LENNOX®

ENGINEERING DATA

CONDENSING UNITS

12ACB
ADDITIONAL RATINGS

April 2001

CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI

ARI RATINGS

Outdoor Unit Model No. Unit Size *Sound Rating Number	★ARI Standard 210/240 Ratings					Indoor Unit Model No.	**Expansion Valve Kit
	Cooling Capacity		Efficiency		Total Unit Watts		
	Btuh	kW	SEER	EER			
12ACB36 Horizontal Coils 3 Ton (78 db US) (76 db Cdn)	36,400	10.7	12.50	10.45	3485	CH33-44/48B-F	**26K34** (LB-85663J)
12ACB42 Horizontal Coils 3.5 Ton (80 db US) (78 db Cdn)	40,500	11.9	12.00	10.70	3785	CH33-44/48B-F	**26K35** (LB-85663K)
	42,000	12.3	12.50	11.00	3820	CH33-50/60C-F	**26K35** (LB-85663K)
12ACB48 Horizontal Coils 4 Ton (82 db US) (80 db Cdn)	46,500	13.6	12.50	10.75	4325	CH33-44/48B-F	**26K35** (LB-85663K)
	47,000	13.8	12.50	10.75	4370	CH33-50/60C-F	**26K35** (LB-85663K)
12ACB60 Horizontal Coils 5 Ton (82 db US) (80 db Cdn	57,000	16.7	12.00	9.90	5760	CH33-50/60C-F	**26K35** (LB-85663K)

★Certified in accordance with USE certification program which is based on ARI Standard 210/240; 95°F (35°C) outdoor air temperature, 80°F (27°C) db / 67°F (19°C) wb entering evaporator air with 20 ft. (7.6 m) of connecting refrigerant lines.
*Sound Rating Number rated in accordance with test conditions included in ARI Standard 270.
**Kit is required and must be ordered extra, unless shown as factory installed.

RATINGS

NOTE - Cooling capacities are gross and do not include indoor coil blower motor heat deduction.
NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

12ACB36 — CH33-44/48B-F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1050	495	36.2	10.6	2.35	.72	.86	.98	34.9	10.2	2.65	.73	.87	.99	33.5	9.8	2.99	.75	.89	1.00	32.1	9.4	3.39	.76	.91	1.00
	1200	565	37.0	10.8	2.36	.75	.90	1.00	35.7	10.5	2.66	.77	.92	1.00	34.3	10.1	3.00	.78	.93	1.00	32.9	9.6	3.40	.79	.95	1.00
	1350	635	37.7	11.0	2.37	.78	.94	1.00	36.4	10.7	2.67	.80	.95	1.00	35.0	10.3	3.01	.81	.97	1.00	33.6	9.8	3.40	.83	.99	1.00
67°F (19°C)	1050	495	38.6	11.3	2.37	.57	.70	.83	37.2	10.9	2.67	.57	.71	.84	35.8	10.5	3.01	.58	.72	.86	34.2	10.0	3.42	.59	.74	.88
	1200	565	39.4	11.5	2.38	.58	.73	.87	37.9	11.1	2.68	.59	.74	.88	36.4	10.7	3.03	.60	.76	.90	34.8	10.2	3.43	.61	.77	.92
	1350	635	40.0	11.7	2.39	.60	.76	.91	38.5	11.3	2.69	.61	.77	.92	37.0	10.8	3.03	.62	.79	.94	35.3	10.3	3.43	.63	.81	.96
71°F (22°C)	1050	495	41.2	12.1	2.40	.42	.55	.67	39.7	11.6	2.70	.43	.56	.68	38.2	11.2	3.04	.43	.56	.70	36.6	10.7	3.45	.43	.57	.71
	1200	565	42.0	12.3	2.40	.43	.57	.70	40.5	11.9	2.70	.43	.58	.72	38.9	11.4	3.06	.44	.58	.73	37.2	10.9	3.46	.44	.59	.75
	1350	635	42.6	12.5	2.41	.44	.59	.73	41.0	12.0	2.71	.44	.60	.75	39.4	11.5	3.06	.44	.60	.77	37.7	11.0	3.46	.45	.62	.79

12ACB42 — CH33-44/48B-F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1250	590	40.4	11.8	2.72	.72	.86	.98	39.0	11.4	3.08	.74	.88	.99	37.5	11.0	3.47	.75	.89	1.00	36.0	10.6	3.92	.76	.91	1.00
	1400	660	41.2	12.1	2.73	.75	.90	1.00	39.8	11.7	3.08	.76	.91	1.00	38.3	11.2	3.48	.77	.93	1.00	36.7	10.8	3.94	.79	.95	1.00
	1550	730	41.9	12.3	2.74	.77	.93	1.00	40.4	11.8	3.09	.79	.94	1.00	38.9	11.4	3.49	.80	.96	1.00	37.3	10.9	3.94	.82	.98	1.00
67°F (19°C)	1250	590	43.0	12.6	2.75	.57	.70	.83	41.5	12.2	3.10	.57	.71	.84	39.9	11.7	3.50	.58	.72	.86	38.3	11.2	3.96	.59	.74	.88
	1400	660	43.7	12.8	2.76	.58	.73	.86	42.2	12.4	3.11	.59	.74	.88	40.6	11.9	3.51	.60	.75	.90	38.8	11.4	3.97	.61	.77	.92
	1550	730	44.3	13.0	2.76	.60	.75	.89	42.7	12.5	3.11	.60	.77	.91	41.1	12.0	3.52	.61	.78	.93	39.3	11.5	3.98	.62	.80	.95
71°F (22°C)	1250	590	45.9	13.5	2.77	.42	.55	.67	44.3	13.0	3.13	.43	.56	.68	42.6	12.5	3.54	.43	.56	.70	40.8	12.0	3.99	.43	.57	.71
	1400	660	46.6	13.7	2.78	.43	.57	.70	44.9	13.2	3.14	.43	.57	.71	43.2	12.7	3.54	.44	.58	.73	41.4	12.1	4.00	.44	.59	.74
	1550	730	47.2	13.8	2.79	.44	.58	.73	45.5	13.3	3.14	.44	.59	.74	43.7	12.8	3.55	.44	.60	.76	41.8	12.3	4.01	.45	.61	.77

NOTE - Due to Lennox' ongoing committment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability.
Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.
Installation and service must be performed by a qualified installer and servicing agency.

RATINGS

NOTE - Cooling capacities are gross and do not include indoor coil blower motor heat deduction.
NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

12ACB42 — CH33-50/60C-F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1250	590	41.8	12.3	2.73	.72	.86	.98	40.4	11.8	3.08	.73	.88	.99	38.8	11.4	3.48	.75	.89	1.00	37.2	10.9	3.93	.76	.91	1.00
	1400	660	42.7	12.5	2.74	.75	.89	1.00	41.1	12.0	3.09	.76	.91	1.00	39.5	11.6	3.49	.78	.93	1.00	37.9	11.1	3.94	.79	.95	1.00
	1550	730	43.4	12.7	2.74	.77	.93	1.00	41.8	12.3	3.10	.79	.94	1.00	40.2	11.8	3.50	.80	.96	1.00	38.6	11.3	3.95	.82	.98	1.00
67°F (19°C)	1250	590	44.6	13.1	2.75	.57	.70	.83	43.0	12.6	3.11	.57	.71	.84	41.3	12.1	3.51	.58	.72	.86	39.5	11.6	3.96	.59	.74	.88
	1400	660	45.4	13.3	2.76	.58	.72	.86	43.7	12.8	3.12	.59	.74	.88	42.0	12.3	3.52	.60	.75	.90	40.1	11.8	3.97	.61	.77	.92
	1550	730	46.0	13.5	2.77	.60	.75	.90	44.3	13.0	3.12	.60	.76	.91	42.5	12.5	3.52	.61	.78	.93	40.7	11.9	3.98	.62	.80	.95
71°F (22°C)	1250	590	47.6	14.0	2.78	.43	.55	.67	45.9	13.5	3.14	.43	.56	.68	44.1	12.9	3.54	.43	.56	.70	42.2	12.4	4.00	.43	.57	.71
	1400	660	48.3	14.2	2.79	.43	.57	.70	46.6	13.7	3.15	.43	.57	.71	44.7	13.1	3.55	.44	.58	.73	42.8	12.5	4.01	.44	.59	.74
	1550	730	49.0	14.4	2.80	.44	.58	.73	47.2	13.8	3.15	.44	.59	.74	45.3	13.3	3.56	.44	.60	.76	43.3	12.7	4.01	.45	.61	.77

12ACB48 — CH33-44/48B-F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	46.3	13.6	3.10	.72	.86	.97	44.7	13.1	3.50	.73	.87	.98	43.0	12.6	3.96	.74	.88	.99	41.1	12.0	4.48	.76	.91	1.00
	1600	755	47.4	13.9	3.11	.75	.89	1.00	45.7	13.4	3.51	.76	.91	1.00	44.0	12.9	3.96	.77	.92	1.00	42.1	12.3	4.49	.79	.94	1.00
	1800	850	48.3	14.2	3.12	.78	.93	1.00	46.6	13.7	3.51	.79	.94	1.00	44.8	13.1	3.97	.80	.96	1.00	42.9	12.6	4.49	.82	.98	1.00
67°F (19°C)	1400	660	49.3	14.4	3.12	.57	.69	.82	47.6	14.0	3.52	.57	.70	.84	45.7	13.4	3.98	.58	.72	.85	43.7	12.8	4.51	.58	.73	.87
	1600	755	50.3	14.7	3.13	.58	.72	.86	48.5	14.2	3.53	.59	.73	.88	46.6	13.7	3.99	.59	.75	.90	44.5	13.0	4.51	.60	.77	.91
	1800	850	51.0	14.9	3.14	.60	.75	.90	49.2	14.4	3.54	.61	.77	.92	47.2	13.8	3.99	.61	.78	.93	45.2	13.2	4.52	.62	.80	.95
71°F (22°C)	1400	660	52.6	15.4	3.15	.43	.55	.67	50.8	14.9	3.54	.43	.55	.68	48.8	14.3	4.01	.43	.56	.69	46.7	13.7	4.54	.43	.57	.71
	1600	755	53.6	15.7	3.15	.43	.56	.70	51.6	15.1	3.55	.43	.57	.71	49.6	14.5	4.01	.44	.58	.73	47.5	13.9	4.54	.44	.59	.74
	1800	850	54.3	15.9	3.16	.44	.58	.73	52.3	15.3	3.56	.44	.59	.74	50.3	14.7	4.02	.44	.60	.76	48.1	14.1	4.55	.45	.61	.78

12ACB48 — CH33-50/60C-F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	46.7	13.7	3.11	.72	.85	.97	45.1	13.2	3.51	.73	.87	.98	43.3	12.7	3.96	.74	.88	1.00	41.4	12.1	4.49	.75	.90	1.00
	1600	755	47.8	14.0	3.12	.75	.89	1.00	46.1	13.5	3.52	.76	.91	1.00	44.3	13.0	3.97	.77	.93	1.00	42.3	12.4	4.51	.79	.95	1.00
	1800	850	48.7	14.3	3.13	.77	.93	1.00	47.0	13.8	3.52	.79	.94	1.00	45.1	13.2	3.98	.80	.96	1.00	43.2	12.7	4.51	.82	.98	1.00
67°F (19°C)	1400	660	49.8	14.6	3.14	.56	.69	.82	48.0	14.1	3.54	.57	.70	.83	46.1	13.5	3.99	.58	.72	.85	44.1	12.9	4.52	.59	.73	.87
	1600	755	50.8	14.9	3.14	.58	.72	.86	49.0	14.4	3.54	.59	.73	.88	47.0	13.8	4.00	.60	.75	.89	44.9	13.2	4.53	.61	.77	.91
	1800	850	51.6	15.1	3.15	.60	.75	.90	49.7	14.6	3.54	.61	.77	.92	47.7	14.0	4.01	.61	.78	.93	45.6	13.4	4.54	.62	.80	.95
71°F (22°C)	1400	660	53.2	15.6	3.16	.42	.55	.67	51.3	15.0	3.56	.43	.55	.68	49.3	14.4	4.01	.43	.56	.69	47.1	13.8	4.55	.43	.57	.70
	1600	755	54.2	15.9	3.17	.43	.56	.70	52.2	15.3	3.57	.43	.57	.71	50.1	14.7	4.03	.44	.58	.72	47.9	14.0	4.56	.44	.59	.74
	1800	850	55.0	16.1	3.18	.44	.58	.73	53.0	15.5	3.57	.44	.59	.74	50.8	14.9	4.04	.44	.60	.76	48.5	14.2	4.57	.45	.61	.78

12ACB60 — CH33-50/60C-F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1600	755	56.6	16.6	3.90	.71	.84	.96	54.7	16.0	4.41	.72	.85	.97	52.6	15.4	4.98	.73	.87	.98	50.5	14.8	5.60	.74	.89	.99
	1800	850	57.7	16.9	3.91	.73	.87	.98	55.7	16.3	4.42	.74	.89	.99	53.7	15.7	4.99	.75	.90	1.00	51.5	15.1	5.62	.77	.92	1.00
	2000	945	58.7	17.2	3.93	.76	.90	1.00	56.7	16.6	4.42	.77	.92	1.00	54.6	16.0	4.99	.78	.93	1.00	52.4	15.4	5.63	.80	.95	1.00
67°F (19°C)	1600	755	60.3	17.7	3.94	.56	.68	.81	58.2	17.1	4.44	.56	.69	.82	56.0	16.4	5.02	.57	.70	.84	53.7	15.7	5.65	.58	.72	.85
	1800	850	61.4	18.0	3.95	.57	.71	.84	59.2	17.3	4.46	.58	.72	.85	57.0	16.7	5.02	.58	.73	.87	54.6	16.0	5.65	.59	.75	.89
	2000	945	62.2	18.2	3.96	.59	.73	.87	60.0	17.6	4.46	.59	.75	.89	57.8	16.9	5.02	.60	.76	.91	55.3	16.2	5.66	.61	.77	.92
71°F (22°C)	1600	755	64.2	18.8	3.97	.43	.54	.66	62.1	18.2	4.48	.43	.55	.67	59.7	17.5	5.06	.43	.55	.68	57.3	16.8	5.69	.43	.56	.69
	1800	850	65.3	19.1	3.98	.43	.56	.68	63.1	18.5	4.49	.43	.56	.69	60.7	17.8	5.06	.43	.57	.71	58.2	17.1	5.69	.43	.58	.72
	2000	945	66.2	19.4	3.99	.43	.57	.71	63.9	18.7	4.50	.44	.58	.72	61.5	18.0	5.07	.44	.59	.73	58.9	17.3	5.70	.44	.60	.75