



3900 Dr. Greaves Rd.

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EVT-100 DX COIL TOTAL UNIT COOLING CAPACITY EVT-100

Table with columns for AIR VOLUME, OA CONDITIONS, RA CONDITIONS, EFFECTIVENESS, AIR-LVG WHL / ENT DXC, COOLING CAP-ENTHALPY WHEEL, REFRIGERANT DATA, LVG AIR TEMP, COOLING CAP-DX COIL, and UNIT PERFORMANCE. It provides detailed performance metrics for different air volume and condition scenarios.

NOTES: 1. Entering liquid temperature is constant at 110°F. 2. Coil face area is 20.12 sq. ft. 3. All data based on balanced system (Exhaust cfm = Supply cfm).



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EVT-120

**DX COIL
TOTAL UNIT COOLING CAPACITY**

EVT-120

EVT-120 TOTAL UNIT COOLING CAPACITY -- DIRECT EXPANSION COIL																							
SUMMER APPLICATION RATINGS - ENTHALPY WHEEL														PERFORMANCE RATINGS - DIRECT EXPANSION COIL						UNIT PERFORMANCE			
AIR VOLUME (cfm)	OA CONDITIONS			RA CONDITIONS		EFFECTIVENESS		AIR-LVG WHL / ENT DXC		COOLING CAP--ENTHALPY WHEEL				REFRIGERANT DATA		LVG AIR TEMP		COOLING CAP--DX COIL			COMBINED COOLING CAP		
	DB (deg F)	RH (%)	WB (deg F)	DB (deg F)	WB (deg F)	LATENT (%)	SENS (%)	DB (deg F)	WB (deg F)	SENS (Btuh)	LATENT (Btuh)	TOTAL (Btuh)	S/T	SUC TEMP (deg F)	PR DROP (psi)	DB (deg F)	WB (deg F)	TOTAL (Btuh)	SENS (Btuh)	S/T	TOTAL (Btuh)	SENS (Btuh)	S/T
8000	80	5	50.4	75.0	47.8	67.76	73.95	76.25	48.45	31,501	4,625	36,126	0.87	40	1.88	56.2	38.3	174,000	174,000	1.00	210,126	205,501	0.98
														45	1.30	59.2	39.9	147,600	147,600	1.00	183,726	179,101	0.97
														50	0.84	62.3	41.4	121,000	121,000	1.00	157,126	152,501	0.97
		40	63.5		59.6	67.85	74.02	76.25	60.71	31,403	36,578	67,981	0.46	40	2.15	56.7	52.4	188,200	169,700	0.90	256,181	201,103	0.79
														45	1.29	59.2	54.3	147,500	147,500	1.00	215,481	178,903	0.83
														50	0.84	62.3	55.5	120,900	120,900	1.00	188,881	152,303	0.81
	75	73.8	69.2	67.95	74.10	76.24	70.56	31,306	67,978	99,284	0.32	40	4.98	61.1	59.6	305,800	131,200	0.43	405,084	162,506	0.40		
												45	3.51	62.9	61.4	262,300	115,900	0.44	361,584	147,206	0.41		
												50	2.29	64.7	63.2	215,300	99,940	0.46	314,584	131,246	0.42		
	95	5	57.7	75.0	47.8	68.06	74.22	79.95	50.50	125,554	21,475	147,029	0.85	40	2.25	57.6	39.5	193,000	193,000	1.00	340,029	318,554	0.94
														45	1.60	60.6	41.1	166,600	166,600	1.00	313,629	292,154	0.93
														50	1.09	63.7	42.6	140,100	140,100	1.00	287,129	265,654	0.93
		40	75.1		59.6	68.19	74.33	79.93	64.48	125,111	181,737	306,848	0.41	40	3.10	59.2	54.9	232,400	179,100	0.77	539,248	304,211	0.56
														45	1.92	61.3	57.1	185,200	160,800	0.87	492,048	285,911	0.58
														50	1.09	63.6	59.0	140,500	140,500	1.00	447,348	265,611	0.59
	75	87.7	69.2	68.31	74.44	79.91	75.35	124,667	347,322	471,989	0.26	40	6.88	64.6	63.4	368,600	132,500	0.36	840,589	257,167	0.31		
												45	5.07	66.2	65.1	324,600	118,200	0.36	796,589	242,867	0.30		
												50	3.59	67.9	66.7	278,900	103,900	0.37	750,889	228,567	0.30		
110	5	64.6	75.0	47.8	68.4	74.5	83.57	52.62	218,944	47,852	266,796	0.82	40	2.64	59.1	40.9	212,000	212,000	1.00	478,796	430,944	0.90	
													45	1.94	62.0	42.4	186,200	186,200	1.00	452,996	405,144	0.89	
													50	1.36	65.1	43.9	159,700	159,700	1.00	426,496	378,644	0.89	
	40	86.8		59.6	68.5	74.7	83.51	69.01	218,032	402,658	620,690	0.35	40	4.43	62.3	58.3	285,700	184,400	0.65	906,390	402,432	0.44	
													45	3.04	64.1	60.1	241,300	168,300	0.70	861,990	386,332	0.45	
													50	1.87	66.1	62.1	191,600	151,000	0.79	812,290	369,032	0.45	
75	101.7	69.2	68.7	74.8	83.46	81.30	217,108	783,126	1,000,234	0.22	40	9.75	68.8	68.3	453,900	127,600	0.28	1,454,134	344,708	0.24			
											45	7.60	70.3	69.8	410,100	114,900	0.28	1,410,334	332,008	0.24			
											50	5.65	71.9	71.3	362,000	101,400	0.28	1,362,234	318,508	0.23			
10000	80	5	50.4	75.0	47.8	62.29	69.67	76.47	48.58	37,081	5,315	42,396	0.87	40	2.46	57.7	39.1	203,200	203,200	1.00	245,596	240,281	0.98
														45	1.70	60.5	40.6	172,500	172,500	1.00	214,896	209,581	0.98
														50	1.11	63.4	42.0	141,600	141,600	1.00	183,996	178,681	0.97
		40	63.5		59.6	62.41	69.76	76.46	60.91	36,977	42,053	79,030	0.47	40	2.69	58.2	53.4	214,100	197,900	0.92	293,130	234,877	0.80
														45	1.70	60.5	55.0	172,400	172,400	1.00	251,430	209,577	0.83
														50	1.11	63.4	56.1	141,600	141,600	1.00	220,630	179,577	0.81
	75	73.8	69.2	62.53	69.85	76.46	70.79	36,873	78,189	115,062	0.32	40	5.98	62.9	61.2	340,300	146,700	0.43	455,362	183,573	0.40		
												45	4.22	64.5	62.8	291,700	130,200	0.45	406,762	167,073	0.41		
												50	2.78	66.0	64.3	240,500	113,300	0.47	355,562	150,173	0.42		
	95	5	57.7	75.0	47.8	62.27	70.01	80.80	50.96	147,801	24,698	172,499	0.86	40	2.98	59.8	40.8	227,100	227,100	1.00	399,599	374,901	0.94
														45	2.18	62.4	42.1	199,000	199,000	1.00	371,499	346,801	0.93
														50	1.49	65.2	43.5	168,200	168,200	1.00	340,699	316,001	0.93
		40	75.1		59.6	62.83	70.15	80.77	65.29	147,324	209,123	356,447	0.41	40	3.92	61.5	56.8	266,200	208,400	0.78	622,647	355,724	0.57
														45	2.58	63.1	58.4	219,200	190,800	0.87	575,647	338,124	0.59
														50	1.50	65.2	60.1	169,000	169,000	1.00	525,447	316,324	0.60
	75	87.7	69.2	62.99	70.28	80.74	76.35	146,844	399,861	546,705	0.27	40	8.60	67.1	65.9	421,300	147,500	0.35	968,005	294,344	0.30		
												45	6.41	68.6	67.3	372,100	132,300	0.36	918,805	279,144	0.30		
												50	4.55	70.0	68.7	320,000	116,900	0.37	866,705	263,744	0.30		
110	5	64.6	75.0	47.8	63.0	70.4	85.03	53.41	257,749	55,079	312,828	0.82	40	3.52	61.8	42.6	250,100	250,100	1.00	562,928	507,849	0.90	
													45	2.66	64.3	43.8	223,200	223,200	1.00	536,028	480,949	0.90	
													50	1.92	67.0	45.1	194,200	194,200	1.00	507,028	451,949	0.89	
	40	86.8		59.6	63.3	70.5	84.96	70.47	256,748	463,731	720,479	0.36	40	5.80	65.3	60.9	334,400	212,800	0.64	1,054,879	469,548	0.45	
													45	4.08	66.9	62.4	285,900	196,000	0.69	1,006,379	452,748	0.45	
													50	2.66	68.4	64.0	234,600	179,100	0.76	955,079	435,848	0.46	
75	101.7	69.2	63.5	70.7	84.90	83.09	255,735	902,414	1,158,149	0.22	40	12.64	72.3	71.8	526,700	137,700	0.26	1,684,849	393,435	0.23			
											45	9.78	73.5	73.0	476,800	124,200	0.26	1,634,949	379,935	0.23			
											50	7.37	74.7	74.3	423,800	110,400	0.26	1,581,949	366,135	0.23			
12000	80	5	50.4	75.0	47.8	56.80	65.37	76.68	48.70	41,732	5,815	47,547	0.88	40	2.98	59.2	39.9	227,000	227,000	1.00	274,547	268,732	0.98
														45	2.11	61.6	41.1	195,300	195,300	1.00	242,847	237,032	0.98
														50	1.38	64.3	42.5	160,600	160,600	1.00	208,147	202,332	0.97
		40	63.5		59.6	56.94	65.48	76.68	61.10	41,631	46,044	87,675	0.47	40	3.15	59.5	54.3	234,600	223,100	0.95	322,275	264,731	0.82
														45	2.11	61.6	55.5	195,300	195,300	1.00	282,975	236,931	0.84
														50	1.38	64.3	56.6	160,600	160,600	1.00	248,275	202,231	0.81
	75	73.8	69.2	57.08	65.59	76.67	71.03	41,528	85,660	127,188	0.33	40	6.87	64.3	62.5	369,300	160,400	0.43	496,488	201,928	0.41		
												45	4.87	65.7	63.8	316,900	143,000	0.45	444,088	184,528	0.42		
												50	3.21	67.0	65.2	261,500	125,200	0.48	388,688	166,728	0.43		
	95	5	57.7	75.0	47.8	57.27	65.79	81.64	51.41	166,400	27,064	193,464	0.86	40	3.69	61.8	41.8	256,800	256,800	1.00	450,264	423,200	0.94
														45	2.73	64.1	43.0	226,900	226,900	1.00	420,364	393,300	0.94
														50	1.93	66.6	44.2	194,700	194,700	1.00	388,164	361,100	0.93
		40	75.1		59.6	57.47	65.95	81.61	66.08	165,926	229,309	395,235	0.42	40	4.77	63.5	58.4	298,200	235,100	0.79	693,435	401,026	0.58