

**CITY OF NEW YORK  
DEPARTMENT OF BUILDINGS**

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of Materials and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, A.I.A., Commissioner  
MEA 304-03-E

Report of Material and Equipment Acceptance Division

Manufacturer – Yazaki Resources Co., Ltd., 740 Higashimachi, Shizuoka Hamamatsu Japan.

Trade Name(s) – Aroace.

Product - Absorption chiller and heater.

Pertinent Code Section(s) -27-770, 27-777.

Prescribed Test(s) -RS 13-6 (ANSI B9.1), RS 13-11 (UL1995).

Laboratory –Underwriters Laboratories Inc.

Test Report(s)- No. file SA6368, dated September 5, 2002.

Description - The chiller-heaters and chillers designed for outdoor installation. They are used for commercial and industrial applications for heating and air conditioning. Water is used as refrigerant and lithium bromide as absorbent. The entire refrigerant cycle operates under a vacuum and is contained within a hermetically sealed vessel. Units, with model numbers and their rating, as tabulated below:

Model	Chiller-Heater/ Chiller Capacity, Btu/h		Heat Medium			Chilled/Hot Water		Cooling Water	
	Cooling	Heating	Input Btu/hr	Flow gal/min	Generator Pressure Loss, psi	Flow gal/ min	Evaporator Pressure Loss, psig	Flow gal/ min	Conden- ser and Absorber Pressure Loss, psig
WFC- SC10	120,000	-	171/400	38.0	(+)	24.2	(+)	80.8	(+)
WFC- SH10	120,000	166,300	171/400	38.0	(+)	24.2	(+)	80.8	(+)
WFC- SC20	240,000	-	342/800	76.1	(+)	48.4	(+)	161.7	(+)
WFC- SH20	240,000	332,600	342/800	76.1	(+)	48.4	(+)	161.7	(+)
WFC- SC30	360,000	-	514/200	114.1	(+)	72.6	(+)	242.5	(+)
WFC- SH30	360,000	498,900	514/200	114.1	(+)	72.6	(+)	242.5	(+)

(+) As specified by manufacturer.

The chilled/hot water outlet temperature marking for all of the above models is "Cooling 44.6°F/Heating 131°F". The cooling water inlet temperature marking for all of the above models is "87.8°F".

Recommendation - That the above described absorption chiller and heater units in conjunction with compatible heat rejection equipment such as a cooling tower (not part of this application) be accepted for outdoor installation, using lithium bromide, under the following conditions:

1. Cooling tower or other compatible outdoor heat rejection equipment, if installed within 100 feet of any dwelling unit window, complies with all provisions of Section 27-770, subdivision 4, as to maximum sound levels permitted for exterior mechanical equipment.
2. Approval of all electrical equipment, apparatus, materials and devices shall be obtained from the Bureau of Electrical Control before installation.
3. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to those tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance 11/21/03

Examined By Shyam R. Prasad