

**APPROVED ICE STORAGE AIR CONDITIONERS Date:**

**REVISED 08-15-2007**

**The following vendors and their ice storage air conditioner models can be used in the ice storage air conditioner compliance options approved on April 26, 2006. Input details are listed below the listing of approved equipment.**

**Manufacturer**

Ice Energy, Inc  
9351 Eastman Park Drive  
Windsor, CO 80550  
Phone Number: 970-545-3630

**Testing Laboratory**

Intertek's ETL SEMPKO Labs  
3933 US Route 11  
Cortland, NY 13045 - 9715

Contact Person: Jeff Martin  
Phone Number: 607-758-6476

**Date Tested**

February 13th, 2006 to March 3rd, 2006

**Tracking Number**

Project Number 3091957

**Model Numbers**

**Non Residential Units**

B600 LRL1CXX

B600 LT159LT

B600 LTL1CFT

B600 LTL1CRL

B600 MSI5ASM

**Equipment Approval Date**

Approved April 26, 2006

Approved April 26, 2006

Approved April 26, 2006

Approved August 15, 2007

Approved August 15, 2007

**Residential Units**

B600 LRL1CXX-R

B600 GTG1CXX-R

Approved April 26, 2006

Approved April 26, 2006

Ice Energy DES/DXAC B600 Series  
 B600 Series Performance Parameters

Parameter	Value
Max Cooling Capacity (Btu/hr)	90000
Direct Cooling Capacity (Btu/hr)	60000
Direct Cooling EIR	0.2592
Storage Capacity (Ton-Hours)	45
Tank UA (Btu/(hr.F))	15.0
Parasitic losses during discharge (KW)	0.301
Parasitic losses during charge (KW)	0.014
Parasitic losses while idle (KW)	0.0026

Bi-quadratic performance coefficients  
 Bi-quadratic breakpoint 0.17

Bi-quad Capacity Coefs < Breakpoint

sngCap10 = 3.1889391E+0  
 sngCap11 = 4.8905407E-2  
 sngCap12 = -4.8911176E-4  
 sngCap13 = -8.6065603E+0  
 sngCap14 = 2.0804781E+1  
 sngCap15 = 2.0302810E-2

Bi-quad EER Coefs < Breakpoint

sngEER10 = 2.4707489E+1  
 sngEER11 = -1.0973203E-1  
 sngEER12 = -6.1508657E-4  
 sngEER13 = -2.7541088E+1  
 sngEER14 = 5.3401066E+1  
 sngEER15 = 1.3096274E-1

Bi-quad Capacity Coefs >= Breakpoint

sngCap20 = 2.3001541E+0  
 sngCap21 = 5.4170638E-2  
 sngCap22 = -5.0336629E-4  
 sngCap23 = -3.1616221E-1  
 sngCap24 = -1.0682326E-1  
 sngCap25 = 1.5659084E-3

Bi-quad EER Coefs >= Breakpoint

sngEER20 = 2.1286606E+1  
 sngEER21 = -7.7516969E-2  
 sngEER22 = -7.0254836E-4  
 sngEER23 = -1.2456290E+0  
 sngEER24 = -7.6417081E-1  
 sngEER25 = 1.7651660E-2

Direct Cooling Capacity Coefs

sCapFT0 = 0.053815799  
 sCapFT1 = 0.02044874  
 sCapFT2 = -1.45568E-5  
 sCapFT3 = -8.91816E-4  
 sCapFT4 = -1.22969E-5  
 sCapFT5 = -2.61616E-5

Direct Cooling EIR Coefs

sEIRFT0 = 0.991169621  
 sEIRFT1 = -0.02958748  
 sEIRFT2 = 0.00023957  
 sEIRFT3 = 0.016367154  
 sEIRFT4 = 5.03703E-05  
 sEIRFT5 = -1.71866E-04

Sample Bi-quadratic Values

Capacity	55	65	75	85	95
0.00%	4.40	4.30	4.11	3.81	3.42
4.64%	4.10	4.01	3.82	3.54	3.16
6.95%	3.98	3.90	3.71	3.43	3.06
16.26%	3.73	3.67	3.50	3.24	2.88
25.56%	3.69	3.63	3.47	3.21	2.85
34.87%	3.66	3.61	3.45	3.19	2.83
44.17%	3.63	3.58	3.42	3.17	2.81
53.48%	3.60	3.55	3.39	3.14	2.78
62.78%	3.57	3.52	3.36	3.11	2.76
72.09%	3.54	3.48	3.33	3.08	2.73
81.39%	3.50	3.45	3.30	3.05	2.70
90.70%	3.46	3.41	3.26	3.01	2.66
100.00%	3.42	3.37	3.23	2.98	2.63

EER	55	65	75	85	95
0.00%	16.81	14.98	13.02	10.94	8.73
4.64%	15.98	14.21	12.31	10.29	8.15
6.95%	15.66	13.91	12.04	10.05	7.94
16.26%	14.92	13.29	11.55	9.68	7.69
25.56%	14.78	13.20	11.49	9.64	7.64
34.87%	14.71	13.15	11.46	9.62	7.64
44.17%	14.63	13.09	11.41	9.59	7.62
53.48%	14.53	13.01	11.34	9.54	7.59
62.78%	14.42	12.92	11.27	9.48	7.55
72.09%	14.30	12.81	11.18	9.41	7.50
81.39%	14.17	12.69	11.08	9.32	7.43
90.70%	14.02	12.56	10.96	9.22	7.34
100.00%	13.86	12.42	10.84	9.11	7.25

### ***B600-Series Control Parameters, Commercial***

Parameter	B600 LRL1CXX	B600 LTI59LT	B600 LTL1CFT	B600 LTL1CRL	B600 MSI5ASM
Min Cap Ratio	0.10	0.10	0.10	0.10	0.10
Max Cap Ratio	0.995	0.995	0.995	0.995	0.995
Charging Hr Offset	6	6	6	6	6
Charging Hr Multiplier	1.5	1.5	1.5	1.5	1.5
Latest Charge Stop	12	9	12	12	9
Earliest Charge Start	18	20	20	20	19
First Peak Month	n/a	May	n/a	n/a	May
Last Peak Month	n/a	Sept	n/a	n/a	Oct
Peak Start Melt Hr	12	12	12	12	13
Off Peak Start Melt HR	12	9	12	12	9
Cooling Enabled	0	12	6	12	13
Cooling Disabled	24	20	20	18	19
First Operating Month	Jan	Jan	Jan	Jan	Jan
Last Operating Month	Dec	Dec	Dec	Dec	Dec

### ***B600-Series Control Parameters, Residential***

Parameter	B600 LRL1CXX-R	B600 GTG1CXX-R
Min Cap Ratio	0.10	0.10
Max Cap Ratio	0.995	0.995
Charging Hr Offset	6	6
Charging Hr Multiplier	1.5	1.5
Latest Charge Stop	12	7
Earliest Charge Start	18	20
First Peak Month	n/a	n/a
Last Peak Month	n/a	n/a
Peak Start Melt Hr	12	7
Off Peak Start Melt HR	12	7
Cooling Enabled	0	0
Cooling Disabled	24	24
First Operating Month	April	April
Last Operating Month	October	October