure calculation
- Endurable from high temp corrosion

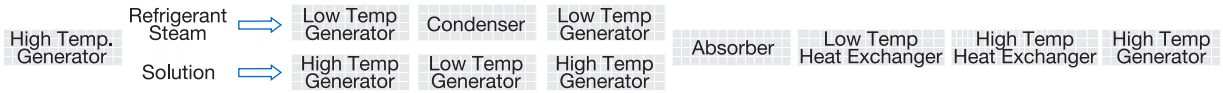
## 》 CYCLE DIAGRAM

Double Effect Exhaust Gas Absorption Chiller & Heater

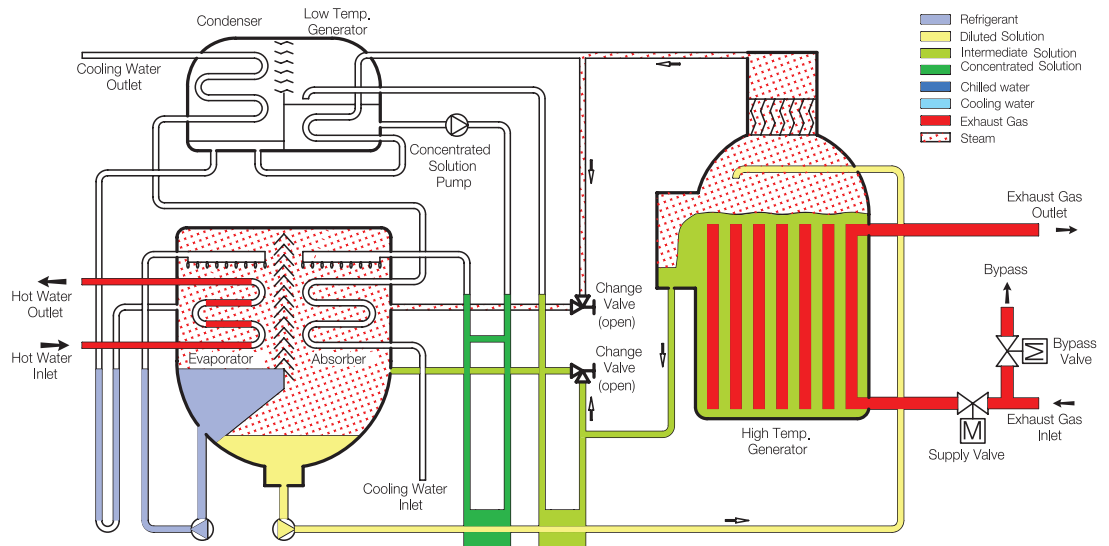
### 》 Cooling Cycle Diagram



### 》 Cooling Cycle Sloution Flow



### 》 Heating Cycle Diagram



### 》 Heating Cycle Sloution Flow



## > SPECIFICATION

### Double Effect Exhaust Gas Absorption Chiller & Heater

MODEL		UNIT	KEG 010	KEG 012	KEG 012	KEG 018	KEG 021	KEG 024	KEG 028	KEG 032	KEG 036	KEG 040	
Cooling capacity	USRT		100	120	150	180	210	240	280	320	360	400	
	kW		351	422	527	633	738	844	984	1.125	1.265	1.406	
Heating Capacity	Mcal/h		283	340	425	510	595	680	793	906	1019	1133	
	kW		329	395	494	592	691	790	922	1053	1185	1317	
Chilled & Hot Water	Temp.	°C	12 / 7										
	Flow rate	ton/h	60.5	72.6	90.7	109	127	145	169	194	218	242	
	P. Drop	mAq	4.8	5.1	6.6	7.0	6.4	6.3	4.6	4.5	5.0	5.1	
	Connection	mm	100				125			150			
Chilled & Hot Water	Temp.	°C											
	Flow rate	ton/h	100	120	150	180	210	240	280	320	360	400	
	P. Drop	mAq	11.1	11.3	11.5	11.8	11.8	12.1	11.2	10.7	11.1	10.8	
	Connection	mm	125			150			200				
Exhaust Gas	Temp.	Kg/sec	0.88	1.05	1.32	1.58	1.84	2.11	2.46	2.81	3.16	3.51	
	Temp.	Cooling	450/165										
		Heating	450/125										
	pressure. Drop	mmAg	77	82	79	92	97	113	129	131	123	131	
	Outlet Conn	mm	400				500				600		
	Divertler Valve	mm	400				500				600		
Electric	Power Source		3 O 380V (50Hz)										
	Abs. Pump	kW(A)	2.0 (5.7)				2.4 (6.1)				3.4 (9.0)		
	Ref. Pump	kW(A)	0.3 ( 1.5 )										
	Purge Pump	kW(A)											
	Contorol Panel	KVA	0.2 ( 0.5 )										
	Amp.(400Vac)	A	9.1				9.5		9.6		12.5		
Size	Length(L)	mm	2.597			3.680		3.686		4.744		4.776	
	Width(w)	mm	1.662	1.740	1.857	1.935	2.150	2.189	2.267	2.375	2.270	2.309	
	Height(H)	mm	1.979				2.303				2.470		
Weight	Rigging	mm	5.0	5.3	6.4	6.8	7.9	8.5	9.8	10.3	12.8	13.2	
	Operation	Ton	5.4	5.8	7.0	7.4	8.6	9.3	10.7	11.3	14.0	14.6	
Tube exchange Space		Ton	2.400			3.400			4.500				

**Note**

- 1 USRT = 3,024 kcal/h
- 2 Working Pressure of each water side is based on 1.0MPa (151 psig).
- 3 Fouling factor 0.0001 m<sup>2</sup>·h·°C/kcal for Absorber and Condenser, 0.0001 m<sup>2</sup>·h·°C/kcal for Evaporator.
- 4 Catalogue specifications are subject to change without prior notice.

## > SPECIFICATION

### Double Effect Exhaust Gas Absorption Chiller & Heater

KEG 045	KEG 050	KEG 056	KEG 063	KEG 070	KEG 080	KEG 090	KEG 100	KEG 110	KEG 120	KEG 130	KEG 140	KEG 150
450	500	560	630	700	800	900	1000	1100	1200	1300	1400	1500
1.582	1.757	1.958	2.214	2.460	2.812	3.163	3.515	3.666	4.218	4.218	4.921	5.272
1271	1416	1586	1784	1982	2266	2549	2832	3115	3398	3398	3965	4248
1481	1646	1843	2074	2304	2633	2962	3291	3621	3950	3950	4608	4937
32 / 37.5												
272	302	339	381	423	484	544	605	665	727	786	847	907
4.4	3.9	3.6	5.0	6.6	4.7	6.4	8.5	7.2	9.2	11.5	8.3	10.2
200				250				300				350
32 / 37.5												
450	500	560	630	700	800	900	1000	1100	1200	1300	1400	1500
10.7	10.8	7.7	10.6	14.0	8.7	11.8	15.6	3.0	3.8	4.8	4.0	4.9
250		300			350			400				
3.95	4.39	4.92	5.53	6.15	7.03	7.91	8.78	9.66	10.54	11.42	12.30	13.18
450/165												
450/125												
133	134	143	133	146	155	153	176	213	221	212	206	184
750							1000					
750							1000					
3 Ø 380V (50Hz)												
5.5(14.3)							7.5(21.9)					
0.4 (1.6)				1.5 (3.8)								
0.4 (1.4)							0.75 (2.2)					
0.2 ( 0.5 )												
17.8			20.0				28.4					
4.954		4.998	5.540	6.038	5.460	5.958	6.483	6.293	6.818	7.318	6.974	7.475
2.491	2.569	2.934	3.069	3.459	3.300	3.480	3.530	4.348	4.448	4.598	4.932	5.182
2.744		3.057			3.390			3.678			3.700	
15.7	16.5	21.2	23.1	24.6	31.0	33.6	35.6	41.1	43.4	46.4	50.2	54.1
17.2	18.1	23.7	25.7	27.5	34.8	37.6	39.9	46.2	48.8	52.1	56.5	60.8
2.400			5.200	5.700	5.200	5.700	6.200	5.700	6.200	6.700	6.200	6.700

**Note**

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