

Air-Cooled Condensing Units

This booklet includes all combination ratings in current Product Data Digest plus ratings at 62 F and 72 F wet-bulb temperature air entering evaporator. Also shown are combination ratings at evaporator air quantities (cfm) above and below ARI air quantity.

SELECTION PROCEDURE (with example)

System Selection

I Determine cooling load requirements.

Given:

Total Cooling Load 30,500 Btuh
Sensible Heat Load 20,000 Btuh
Indoor Air Quantity 1,150 cfm
Evap Air Temp - Ent Wet-Bulb (ewb) ... 67 F
Evap Air Temp - Ent Dry-Bulb (edb) 77 F
Temp Air Entering Condenser 95 F

II Select a cooling system from Combination Ratings tables which will meet cooling requirements. (For complete indoor unit data see 28 or 40 Series Product Data Digests.)

A. Make preliminary cooling system selection(s) from Index (page 2) at required total cooling capacity and indoor air quantity.

B. Enter Combination Ratings tables for pre-selected system(s) at 1,150 cfm, 67 F wet-bulb temperature air entering evaporator and 95 F dry-bulb temperature air entering condenser. Make final selection of 38GR003/28AR030 system which has a TC of 31,000 Btuh and SHC of 23,000 Btuh with 4.4 kw power input. Bypass factor for 28AR030 at 1,150 cfm is .21. Correct SHC for 77 F db temperature air entering evaporator. Refer to Note 5 under Performance Data.

Bypass Factor		Correction Factor
.20	From Table	2.59
.30	From Table	2.27
.21	By Interpolation	2.56

Correction calculation: $2.56 \times 1,150$
= 2,944 Btuh

Corrected SHC: $23,000 - 2,944$
= 20,056 Btuh

III Determine static pressure loss across selected cooling coil or static pressure available from selected fan coil.

From 28 Series Product Data Digest find static pressure loss for 28AR030 at 1,150 cfm: wet-coil pressure loss is .298 in. wg; dry-coil loss is .238 in. wg.

COMBINATION RATING NOTES

- Combination ratings are based on evaporator and condensing units at the same elevation and connected by 25 ft of tubing (Tubing diameter same as Carrier accessory 25-ft tubing package except 38GR006 which requires 1-1/8 in suction line and 3/8-in liquid line) If other than 25 ft of tubing is used and/or evaporator is installed above condensing unit, a slight capacity variation may occur. For maximum allowable vertical separation of condensing unit and evaporator, see Installation Instructions for Refrigerant Line Data table.
- Systems will operate at desert conditions (125 F air entering condenser, 80 F edb, 60 F ewb, 500 cfm/ton)
- On systems where evaporator is more than one size larger than condensing unit (i.e. 38GR002/28GS036), it is recommended that a thermal expansion valve be used for refrigerant control.
- Net capacities shown include a deduction for evaporator fan motor heat.
- Direct interpolation is permissible. Do not extrapolate.
- SHC is based on 80 F temperature of air entering evaporator coil.

Below 80 F db subtract (corr factor x cfm) from SHC

ENTERING AIR DRY-BULB TEMP (F)						
BYPASS FACTOR	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
Correction Factor						
.10	.97	1.95	2.92	3.89	4.86	Use formula shown below
.20	.86	1.73	2.59	3.46	4.32	
.30	.76	1.51	2.27	3.03	3.78	

Interpolation is permissible

Correction Factor = $1.08 \times (1 - BF) \times (db - 80)$

7 Formulas:

$$t_{ldb} = t_{edb} - \frac{\text{sensible heat capacity (Btuh)}}{1.08 \times \text{cfm}}$$

$$t_{lwb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil } (h_{lwb})$$

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where h_{ewb} = enthalpy of air entering evaporator coil

**PERFORMANCE DATA
COMBINATION RATING INDEX**

CONDENSING UNIT	COIL	ARI				TABLE NO.
	FAN COIL	CFM	TC	EER	SRN*	
38GR002	28GS, MC, MQ024	825	24	7.3	18/17	1
	28AR024	900	24	7.3		2
	40FS, MC024	825	23	6.8		3
	28GS, MC, MQ030	940	25	7.4		4
	28AR030	940	25	7.4		5
	40FS, MC030	900	24	6.9		6
	40FS160	975	26	7.4		7
	40FS160	975	26	7.4		8
	28GS, MC, MQ036	975	26	7.4		9
	28AR036	975	26	7.4		10
	40FS160	1010	27	7.5		11
	40FS160	1010	27	7.5		12
38GR003	28GS, MC, MQ030	1030	31	7.0	18/17	13
	28AR030	1150	31	7.0		14
	40FS, MC030	1030	30	6.7		15
	40FS160	1160	31	6.7		16
	40FS160	1160	31	7.0		17
	28GS, MC, MQ036	1200	32	7.1		18
	28GS, MC, MQ036 with 40FS160	1085	31	6.7		19
	40FS, MC036	1085	31	6.7		20
	28AR036	1200	32	7.1		21
	40FS160	1200	32	7.0		22
	40FS160	1200	32	7.0		23
	28GS, MC, MQ042	1240	33	7.2		24
	28AR042	1240	33	7.2		25
38GR004	28GS, MC, MQ036	1350	36	6.9	18/17	26
	28GS, MC, MQ036 with 40FS160	1310	35	6.5		27
	40FS, MC036	1310	35	6.5		28
	28AR036	1350	36	6.9		29
	40FS160	1390	37	6.7		30
	40FS160	1350	36	6.5		31
	28GS, MC, MQ042	1390	37	7.0		32
	28GS, MC, MQ042 with 40FS160	1350	36	6.7		33
	28AR042	1390	37	7.0		34
	28GS, MC, MQ048	1390	37	7.0		35
38GR005	28AR048	1350	37	7.0	18/17	36
	28GS, MC, MQ042	1535	42	7.1		37
	28GS, MC, MQ042 with 40FS160	1535	41	6.7		38
	28AR042	1535	41	6.9		39
	28GS, MC, MQ048	1550	42	6.9		40
	28GS, MC, MQ048 with 40FS200	1535	41	6.5		41
	28AR048	1575	42	7.0		42
38GR005†	28AR060	1600	43	7.0	19/17	43
	28GS, MC, MQ048	1550	47	7.6		44
	28GS, MC, MQ048 with 40FS200	1725	46	7.2		45
	28AR048	1600	47	7.6		46
	28GS, MC060 with 40FS200	1760	47	7.3		47
38GR006†	28AR060	1800	48	7.6	19/18	48
	28GS, MC060 with 40FS200	1900	56	7.2		49
	28AR060	2000	58	7.4		50
	28CB008	2250	60	7.4		51
	40FS160	2285	61	7.4		52
	40FS160	2250	60	7.2		53

TC — Total Capacity
EER — Energy Efficiency Ratio (Btuh/watt)
SRN — Sound Rating Number

*An SRN is shown for condensing unit operation at high and low condenser fan speed, in that order (Hi/Lo)

†ARI listed as models 38GR005-1 and 38GR006-1

PERFORMANCE DATA

Combination Ratings



Rated in accordance with ARI Standards 210-74 and 270-75

LEGEND

BF — Bypass Factor
Ewb — Entering Wet-Bulb
KW — Compressor Motor Power Input
SHC — Sensible Heat Capacity (1000 Btuh)
TC — Total (Net) Capacity (1000 Btuh)

Determine actual CFM values obtainable from your system by referring to Fan Performance Data in fan coil or furnace literature. Interpolate as required.

1 38GR002/28GS,MC,MQ024										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		600/.12			825/.16			1000/.18		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	25	24	22	26	25	23	26	25	24
	SHC	14	17	20	15	18	22	15	20	23
	KW	3.1	3.1	3.1	3.2	3.1	3.1	3.1	3.1	3.1
95	TC	25	23	21	25	24	22	25	24	23
	SHC	14	17	19	14	18	22	15	20	23
	KW	3.3	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3
100	TC	24	22	20	25	23	21	25	24	23
	SHC	13	16	19	14	18	21	15	20	22
	KW	3.4	3.3	3.3	3.4	3.3	3.2	3.4	3.4	3.3
105	TC	24	22	19	24	22	21	25	23	22
	SHC	13	16	18	14	18	21	15	20	22
	KW	3.5	3.4	3.3	3.5	3.4	3.4	3.5	3.4	3.4
115	TC	22	20	18	23	21	19	23	21	21
	SHC	13	15	17	14	17	19	15	19	21
	KW	3.6	3.5	3.5	3.6	3.6	3.5	3.7	3.6	3.6

2 38GR002/28AR024										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		600/.15			900/.21			1000/.22		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	26	24	22	27	25	23	28	26	24
	SHC	14	17	19	15	18	21	16	19	23
	KW	3.2	3.2	3.1	3.2	3.2	3.2	3.3	3.2	3.2
95	TC	25	23	21	26	24	22	26	25	23
	SHC	14	16	18	15	18	21	15	19	23
	KW	3.4	3.3	3.2	3.4	3.3	3.3	3.4	3.4	3.3
100	TC	24	22	20	25	23	21	26	24	22
	SHC	14	16	18	15	18	20	15	19	22
	KW	3.4	3.4	3.3	3.5	3.4	3.3	3.5	3.4	3.4
105	TC	24	22	19	25	23	21	25	23	22
	SHC	13	16	18	14	17	20	15	19	22
	KW	3.5	3.4	3.4	3.5	3.5	3.4	3.5	3.5	3.4
115	TC	22	20	18	23	21	19	24	22	21
	SHC	13	15	17	14	17	19	15	18	21
	KW	3.7	3.6	3.5	3.7	3.6	3.5	3.7	3.6	3.6

3 38GR002/40AS,AQ024										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		600/12			825/.16			1000/.18		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	24	23	21	25	24	22	25	24	23
	SHC	13	16	19	14	17	21	14	19	22
	KW	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.2	3.2
95	TC	24	22	20	24	23	21	24	23	22
	SHC	13	16	18	13	17	21	14	19	22
	KW	3.4	3.3	3.3	3.4	3.4	3.3	3.4	3.4	3.4
100	TC	23	21	19	24	22	20	24	23	22
	SHC	12	15	18	13	17	20	14	19	21
	KW	3.5	3.4	3.4	3.5	3.4	3.4	3.5	3.5	3.4
105	TC	23	21	18	23	21	20	24	22	21
	SHC	12	15	17	13	17	20	14	19	21
	KW	3.6	3.5	3.4	3.6	3.5	3.5	3.6	3.5	3.5
115	TC	21	19	17	22	20	18	22	20	20
	SHC	12	14	16	13	16	18	14	18	20
	KW	3.7	3.6	3.6	3.7	3.7	3.6	3.8	3.7	3.7

4

38GR002/28GS,MC,MQ030

Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		750/.12			940/.14			1025/.15		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	27	25	23	28	26	23	28	27	26
	SHC	15	19	22	16	21	24	19	23	26
	KW	3.3	3.2	3.2	3.3	3.3	3.2	3.3	3.3	3.3
95	TC	26	24	22	27	25	24	27	25	25
	SHC	15	19	22	16	21	23	17	23	25
	KW	3.4	3.4	3.3	3.5	3.4	3.4	3.5	3.4	3.4
100	TC	25	23	21	26	24	23	26	25	24
	SHC	15	18	21	16	21	23	17	22	24
	KW	3.5	3.5	3.4	3.5	3.5	3.4	3.5	3.5	3.5
105	TC	25	23	21	25	24	22	26	24	24
	SHC	15	18	21	16	21	22	17	22	24
	KW	3.6	3.5	3.5	3.6	3.6	3.5	3.6	3.6	3.6
115	TC	23	21	19	24	22	21	24	23	22
	SHC	14	18	19	15	20	21	17	22	22
	KW	3.8	3.7	3.6	3.8	3.7	3.7	3.8	3.7	3.7

5 38GR002/28AR030										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		750/.15			940/.18			1025/.19		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	27	25	23	28	26	24	28	26	25
	SHC	15	18	22	15	21	24	17	22	25
	KW	3.3	3.3	3.2	3.3	3.3	3.2	3.3	3.3	3.3
95	TC	26	24	21	27	25	23	27	25	24
	SHC	14	18	21	15	20	23	16	22	24
	KW	3.5	3.4	3.3	3.5	3.4	3.4	3.5	3.4	3.4
100	TC	25	23	21	26	24	22	26	24	24
	SHC	14	18	20	15	20	22	16	22	24
	KW	3.5	3.5	3.4	3.6	3.5	3.5	3.6	3.5	3.5
105	TC	25	22	20	25	23	22	26	24	23
	SHC	14	17	20	15	20	22	16	22	23
	KW	3.6	3.5	3.5	3.6	3.6	3.5	3.7	3.6	3.6
115	TC	23	20	19	23	21	20	24	22	21
	SHC	13	17	19	15	19	20	16	21	21
	KW	3.8	3.7	3.6	3.8	3.7	3.7	3.8	3.7	3.7

6 38GR002/40AS,AQ030										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		750/.12			900/.14			1025/.15		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	26	24	22	27	25	24	27	26	25
	SHC	14	18	21	15	20	23	10	22	25
	KW	3.4	3.3	3.3	3.4	3.4	3.3	3.4	3.4	3.4
95	TC	25	23	21	26	24	23	26	24	24
	SHC	14	18	21	15	20	22	16	22	24
	KW	3.5	3.5	3.4	3.6	3.5	3.5	3.6	3.5	3.5
100	TC	24	22	20	25	23	22	25	24	23
	SHC	14	17	20	15	20	22	16	21	23
	KW	3.6	3.6	3.5	3.6	3.6	3.5	3.6	3.6	3.6
105	TC	24	22	20	24	23	21	25	23	23
	SHC	14	17	20	15	20	21	16	21	23
	KW	3.7	3.6	3.6	3.7	3.7	3.6	3.7	3.7	3.7
115	TC	22	20	18	23	21	20	23	22	21
	SHC	13	17	18	14	19	20	16	21	21
	KW	3.9	3.8	3.7	3.9	3.8	3.8	3.9	3.8	3.8

7 38GR002/40VU003											
Temp (F) Air Ent Cond			Evap Air - Cfm/BF								
			750/.17			975/.21			1200/.24		
			Evap Air - Ewb (F)								
			72	67	62	72	67	62	72	67	62
85	TC		29	27	25	30	28	26	30	28	27
	SHC		14	19	23	16	21	26	17	23	27
	KW		3.3	3.3	3.2	3.4	3.3	3.2	3.4	3.3	3.3
95	TC		27	25	23	28	26	24	29	27	25
	SHC		14	18	22	16	21	24	17	23	25
	KW		3.6	3.5	3.4	3.6	3.5	3.4	3.6	3.6	3.5
100	TC		27	24	22	28	25	23	28	26	25
	SHC		14	18	21	15	21	23	17	23	25
	KW		3.7	3.6	3.5	3.7	3.6	3.5	3.7	3.6	3.6
105	TC		26	24	21	27	25	23	28	25	24
	SHC		13	18	21	15	21	23	17	23	24
	KW		3.8	3.7	3.5	3.8	3.7	3.6	3.8	3.7	3.7
115	TC		24	22	19	25	23	21	26	23	22
	SHC		13	17	19	15	20	21	17	22	22
	KW		4.0	3.8	3.7	4.0	3.9	3.8	4.0	3.9	3.9

8 38GR002/40HH003											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		750/.12			975/.16			1250/.19			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	28	26	24	28	27	26	29	27	27	
	SHC	16	20	24	17	22	26	18	24	27	
	KW	3.4	3.4	3.3	3.4	3.4	3.4	3.4	3.5	3.4	
95	TC	27	25	23	28	26	25	28	26	26	
	SHC	16	20	23	17	22	25	18	24	26	
	KW	3.6	3.5	3.5	3.6	3.5	3.5	3.6	3.6	3.5	
100	TC	26	24	22	27	25	24	27	25	25	
	SHC	16	20	22	17	22	24	18	24	25	
	KW	3.7	3.6	3.5	3.7	3.6	3.6	3.7	3.6	3.6	
105	TC	25	23	21	26	24	23	26	25	24	
	SHC	15	19	21	17	22	23	18	24	24	
	KW	3.7	3.7	3.6	3.8	3.7	3.7	3.8	3.7	3.7	
115	TC	23	20	19	24	21	21	24	22	22	
	SHC	15	18	19	16	21	21	18	22	22	
	KW	3.9	3.8	3.8	3.9	3.9	3.9	4.0	3.9	3.9	

9 38GR002/28GS,MC,MQ036											
Temp (F) Air Ent Cond			Evap Air - Cfm/BF								
			900/.12			975/.13			1200/.16		
			Evap Air - Ewb (F)								
			72	67	62	72	67	62	72	67	62
85	TC	SHC	29	27	25	30	28	26	31	29	27
	SHC	KW	14	18	22	15	20	25	16	23	27
	KW		3.3	3.2	3.1	3.3	3.3	3.2	3.4	3.3	3.2
95	TC	SHC	28	25	23	28	26	24	29	27	26
	SHC	KW	13	18	21	15	20	24	16	22	26
	KW		3.5	3.4	3.3	3.6	3.5	3.4	3.6	3.5	3.4
100	TC	SHC	27	24	22	28	25	24	28	26	25
	SHC	KW	13	17	21	14	20	23	16	22	25
	KW		3.6	3.5	3.4	3.7	3.6	3.5	3.7	3.6	3.5
105	TC	SHC	26	24	21	27	25	23	27	25	24
	SHC	KW	13	17	20	14	20	23	15	23	24
	KW		3.7	3.6	3.5	3.8	3.6	3.5	3.8	3.7	3.6
115	TC	SHC	24	22	19	25	23	21	26	23	23
	SHC	KW	12	16	19	14	19	23	15	21	23
	KW		3.9	3.8	3.7	3.9	3.8	3.7	4.0	3.9	3.8

38GR002/28AR036											
Temp (F)	Air Ent	Cond	Evap Air - Cfm/BF								
			900/.14			975/.16			1200/.24		
			Evap Air - Ewb (F)								
			72	67	62	72	67	62	72	67	62
85	TC	29	27	24	30	28	25	31	29	27	
	SHC	13	20	24	14	21	25	16	23	27	
	KW	3.3	3.2	3.1	3.4	3.3	3.2	3.4	3.3	3.3	
95	TC	27	25	22	28	26	23	29	26	25	
	SHC	13	19	22	14	20	23	15	22	25	
	KW	3.5	3.4	3.3	3.6	3.5	3.4	3.6	3.5	3.5	
100	TC	25	24	21	26	25	22	27	25	23	
	SHC	13	18	21	14	19	22	15	22	23	
	KW	3.7	3.5	3.4	3.8	3.6	3.5	3.8	3.6	3.6	
105	TC	23	23	19	24	24	20	25	24	21	
	SHC	12	18	19	13	19	20	15	22	21	
	KW	3.9	3.6	3.6	3.9	3.6	3.7	3.9	3.8	3.7	
115	TC	21	20	17	22	21	18	23	22	20	
	SHC	11	17	17	12	18	18	14	21	20	
	KW	4.0	3.6	3.6	4.0	3.7	3.7	4.0	3.8	3.8	

11 38GR002/40VU004											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		900/.17			1010/.18			1200/.21			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	31	28	25	32	29	27	33	30	28	
	SHC	15	20	24	18	24	27	20	27	28	
	KW	3.6	3.4	3.3	3.6	3.5	3.4	3.7	3.5	3.5	
95	TC	29	26	23	30	27	25	31	28	26	
	SHC	14	19	23	17	23	25	19	26	26	
	KW	3.7	3.6	3.5	3.8	3.7	3.6	3.9	3.7	3.7	
100	TC	28	25	22	29	26	24	30	27	26	
	SHC	14	18	22	16	22	24	19	25	26	
	KW	3.8	3.7	3.6	3.9	3.8	3.7	3.9	3.8	3.7	
105	TC	27	24	22	28	25	24	28	26	25	
	SHC	13	18	22	16	22	24	18	25	25	
	KW	3.9	3.8	3.7	4.0	3.8	3.8	4.0	3.9	3.8	
115	TC	25	22	20	25	23	22	26	23	23	
	SHC	13	17	20	15	21	22	18	23	23	
	KW	4.1	3.9	3.8	4.1	4.0	3.9	4.1	4.0	4.0	

38GR002/40HH004											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		900/.11			1010/.12			1200/.15			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	31	28	25	32	29	27	33	30	29	
	SHC	14	19	24	17	23	27	20	27	29	
	KW	3.5	3.4	3.3	3.6	3.4	3.3	3.6	3.5	3.4	
95	TC	28	26	23	30	27	25	31	28	27	
	SHC	14	19	23	16	24	25	19	26	27	
	KW	3.7	3.6	3.4	3.8	3.6	3.5	3.8	3.7	3.6	
100	TC	27	25	23	29	26	24	29	27	26	
	SHC	13	18	22	16	22	24	18	25	26	
	KW	3.8	3.6	3.5	3.8	3.7	3.6	3.9	3.8	3.7	
105	TC	26	24	22	28	25	23	28	26	25	
	SHC	13	18	21	16	22	23	18	25	25	
	KW	3.9	3.7	3.6	3.9	3.8	3.7	4.0	3.8	3.8	
115	TC	24	22	20	25	23	22	26	24	23	
	SHC	12	17	20	15	21	22	17	23	23	
	KW	4.0	3.9	3.8	4.1	3.9	3.8	4.1	4.0	4.0	

PERFORMANCE DATA

Combination Ratings

15 38GR003/40AS,AQ030

Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		.750/.12			1030/.15			1250/.18		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	.31	.30	.28	.32	.30	.29	.32	.31	.30
	SHC	17	21	25	18	23	28	18	24	29
	KW	4.3	4.3	4.2	4.3	4.3	4.2	4.3	4.3	4.3
95	TC	.31	.29	.27	.31	.30	.28	.32	.30	.29
	SHC	17	21	24	18	23	27	19	25	29
	KW	4.5	4.4	4.4	4.5	4.5	4.4	4.5	4.5	4.5
100	TC	.30	.28	.26	.31	.29	.27	.31	.30	.29
	SHC	17	21	24	18	23	27	19	25	28
	KW	4.6	4.5	4.4	4.6	4.6	4.5	4.6	4.6	4.6
105	TC	.30	.28	.25	.31	.29	.27	.31	.29	.28
	SHC	16	20	24	18	23	26	19	25	28
	KW	4.7	4.6	4.5	4.7	4.7	4.6	4.7	4.7	4.6
115	TC	.29	.26	.24	.29	.27	.25	.30	.28	.27
	SHC	16	20	23	17	22	25	19	24	27
	KW	4.9	4.8	4.7	4.9	4.8	4.8	4.9	4.9	4.8

16 38GR003/40VU003

Temp (F) Air Ent Cond			Evap Air – Cfm/BF								
			750/.16			1160/.24			1200/.25		
			Evap Air – Ewb (F)								
			72	67	62	72	67	62	72	67	62
85	TC	33	31	29	33	32	30	33	32	31	
	SHC	18	22	26	19	24	29	19	25	31	
	KW	4.5	4.4	4.3	4.5	4.4	4.4	4.5	4.4	4.4	
95	TC	32	30	26	33	31	29	33	32	30	
	SHC	18	22	25	19	24	28	20	26	30	
	KW	4.7	4.6	4.5	4.7	4.6	4.6	4.7	4.6	4.6	
100	TC	32	29	25	33	30	28	33	31	29	
	SHC	17	21	24	19	24	27	20	26	29	
	KW	4.8	4.7	4.6	4.8	4.7	4.7	4.8	4.7	4.7	
105	TC	31	28	24	32	29	27	33	30	29	
	SHC	17	21	24	19	24	27	20	26	29	
	KW	4.9	4.8	4.7	4.9	4.8	4.8	4.9	4.8	4.8	
115	TC	29	25	23	30	27	25	31	27	26	
	SHC	17	20	23	18	23	25	20	25	26	
	KW	5.1	5.0	4.9	5.1	5.0	5.0	5.1	5.0	5.0	

17 38GR003/40HH003

Temp (F) Air Ent Cond		Evap Air – Cfm/BF											
		700/.11			1160/.19			1300/.20					
		Evap Air – Ewb (F)											
		72	67	62	72	67	62	72	67	62			
85	TC	33	32	29	34	32	31	34	32	32			
	SHC	18	23	27	19	25	30	30	26	32			
	KW	4.2	4.1	4.1	4.2	4.1	4.1	4.2	4.1	4.1			
95	TC	33	30	27	33	31	29	34	32	31			
	SHC	18	22	26	33	31	29	34	32	31			
	KW	4.4	4.3	4.2	4.4	4.4	4.3	4.4	4.4	4.3			
100	TC	32	29	26	33	31	28	33	31	30			
	SHC	18	22	25	19	25	28	20	27	30			
	KW	4.5	4.4	4.3	4.5	4.4	4.4	4.5	4.5	4.4			
105	TC	32	28	25	33	30	27	33	31	29			
	SHC	18	22	25	19	24	27	20	27	29			
	KW	4.6	4.5	4.4	4.6	4.5	4.5	4.6	4.6	4.5			
115	TC	30	25	23	31	27	25	31	28	27			
	SHC	17	20	23	19	24	25	20	26	27			
	KW	4.8	4.7	4.6	4.8	4.7	4.7	4.9	4.8	4.7			

18 38GR003/28GS,MC,MQ036

Temp (F) Air Ent Cond		Evap Air – Cfm/BF											
		900/.11			1200/.15			1500/.17					
		Evap Air – Ewb (F)											
		72	67	62	72	67	62	72	67	62			
85	TC	34	32	30	35	33	32	35	34	33			
	SHC	19	24	28	20	26	31	21	27	33			
	KW	4.3	4.3	4.2	4.4	4.3	4.2	4.4	4.3	4.3			
95	TC	34	31	28	34	32	30	35	33	32			
	SHC	19	23	27	20	26	30	21	28	32			
	KW	4.5	4.4	4.3	4.6	4.5	4.4	4.6	4.5	4.5			
100	TC	33	30	27	34	31	30	34	32	31			
	SHC	18	23	26	20	26	29	21	28	31			
	KW	4.6	4.5	4.4	4.6	4.6	4.5	4.7	4.6	4.6			
105	TC	32	30	27	33	31	29	33	31	30			
	SHC	18	23	26	20	26	29	21	28	29			
	KW	4.7	4.6	4.5	4.7	4.7	4.6	4.8	4.7	4.7			
115	TC	31	28	25	31	29	27	32	30	29			
	SHC	18	22	25	19	25	27	21	27	29			
	KW	4.9	4.8	4.7	4.9	4.8	4.8	5.0	4.9	4.8			

19 38GR003/28GS,MC,MQ036 with 40FS160

Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		900/.11			1085/.14			1500/.17		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	33	31	29	34	32	31	34	33	32
	SHC	18	23	27	19	25	30	20	26	31
	KW	4.4	4.4	4.3	4.5	4.4	4.3	4.5	4.4	4.4
95	TC	33	30	27	33	31	29	34	32	31
	SHC	18	22	26	19	25	29	20	27	31
	KW	4.6	4.5	4.4	4.7	4.6	4.5	4.7	4.6	4.6
100	TC	32	29	26	33	30	29	33	31	30
	SHC	17	22	25	19	25	28	20	27	30
	KW	4.7	4.6	4.5	4.7	4.7	4.6	4.8	4.7	4.7
105	TC	31	29	26	32	30	28	32	30	29
	SHC	17	22	25	19	24	28	20	27	29
	KW	4.8	4.7	4.6	4.8	4.8	4.7	4.9	4.8	4.8
115	TC	30	27	24	30	28	26	31	29	28
	SHC	17	21	24	18	24	26	20	26	28
	KW	5.0	4.9	4.8	5.0	4.9	4.9	5.1	5.0	4.9

20 38GR003/40AS,AQ036

Temp (F) Air Ent Cond		Evap Air - Cfm/BF								
		900/.11			1085/.14			1500/.17		
		Evap Air - Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	33	31	29	34	32	31	34	33	32
	SHC	18	23	27	19	25	30	20	26	31
	KW	4.4	4.4	4.3	4.5	4.4	4.3	4.5	4.4	4.4
95	TC	33	30	27	33	31	29	34	32	31
	SHC	18	22	26	19	25	29	20	27	31
	KW	4.6	4.5	4.4	4.7	4.6	4.5	4.7	4.6	4.6
100	TC	32	29	26	33	30	28	33	31	30
	SHC	17	22	25	19	25	28	20	27	30
	KW	4.7	4.6	4.5	4.7	4.7	4.6	4.8	4.7	4.7
105	TC	31	29	26	32	30	28	32	30	29
	SHC	17	22	25	19	24	28	20	27	29
	KW	4.8	4.7	4.6	4.8	4.8	4.7	4.9	4.8	4.8
115	TC	30	27	24	30	28	26	31	29	28
	SHC	17	21	24	18	24	26	20	26	28
	KW	5.0	4.9	4.8	5.0	4.9	4.9	5.1	5.0	4.9

21 38GR003/28AR036

Temp (F)	Air Ent	Cond	Evap Air - C
----------	---------	------	--------------

PERFORMANCE DATA

Combination Ratings

23 38GR003/40HH004										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		900/.11			1200/.15			1400/.17		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	35	32	29	36	33	31	37	34	33
	SHC	19	24	28	21	27	31	23	30	33
	KW	4.5	4.4	4.3	4.6	4.5	4.4	4.6	4.5	4.5
95	TC	33	30	28	35	32	30	35	32	31
	SHC	18	23	27	20	26	30	22	29	31
	KW	4.7	4.6	4.5	4.8	4.6	4.6	4.8	4.7	4.6
100	TC	32	29	27	34	31	29	34	31	31
	SHC	18	22	26	20	26	29	22	28	31
	KW	4.8	4.7	4.6	4.8	4.7	4.7	4.9	4.8	4.7
105	TC	31	29	26	32	30	28	33	30	30
	SHC	17	22	26	19	25	28	21	28	30
	KW	4.9	4.7	4.6	4.9	4.8	4.7	5.0	4.8	4.8
115	TC	30	27	25	30	28	27	31	29	28
	SHC	17	21	25	19	24	27	21	27	28
	KW	5.0	4.9	4.8	5.1	5.0	4.9	5.1	5.0	5.0

24 38GR003/28GS,MC,MQ042												
Temp (F) Air Ent Cond		Evap Air – Cfm/BF										
		1000/.11			1240/.12			1500/.15				
		Evap Air – Ewb (F)										
		72	67	62	72	67	62	72	67	62		
85	TC	37	34	31	39	36	33	39	37	35		
	SHC	18	23	28	20	27	32	22	29	34		
	KW	4.4	4.2	4.1	4.4	4.3	4.2	4.5	4.4	4.3		
95	TC	35	32	29	36	33	31	37	34	33		
	SHC	17	23	27	19	26	31	21	28	33		
	KW	4.6	4.5	4.3	4.7	4.6	4.5	4.7	4.6	4.5		
100	TC	34	31	28	35	32	30	36	33	32		
	SHC	17	22	26	19	25	30	20	28	32		
	KW	4.8	4.6	4.4	4.8	4.7	4.6	4.9	4.7	4.7		
105	TC	33	30	27	34	31	29	35	32	31		
	SHC	17	22	26	19	25	29	20	28	31		
	KW	4.9	4.7	4.5	4.9	4.8	4.7	5.0	4.8	4.8		
115	TC	32	28	25	32	29	28	33	30	29		
	SHC	16	21	25	18	24	27	20	27	29		
	KW	5.1	4.9	4.8	5.2	5.0	4.9	5.2	5.1	5.0		

25 38GR003/28AR042												
Temp (F) Air Ent Cond		Evap Air – Cfm/BF										
		1000/.14			1240/.17			1500/.20				
		Evap Air – Ewb (F)										
		72	67	62	72	67	62	72	67	62		
85	TC	37	34	31	38	36	33	39	36	34		
	SHC	18	23	28	19	26	32	21	28	34		
	KW	4.4	4.3	4.1	4.5	4.4	4.2	4.5	4.4	4.3		
95	TC	35	32	29	36	33	31	36	34	32		
	SHC	17	22	27	18	25	30	20	28	32		
	KW	4.7	4.5	4.4	4.7	4.6	4.5	4.8	4.6	4.6		
100	TC	34	31	28	35	32	30	36	33	31		
	SHC	16	21	26	18	25	30	19	27	31		
	KW	4.8	4.7	4.5	4.9	4.7	4.6	4.9	4.8	4.7		
105	TC	33	30	27	34	31	29	35	32	31		
	SHC	16	21	26	18	24	29	19	27	31		
	KW	4.9	4.8	4.6	5.0	4.8	4.7	5.0	4.9	4.8		
115	TC	31	28	24	32	29	27	32	30	29		
	SHC	15	20	24	17	24	27	19	26	29		
	KW	5.2	5.0	4.8	5.2	5.1	4.9	5.3	5.1	5.1		

26 38GR004/28GS,MC,MQ036											
Temp (F) Air Ent Cond		Evap Air – Cfm/BF									
		900/.11			1350/.16			1500/.18			
		Evap Air – Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	37	36	33	38	37	35	39	37	36	
	SHC	20	24	29	21	27	33	21	28	35	
	KW	5.0	4.9	4.8	5.0	5.0	4.9	5.0	4.9	4.9	
95	TC	37	35	32	38	36	34	39	37	35	
	SHC	20	24	28	21	27	32	22	29	35	
	KW	5.3	5.0	4.8	5.3	5.2	5.1	5.3	5.2	5.2	
100	TC	37	34	31	38	36	33	38	36	35	
	SHC	19	24	28	21	27	32	22	29	34	
	KW	5.4	5.3	5.1	5.4	5.3	5.2	5.4	5.4	5.3	
105	TC	37	33	29	37	35	32	38	36	34	
	SHC	19	23	27	21	27	31	22	29	34	
	KW	5.5	5.4	5.3	5.6	5.5	5.4	5.6	5.5	5.4	
115	TC	35	31	27	36	33	29	37	34	32	
	SHC	19	23	26	20	26	29	22	29	32	
	KW	5.8	5.6	5.5	5.9	5.7	5.6	5.9	5.7	5.7	

27

38GR004/28GS,MC,MQ036 with 40FS160

Temp (F) Air Ent Cond		Evap Air - Cfm/BF								
		900/.11			1310/.16			1500/.18		
		Evap Air - Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	36	35	32	38	36	34	38	36	35
	SHC	19	23	28	20	26	32	20	27	34
	KW	5.2	5.1	5.0	5.2	5.2	5.1	5.2	5.1	5.1
95	TC	36	34	31	37	35	33	38	36	34
	SHC	19	23	27	20	26	31	21	28	34
	KW	5.5	5.2	5.0	5.5	5.4	5.3	5.5	5.4	5.4
100	TC	36	33	30	37	35	32	37	35	34
	SHC	18	23	27	20	26	31	21	28	33
	KW	5.6	5.5	5.3	5.6	5.5	5.4	5.6	5.6	5.5
105	TC	36	32	28	36	34	31	37	35	33
	SHC	18	22	26	20	26	30	21	28	33
	KW	5.7	5.6	5.5	5.8	5.7	5.6	5.8	5.7	5.6
115	TC	34	30	26	35	32	28	36	33	31
	SHC	18	22	25	19	25	28	21	28	31
	KW	6.0	5.8	5.7	6.1	5.9	5.8	6.1	5.9	5.9

28 38GR004/40AS,AQ036											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		900/.11			1310/.16			1500/.18			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	36	35	32	38	36	34	38	36	35	
	SHC	19	23	28	20	26	32	20	27	34	
	KW	5.2	5.1	5.0	5.2	5.2	5.1	5.2	5.1	5.1	
95	TC	36	34	31	37	35	33	38	36	34	
	SHC	19	23	27	20	26	31	21	28	34	
	KW	5.5	5.2	5.0	5.5	5.4	5.3	5.5	5.4	5.4	
100	TC	36	33	30	37	35	32	37	35	34	
	SHC	18	23	27	20	26	31	21	28	33	
	KW	5.6	5.5	5.3	5.6	5.5	5.4	5.6	5.6	5.5	
105	TC	36	32	28	36	34	31	37	35	33	
	SHC	18	22	26	20	26	30	21	28	33	
	KW	5.7	5.6	5.5	5.8	5.7	5.6	5.8	5.7	5.6	
115	TC	34	30	26	35	32	28	36	33	31	
	SHC	18	22	25	19	25	28	21	28	31	
	KW	6.0	5.8	5.7	6.1	5.9	5.8	6.1	5.9	5.9	

PERFORMANCE DATA

Combination Ratings

31 38GR004/40HH004										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		900/.11			1350/.17			1500/.18		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	40	36	33	42	38	35	43	39	37
	SHC	20	25	29	22	28	33	24	31	36
	KW	5.4	5.2	5.1	5.4	5.3	5.2	5.5	5.3	5.2
95	TC	38	34	31	40	36	33	41	37	35
	SHC	19	24	28	21	27	32	23	30	35
	KW	5.6	5.4	5.3	5.7	5.5	5.4	5.7	5.5	5.4
100	TC	37	34	30	39	35	32	40	36	34
	SHC	19	23	28	21	27	32	23	30	34
	KW	5.7	5.5	5.4	5.8	5.6	5.5	5.8	5.7	5.6
105	TC	36	33	30	38	34	32	39	35	33
	SHC	18	23	27	20	26	31	22	30	33
	KW	5.8	5.6	5.5	5.9	5.7	5.6	5.9	5.8	5.7
115	TC	34	31	28	35	32	30	36	33	32
	SHC	17	22	27	20	26	30	22	29	32
	KW	6.0	5.8	5.7	6.1	5.9	5.8	6.2	6.0	5.9

32 38GR004/28GS,MC,MQ042											
Temp (F) Air Ent Cond			Evap Air - Cfm/BF								
			1050/.11			1390/.14			1750/.17		
			Evap Air - Ewb (F)								
			72	67	62	72	67	62	72	67	62
85	TC	40	37	35	41	38	36	41	39	37	
	SHC	21	26	31	22	28	35	23	31	37	
	KW	5.0	4.9	4.8	5.0	4.9	4.9	5.0	5.0	4.9	
95	TC	39	36	32	40	37	34	40	38	36	
	SHC	20	25	30	22	29	34	23	31	36	
	KW	5.3	5.1	5.0	5.3	5.2	5.1	5.3	5.2	5.2	
100	TC	38	35	31	39	36	33	39	37	35	
	SHC	20	25	29	22	28	33	23	31	35	
	KW	5.4	5.2	5.1	5.4	5.3	5.2	5.4	5.3	5.3	
105	TC	37	34	30	38	35	33	39	36	35	
	SHC	20	25	29	22	28	32	23	31	35	
	KW	5.5	5.4	5.2	5.6	5.4	5.3	5.6	5.5	5.4	
115	TC	35	31	28	36	33	31	37	34	33	
	SHC	19	24	28	21	27	31	23	30	33	
	KW	5.8	5.6	5.5	5.8	5.7	5.6	5.8	5.7	5.7	

33 38GR004/28GS,MC,MQ042 with 40FS160										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1050/.11			1350/.14			1750/.17		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	39	36	34	40	37	35	40	38	36
	SHC	20	25	30	21	27	34	22	30	36
	KW	5.2	5.1	5.0	5.2	5.1	5.1	5.2	5.2	5.1
95	TC	38	35	31	39	36	33	39	37	35
	SHC	19	24	29	21	28	33	22	30	35
	KW	5.5	5.3	5.2	5.5	5.4	5.3	5.5	5.4	5.4
100	TC	37	34	30	38	35	32	38	36	34
	SHC	19	24	28	21	27	32	22	30	34
	KW	5.6	5.4	5.3	5.6	5.5	5.4	5.6	5.5	5.5
105	TC	36	33	29	37	34	31	38	35	34
	SHC	19	24	28	21	27	31	22	30	34
	KW	5.7	5.6	5.4	5.8	5.6	5.5	5.8	5.7	5.6
115	TC	34	30	27	35	32	30	36	33	32
	SHC	18	23	27	20	26	30	22	29	32
	KW	6.0	5.8	5.7	6.0	5.9	5.8	6.0	5.9	5.9

34 38GR004/28AR042										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1050/.16			1390/.19			1750/.22		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	40	37	34	41	39	36	42	40	37
	SHC	20	26	31	22	28	35	23	31	37
	KW	5.1	5.0	4.9	5.1	5.0	5.0	5.2	5.1	5.0
95	TC	39	36	32	40	37	34	41	38	36
	SHC	20	25	30	22	28	34	23	31	36
	KW	5.4	5.2	5.1	5.4	5.3	5.2	5.5	5.4	5.3
100	TC	38	35	31	39	36	33	40	37	35
	SHC	20	25	29	22	28	33	23	31	35
	KW	5.5	5.4	5.2	5.6	5.4	5.3	5.6	5.5	5.4
105	TC	37	34	30	38	35	32	39	36	34
	SHC	19	24	29	21	28	32	23	31	34
	KW	5.6	5.5	5.3	5.7	5.6	5.4	5.7	5.6	5.5
115	TC	35	31	27	36	33	30	37	34	32
	SHC	19	23	27	21	27	30	23	30	32
	KW	5.9	5.7	5.6	6.0	5.8	5.7	6.0	5.8	5.8

35

38GR004/28GS,MC,MQ048

Temp (F) Air Ent Cond		Evap Air - Cfm/BF								
		1200/.12			1390/.13			1600/.16		
		Evap Air - Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	41	38	35	42	40	37	43	40	38
	SHC	20	26	31	22	30	36	23	32	38
	KW	5.1	5.0	4.8	5.2	5.1	4.9	5.2	5.1	5.0
95	TC	39	35	32	39	37	34	40	38	36
	SHC	19	25	30	21	29	34	22	31	36
	KW	5.4	5.2	5.1	5.5	5.3	5.2	5.5	5.4	5.3
100	TC	37	34	32	39	36	33	39	37	35
	SHC	19	25	30	21	28	33	22	31	35
	KW	5.5	5.4	5.2	5.6	5.5	5.3	5.6	5.5	5.4
105	TC	36	34	30	38	35	32	38	36	34
	SHC	19	25	29	21	28	32	22	31	34
	KW	5.7	5.5	5.3	5.8	5.6	5.4	5.8	5.6	5.6
115	TC	35	31	28	36	33	31	36	33	33
	SHC	18	24	28	20	28	31	22	30	33
	KW	6.0	5.7	5.6	6.1	5.8	5.7	6.1	5.9	5.8

36

38GR004/28AR048

Temp (F) Air Ent Cond		Evap Air - Cfm/BF								
		1200/.12			1350/.17			1600/.19		
		Evap Air - Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	41	38	35	42	40	37	43	40	38
	SHC	20	26	31	22	30	36	23	32	38
	KW	5.1	5.0	4.8	5.2	5.1	4.9	5.2	5.1	5.0
95	TC	39	35	32	39	37	34	40	38	36
	SHC	19	25	30	21	29	34	22	31	36
	KW	5.4	5.2	5.1	5.5	5.3	5.2	5.5	5.4	5.3
100	TC	37	34	32	39	36	33	39	37	35
	SHC	19	25	30	21	28	33	22	31	35
	KW	5.5	5.4	5.2	5.6	5.5	5.3	5.6	5.5	5.4
105	TC	36	34	30	38	35	32	38	36	34
	SHC	19	25	29	21	28	32	22	31	34
	KW	5.7	5.5	5.3	5.8	5.6	5.4	5.8	5.6	5.6
115	TC	35	31	28	36	33	31	36	33	33
	SHC	18	24	28	20	28	31	22	30	33
	KW	6.0	5.7	5.6	6.1	5.8	5.7	6.1	5.9	5.8

37

38GR045/28GS,MC,MQ042

Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1050/.11			1335/.15			1750/.17		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	46	43	39	47	45	41	47	46	43
	SHC	22	28	33	23	31	38	24	33	41
	KW	5.9	5.7	5.6	6.1	6.0	5.8	6.2	6.1	6.0
95	TC	45	41	36	47	42	38	47	44	41
	SHC	21	27	31	23	29	36	24	33	40
	KW	6.1	6.0	5.8	6.4	6.3	6.1	6.5	6.4	6.2
100	TC	44	40	34	46	41	37	46	43	40
	SHC	21	26	31	23	29	35	24	33	39
	KW	6.3	6.1	6.0	6.5	6.2	6.2	6.7	6.5	6.4
105	TC	43	38	32	45	41	35	45	42	38
	SHC	21	25	30	23	29	35	24	33	38
	KW	6.4	6.2	6.1	6.6	6.4	6.3	6.8	6.6	6.5
115	TC	40	35	29	42	37	32	43	38	35
	SHC	20	24	28	22	28	32	24	32	35
	KW	6.6	6.4	6.3	6.9	6.7	6.5	7.1	6.9	6.8

PERFORMANCE DATA

Combination Ratings

39 38GR045/28AR042										
Temp (F) Air Ent Cond		Evap Air — Cfm/BF								
		1050/.15			1535/.20			1750/.22		
		Evap Air — Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	44	42	38	45	43	40	46	44	41
	SHC	20	26	31	21	29	36	22	31	39
	KW	5.3	5.2	5.0	5.5	5.4	5.3	5.7	5.6	5.5
95	TC	43	40	34	44	41	37	45	42	39
	SHC	20	25	30	21	28	35	22	31	38
	KW	5.4	5.4	5.3	5.8	5.4	5.4	6.0	5.8	5.7
100	TC	42	39	33	44	40	35	45	41	38
	SHC	20	25	29	21	28	34	22	31	37
	KW	5.8	5.6	5.4	6.0	5.7	5.6	6.2	6.0	5.9
105	TC	41	37	31	43	39	33	44	40	36
	SHC	19	24	28	21	28	33	22	31	36
	KW	5.9	5.7	5.5	6.1	5.9	5.7	6.3	6.1	6.0
115	TC	39	33	28	40	35	30	41	36	33
	SHC	18	23	26	20	26	30	22	30	33
	KW	6.1	5.9	5.7	6.3	6.1	6.0	6.5	6.3	6.2

38GR045/28GS,MC,MQ048										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1200/.10			1550/.12			2000/.15		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	45	42	38	47	44	40	47	45	42
	SHC	21	27	32	22	30	37	23	32	41
	KW	5.8	5.7	5.5	6.0	5.9	5.7	6.1	6.1	5.9
95	TC	44	40	36	45	42	38	46	43	40
	SHC	20	26	31	22	29	36	23	32	39
	KW	6.0	5.9	5.7	6.2	6.1	6.0	6.4	6.3	6.2
100	TC	43	39	35	45	41	37	45	42	39
	SHC	20	26	31	22	29	36	23	32	38
	KW	6.2	6.0	5.8	6.4	6.2	6.5	6.6	6.4	6.3
105	TC	42	38	33	44	40	35	44	41	37
	SHC	19	25	30	21	29	35	23	32	37
	KW	6.3	6.1	6.0	6.5	6.3	6.2	6.7	6.5	6.4
115	TC	40	35	30	41	37	33	41	38	35
	SHC	18	24	28	20	28	33	22	31	35
	KW	6.5	6.2	6.2	6.7	6.5	6.4	6.9	6.7	6.6

41 38GR045/28GS,MC,MQ048 with 40FS200										
Temp (F) Air Ent Cond		Evap Air - Cfm/BF								
		1200/.12			1535/.15			2000/.19		
		Evap Air - Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	44	41	37	46	43	39	46	44	41
	SHC	20	26	31	21	29	36	22	31	40
	KW	6.0	5.9	5.7	6.2	6.1	5.9	6.3	6.3	6.1
95	TC	43	39	35	44	41	37	45	42	39
	SHC	19	25	30	21	28	35	22	31	38
	KW	6.2	6.1	5.9	6.4	6.3	6.2	6.6	6.5	6.4
100	TC	42	38	34	44	40	36	44	41	38
	SHC	19	25	30	21	28	35	22	31	37
	KW	6.4	6.2	6.1	6.6	6.4	6.3	6.8	6.6	6.5
105	TC	41	37	32	43	39	34	43	40	36
	SHC	18	24	29	20	28	34	22	31	36
	KW	6.5	6.3	6.2	6.7	6.5	6.4	6.9	6.7	6.6
115	TC	39	34	29	40	36	32	40	37	34
	SHC	17	23	27	19	27	32	21	30	34
	KW	6.7	6.5	6.4	6.9	6.7	6.6	7.1	6.9	6.8

38GR045/28AR048										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1200/.12			1575/.15			2000/.17		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	47	43	39	47	45	41	48	45	42
	SHC	21	28	33	22	31	39	24	33	42
	KW	5.3	5.2	5.1	5.5	5.4	5.3	5.7	5.6	5.5
95	TC	45	41	36	46	42	38	47	43	41
	SHC	20	27	32	22	30	37	23	33	40
	KW	5.6	5.5	5.3	5.8	5.5	5.5	6.0	5.9	5.8
100	TC	44	40	35	45	41	37	46	42	40
	SHC	20	26	31	22	30	36	23	33	39
	KW	5.8	5.6	5.4	6.0	5.7	5.7	6.2	6.1	5.9
105	TC	43	38	33	44	40	35	44	41	38
	SHC	20	25	30	22	29	35	23	33	38
	KW	5.9	5.7	5.5	6.1	5.9	5.8	6.3	6.2	6.0
115	TC	40	35	29	41	36	32	42	38	35
	SHC	19	24	29	21	28	32	23	32	35
	KW	6.1	5.9	5.7	6.4	6.2	6.0	6.6	6.4	6.3

43

38GR045/28AR060

Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1500/.16			1600/.17			2000/.19		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	47	44	40	48	45	43	49	46	45
	SHC	23	31	38	26	35	43	28	38	45
	KW	5.3	5.1	4.9	5.3	5.2	5.1	5.4	5.2	5.2
95	TC	45	41	37	46	43	40	47	43	42
	SHC	23	31	36	26	35	40	27	39	42
	KW	5.7	5.5	5.3	5.8	5.6	5.5	5.8	5.6	5.6
100	TC	44	40	35	45	41	39	46	42	41
	SHC	23	30	35	26	35	39	28	39	41
	KW	5.9	5.6	5.4	5.9	5.7	5.6	6.0	5.8	5.7
105	TC	43	38	34	44	40	38	45	41	40
	SHC	23	30	34	26	35	38	28	39	40
	KW	6.0	5.8	5.6	6.1	5.9	5.8	6.1	5.9	5.9
115	TC	40	34	30	41	35	34	42	37	37
	SHC	22	28	30	25	33	34	27	37	37
	KW	6.4	6.1	5.8	6.4	6.2	6.2	6.5	6.3	6.3

44

38GR005/28GS,MC,MQ048

Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		1200/.12			1550/.15			2000/.19		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	51	48	43	52	50	46	53	50	47
	SHC	24	30	36	25	34	42	26	36	46
	KW	6.1	6.0	5.8	6.3	6.1	6.1	6.5	6.4	6.3
95	TC	49	46	41	50	47	43	51	48	45
	SHC	23	30	35	25	33	41	26	36	45
	KW	6.7	6.1	6.1	7.0	6.2	6.3	6.9	6.7	6.6
100	TC	48	45	40	50	46	42	51	47	44
	SHC	23	29	35	25	33	40	26	36	44
	KW	6.7	6.3	6.2	7.0	6.4	6.5	7.1	6.9	6.7
105	TC	47	43	38	49	45	40	50	46	42
	SHC	22	28	34	25	33	39	26	36	42
	KW	6.7	6.5	6.3	7.0	6.6	6.6	7.2	7.0	6.8
115	TC	45	39	34	43	42	37	47	43	40
	SHC	21	27	32	23	31	37	25	35	40
	KW	7.0	6.8	6.6	7.5	7.0	6.9	7.5	7.3	7.1

3

PERFORMANCE DATA

Combination Ratings

47 38GR005/28GS,MC060 with 40FS200											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		1400/.14			1760/.17			2000/.19			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	51	48	42	52	50	46	53	50	47	
	SHC	24	30	36	25	34	42	26	36	46	
	KW	6.3	6.2	6.0	6.5	6.3	6.3	6.7	6.6	6.5	
95	TC	49	46	41	50	47	43	51	48	45	
	SHC	23	30	35	25	33	41	26	36	45	
	KW	6.9	6.3	6.3	7.2	6.4	6.5	7.1	6.9	6.8	
100	TC	48	45	40	50	46	42	51	47	44	
	SHC	23	29	35	25	33	40	26	36	44	
	KW	6.9	6.5	6.4	7.2	6.6	6.7	7.3	7.1	6.9	
105	TC	47	43	38	49	45	40	50	46	42	
	SHC	22	28	34	25	33	39	26	36	42	
	KW	6.9	6.7	6.5	7.2	6.8	6.8	7.4	7.2	7.0	
115	TC	45	39	34	43	42	37	47	43	40	
	SHC	21	27	32	23	31	37	25	35	40	
	KW	7.2	7.0	6.8	7.7	7.2	7.1	7.7	7.5	7.3	

48 38GR005/28AR060											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		1500/.16			1800/.18			2300/.21			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	53	49	44	55	51	46	55	52	48	
	SHC	24	31	37	26	35	43	27	39	47	
	KW	6.0	5.8	5.6	6.2	6.1	5.9	6.4	6.3	6.1	
95	TC	51	46	41	52	48	43	52	49	45	
	SHC	23	30	36	25	34	42	27	38	45	
	KW	6.3	6.0	5.8	6.5	6.3	6.1	6.7	6.5	6.4	
100	TC	50	45	39	51	47	42	51	48	44	
	SHC	23	30	35	25	34	41	27	38	44	
	KW	6.4	6.1	5.9	6.6	6.4	6.2	6.8	6.6	6.5	
105	TC	48	43	37	49	45	40	50	46	43	
	SHC	22	29	34	25	33	39	27	37	43	
	KW	6.5	6.2	6.0	6.7	6.5	6.3	6.9	6.7	6.6	
115	TC	46	40	34	47	42	37	49	43	40	
	SHC	21	27	32	24	32	37	27	36	40	
	KW	6.6	6.4	6.3	6.9	6.7	6.5	7.1	6.9	6.8	

49 38GR006/28GS,MC060 with 40FS200										
Temp (F) Air Ent Cond		Evap Air - Cfm/BF								
		1500/.15			1900/.18			2300/.21		
		Evap Air - Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	61	56	50	63	58	53	63	59	55
	SHC	28	36	43	36	41	50	32	44	54
	KW	7.6	7.4	7.1	7.9	7.7	7.5	8.1	8.0	7.8
95	TC	58	53	47	60	56	50	60	56	52
	SHC	27	34	41	29	39	48	31	43	52
	KW	7.9	7.6	7.4	8.2	7.9	7.7	8.4	8.3	8.1
100	TC	57	51	45	59	54	48	59	55	51
	SHC	27	34	41	29	39	47	31	43	51
	KW	8.1	7.8	7.5	8.4	8.1	7.8	8.6	8.4	8.2
105	TC	55	49	43	57	52	46	57	53	49
	SHC	26	33	40	28	38	45	30	42	49
	KW	8.2	7.9	7.6	8.5	8.3	8.0	8.7	8.5	8.3
115	TC	51	45	39	54	49	43	54	49	46
	SHC	25	32	37	27	37	43	29	41	46
	KW	8.5	8.1	7.9	8.7	8.5	8.3	9.0	8.8	8.6

50 38GR006/28AR060											
Temp (F) Air Ent Cond		Evap Air - Cfm/BF									
		1500/.16			2000/.19			2500/.22			
		Evap Air - Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	63	58	52	65	60	55	65	61	57	
	SHC	30	38	45	32	43	52	34	46	56	
	KW	7.6	7.4	7.1	7.9	7.7	7.5	8.1	8.0	7.8	
95	TC	60	55	49	62	58	52	62	58	54	
	SHC	29	36	43	31	41	50	33	45	54	
	KW	7.9	7.6	7.4	8.2	7.9	7.7	8.4	8.3	8.1	
100	TC	59	53	47	61	56	50	61	57	53	
	SHC	29	36	43	31	41	49	33	45	53	
	KW	8.1	7.8	7.5	8.4	8.1	7.8	8.6	8.4	8.2	
105	TC	57	51	45	59	54	48	59	55	51	
	SHC	28	35	42	30	40	47	32	44	51	
	KW	8.2	7.9	7.6	8.5	8.3	8.0	8.7	8.5	8.3	
115	TC	53	47	41	56	50	45	56	51	48	
	SHC	27	34	39	29	39	45	31	43	48	
	KW	8.5	8.1	7.9	8.7	8.5	8.3	9.0	8.8	8.6	

51

38GR006/28CB008

Temp (F) Air Ent Cond		Evap Air – Cfm/BF									
		–			2250/.20			3000/.24			
		Evap Air – Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC				72	65	59	74	68	63	
	SHC	–	–	–	54	47	59	41	57	63	
	KW				8.0	7.5	7.2	8.2	7.8	7.4	
95	TC				66	60	54	68	62	58	
	SHC	–	–	–	32	45	54	39	55	58	
	KW				8.6	8.1	7.7	8.8	8.3	8.0	
100	TC				63	57	52	65	59	56	
	SHC	–	–	–	32	44	52	38	53	56	
	KW				8.8	8.3	7.9	9.0	8.5	8.2	
105	TC				60	55	51	62	57	54	
	SHC	–	–	–	31	43	51	37	52	54	
	KW				9.0	8.5	8.1	9.2	8.7	8.5	
115	TC				54	50	47	56	51	50	
	SHC	–	–	–	29	41	47	35	50	50	
	KW				9.4	8.9	8.6	9.7	9.1	9.0	

52 38GR006/40RR008											
Temp (F) Air Ent Cond		Evap Air – Cfm/BF									
		–			2265/.16			3000/.20			
		Evap Air – Ewb (F)									
		72	67	62	72	67	62	72	67	62	
85	TC	–	–	–	73	65	59	75	68	64	
	SHC	–	–	–	37	49	59	44	58	64	
	KW	–	–	–	8.2	7.7	7.6	8.6	8.0	7.8	
95	TC	–	–	–	67	61	56	69	63	60	
	SHC	–	–	–	35	48	56	42	56	60	
	KW	–	–	–	8.9	8.2	8.0	8.7	8.5	8.3	
100	TC	–	–	–	65	58	54	67	61	58	
	SHC	–	–	–	34	47	54	41	55	58	
	KW	–	–	–	9.0	8.6	8.2	9.2	8.6	8.5	
105	TC	–	–	–	62	56	52	64	58	56	
	SHC	–	–	–	33	46	52	40	54	56	
	KW	–	–	–	9.3	8.8	8.5	9.5	9.0	8.8	
115	TC	–	–	–	57	52	49	59	54	52	
	SHC	–	–	–	32	44	49	38	51	52	
	KW	–	–	–	9.7	9.2	8.9	9.9	9.4	9.3	

53 38GR006/40BA009										
Temp (F) Air Ent Cond		Evap Air – Cfm/BF								
		–			2250/.15			3250/.22		
		Evap Air – Ewb (F)								
		72	67	62	72	67	62	72	67	62
85	TC	–	–	–	72	65	60	74	68	65
	SHC				37	51	60	44	61	65
	KW				8.3	7.8	7.5	8.4	8.0	7.8
95	TC	–	–	–	66	60	56	68	62	60
	SHC				35	48	56	42	58	60
	KW				8.8	8.3	8.0	9.0	8.5	8.4
100	TC	–	–	–	63	57	54	65	59	58
	SHC				34	49	54	41	56	58
	KW				9.0	8.5	8.2	9.2	8.7	8.6
105	TC	–	–	–	60	55	52	62	57	56
	SHC				33	47	52	40	55	56
	KW				9.3	8.8	8.5	9.5	9.0	8.9
115	TC	–	–	–	54	50	48	55	51	51
	SHC				31	44	48	38	51	51
	KW				9.7	9.2	9.0	9.9	9.4	9.4

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.