

YIA

Single stage hot water or steam powered absorption chiller

Cooling capacities from 280 kW to 3150 kW



Features

YIA chillers are available using low pressure steam or hot water. Compared to electrically driven chillers **YIA** chillers can dramatically lower system operating costs when using waste heat.

Applications particularly well suited to the **YORK YIA** absorption chiller include cogeneration, waste heat recovery from diesel or gas engine jacket water, turbine air inlet cooling and district heating and cooling installations.

Hot water units

Hot water units can operate with entering water temperature from 80 to 128°C.

Steam units

Steam units can operate with a steam pressure at generator inlet from 0.2 barg to 0.95 barg.

Refrigerant cycle

The **YORK YIA** high efficiency single-stage absorption refrigeration cycle uses water as the refrigerant and lithium bromide as the absorbent. It is the strong affinity and ease of separation that these two substances have for each other that makes the cycle work. The entire process occurs in hermetic vessels in a near complete vacuum. By using the environmental friendly ADVAGuard 750 inhibitor the internal corrosion rate and hydrogen generation is up to 8 times less than using lithium molybdate.

Chiller control

The **YORK YIA** chiller utilizes the OptiView control panel for advanced chiller control and building system integration.

Smart Purge is included to eliminate the need for time consuming manual purging of the chiller system.

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Nominal capacity

YIA Model	1A1	1A2	2A3	2A4	2B1	3B2	3B3	4B4	4C1	5C2	5C3
Cooling Capacity kW	280	321	406	465	506	606	674	757	760	928	1048
EER (low temperature hot water)	0,61	0,68	0,69	0,69	0,69	0,69	0,69	0,69	0,68	0,69	0,61

YIA Model	6C4	7D1	7D2	8D3	8E1	9E2	10E3	12F1	13F2	14F3
Cooling Capacity kW	1145	1253	1415	1535	1885	2090	2265	2675	2940	3150
EER (low temperature hot water)	0,68	0,68	0,68	0,68	0,70	0,70	0,69	0,70	0,71	0,69

At 7°C leaving chilled water, 95°C entering generator water, and 29.4°C entering condenser water.

Technical data

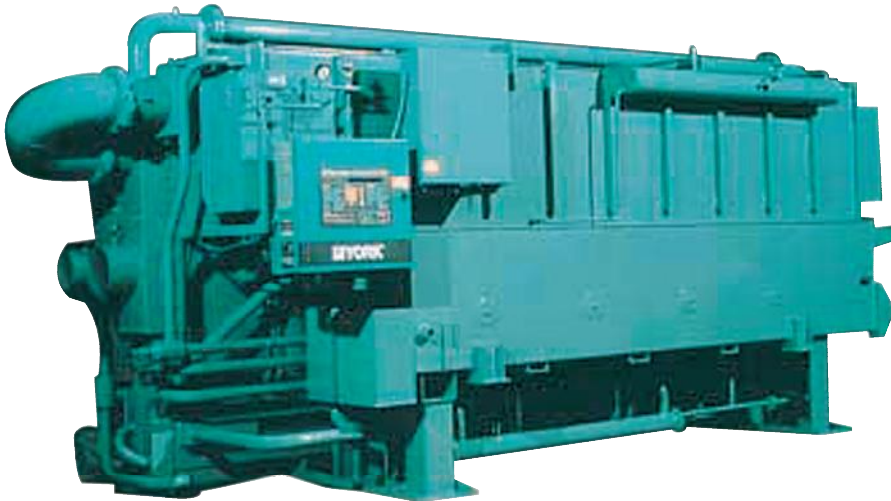
YIA Model			1A1	1A2	2A3	2A4	2B1	3B2	3B3	4B4	4C1	5C2	5C3
Dimensions	Length	mm	3720	4330	4940	5550	4940	5550	6160	6770	5550	6160	6770
	Width	mm	1760	1420				1580				1770	
	Height	mm	2320				2640				3020		
Operating weight kg			4950	5500	6130	6590	7900	8540	9490	10490	11400	12260	13620

YIA Model			6C4	7D1	7D2	8D3	8E1	9E2	10E3	12F1	13F2	14F3
Dimensions	Length	mm	7530	6160	6770	7530	6870	7630		8390		9150
	Width	mm	1770	2110	1670	2110	2290			2480		
	Height	mm	3020	3540			3840			4240		
Operating weight kg			14760	17890	19840	21800	24110	26830	29790	35550	39050	41140

YPC-ST

Two-stage steam fed absorption chiller

Cooling capacities from 1055 kW to 2370 kW



Features

- The YORK YPC high efficiency two-stage absorption chiller uses water as the refrigerant and lithium bromide as the absorbent.
- The YORK YPC chiller is designed for chilled water applications.
- Product quality, reliability, and service after the sale is evident by having many YORK brand absorption chillers in operation for more than 35 years.
- ADVAGuard750 is used in YORK absorption chillers to extend chiller life by reducing the corrosion and non-condensable gas generation rates by more than eight (8) times beyond conventional molybdate inhibitors.
- An automatic refrigerant purge system is utilized to eliminate the need for time consuming manual purging of the chiller.

Nominal capacity and technical data

YPC-ST Model	14SC	16SL	17S	18S	19S
Cooling Capacity (kW)	1055	1547	1705	2039	2373
Length / Width / Height (m)	5.1 / 1.9 / 2.3	6.0 / 2.3 / 2.6	5.9 / 2.3 / 2.6	7.0 / 2.3 / 2.8	8.0/2.3/2.8
Operating weight (kg)	11030	17150	17510	20780	24190

Leaving chilled liquid 7°C Entering Tower Water 30°C.
Entering Steam 8 psi.

YPC-F

Two-stage direct fired chiller-heater

Cooling capacities from 703 kW to 2370 kW

Heating capacities from 565 kW to 1970 kW



Features

YPC-F is designed to provide both chilled or hot water. Both cooling and heating operations, with hot water up to 60°C, are performed through the evaporator as standard. Optionally an additional hot water heat exchanger providing hot water up to 79,4°C can be installed. With this option a parallel cooling and heating operation is possible.

Refrigerant cycle

The **YORK YPC** high efficiency two-stage absorption refrigeration cycle uses water as the refrigerant and lithium bromide as the absorbent. It is the strong affinity that these two substances have for each other that makes the cycle work. The entire process occurs in hermetic vessels in a near complete vacuum.

YORK's exclusive two-way split of solution flow allows the unit to operate at much lower solution concentrations and temperatures than in series flow systems. This dramatically increases the efficiency of the unit and virtually eliminates crystallisation problems. By using the environmentally friendly ADVAGuard 750 inhibitor the internal corrosion rate and hydrogen generation is up to 8 times less than using lithium molybdate.

Burner

YPC-F units can be operated by either natural gas, propane gas or fuel oil. Capacity control is accomplished by modulating the burner's firing rate.

Nominal capacity and technical data

YPC-F Model	12SC	13SC	14SC	15SL	16S	16SL	17S	18S	19S
Cooling Capacity (kW)	703	809	1055	1231	1407	1547	1705	2039	2373
Heating Capacity (kW)	563	675	844	1013	1125	1268	1407	1688	1969
Length / Width / Height (m)	4.0/1.9/2.3	4.0/2.0/2.3	5.0/1.9/2.3	5.0/2.5/2.7	5.0/2.5/2.7	6.0/2.6/2.8	6.0/2.6/2.8	7.0/2.7/3.0	8.0/2.7/3.0
Operating weight (kg)	9490	10830	12130	17360	17580	21180	21580	25190	29720

Leaving chilled liquid 7°C Entering Tower Water 30°C.
Leaving Hot Water 60°C.



Manufacturer reserves the rights to change specifications without prior notice.