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EVT-010

**HOT WATER COIL  
TOTAL UNIT HEATING CAPACITY**

EVT-010

EVT-010 TOTAL UNIT HEATING CAPACITY -- HOT WATER COIL																												
WINTER APPLICATION RATINGS - ENTHALPY WHEEL													PERFORMANCE RATINGS - HOT WATER COIL						UNIT PERFORMANCE									
AIR VOLUME (cfm)	OA CONDITIONS			RA CONDITIONS		EFFECTIVENESS		AIR-LVG WHL / ENT HWC		HEATING CAP-ENTHALPY WHEEL			S/T	FLUID DATA						LVG AIR TEMP			COOLING CAP--HWC			COMBINED HEATING 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)		FR (gpm)	VEL (ft/sec)	ENT TEMP (deg F)	PR DROP (fwc)	LVG TEMP (deg F)	DB (deg F)	WB (deg F)	TOTAL (Btuh)	SENS (Btuh)	S/T	TOTAL (Btuh)	SENS (Btuh)	S/T		
600	-10	30	-11.5	72.0	54.0	77.9	82.5	56.71	45.05	43,448	10,579	54,027	0.80	2	1.69	120	1.46	108.7	74.0	52.8	11,245	11,245	1.00	65,272	54,693	0.838		
														160	1.37	141.2	85.1	57.3	18,497	18,497	1.00	72,524	61,945	0.854				
														200	1.30	173.7	96.4	62.2	25,810	25,810	1.00	79,837	69,258	0.867				
														4	3.38	120	5.03	113.9	75.3	53.4	12,112	12,112	1.00	66,139	55,560	0.840		
														160	4.74	154.3	87.2	58.1	19,871	19,871	1.00	73,898	63,319	0.857				
														200	4.49	185.8	99.2	62.5	27,668	27,668	1.00	81,695	71,116	0.871				
	20	30	14.8	72.0	54.0	77.6	82.2	62.65	48.11	27,455	9,642	37,097	0.74	2	1.69	120	1.45	109.7	78.3	54.9	10,195	10,195	1.00	47,292	37,650	0.796		
														160	1.37	142.3	89.5	59.2	17,440	17,440	1.00	54,537	44,895	0.823				
														200	1.30	174.4	100.3	62.8	28,339	28,339	1.00	82,366	71,787	0.872				
														4	3.38	120	5.03	114.5	79.5	55.3	10,977	10,977	1.00	48,074	38,432	0.799		
														160	4.73	150.5	91.4	59.9	18,730	18,730	1.00	55,827	46,185	0.827				
														200	4.49	186.4	103.4	64.1	26,524	26,524	1.08	63,621	55,979	0.880				
50	30	38.4	72.0	54.0	77.4	81.9	68.18	51.37	11,576	5,684	17,260	0.67	2	1.69	120	1.45	110.7	82.3	57.1	9,216	9,216	1.00	109,476	103,792	0.948			
													160	1.36	143.3	93.5	61.3	16,456	16,456	1.00	33,716	28,032	0.831					
													200	1.30	175.7	104.7	65.1	23,758	23,758	1.00	41,018	35,334	0.861					
													4	3.38	120	5.02	115.0	83.4	57.6	9,920	9,920	1.00	27,180	21,496	0.791			
													160	4.73	151.0	95.3	61.9	17,668	17,668	1.00	34,928	29,244	0.837					
													200	4.49	186.9	107.3	6.0	25,458	25,458	1.00	42,718	37,034	0.867					
800	-10	30	-11.5	72.0	54.0	74.0	79.3	53.83	43.20	55,723	13,387	69,110	0.81	2	1.69	120	1.48	106.1	69.8	50.6	13,844	13,844	1.00	82,954	69,567	0.839		
														160	1.40	137.3	79.7	54.8	22,411	22,411	1.00	91,521	78,134	0.854				
														200	1.33	168.4	89.6	58.7	31,062	31,062	1.00	100,172	86,785	0.866				
														4	3.38	120	5.07	112.3	71.3	51.3	15,175	15,175	1.00	84,285	70,898	0.841		
														160	4.77	147.6	82.1	55.8	24,500	24,500	1.00	93,610	80,223	0.857				
														200	4.54	182.7	92.9	59.9	33,881	33,881	1.00	102,991	89,604	0.870				
	20	30	14.8	72.0	54.0	76.7	79.0	60.87	46.93	35,190	12,201	47,391	0.74	2	1.69	120	1.47	107.5	75.1	53.2	12,384	12,384	1.00	59,775	47,574	0.796		
														160	1.39	138.8	85.0	57.2	20,942	20,942	1.00	68,333	56,132	0.821				
														200	1.32	169.9	95.0	60.9	29,585	29,585	1.00	76,976	64,775	0.841				
														4	3.38	120	5.05	113.2	76.5	53.8	13,564	13,564	1.00	60,955	48,754	0.800		
														160	4.77	148.4	87.2	58.0	22,880	22,880	1.00	70,271	58,070	0.826				
														200	4.53	183.5	98.0	62.0	32,254	32,254	1.00	79,645	67,444	0.847				
50	30	38.4	72.0	54.0	73.4	78.7	67.45	50.86	14,829	7,192	22,021	0.67	2	1.69	120	1.46	108.9	80.1	56.1	11,017	11,017	1.00	33,038	25,846	0.782			
													160	1.38	140.2	90.0	59.9	19,567	19,567	1.00	41,588	34,396	0.827					
													200	1.32	171.3	100.0	63.4	28,203	28,203	1.00	50,224	43,032	0.857					
													4	3.41	120	5.05	113.9	81.3	56.6	12,058	12,058	1.00	34,079	26,887	0.789			
													160	4.75	149.1	92.1	60.6	21,366	21,366	1.00	43,387	36,195	0.834					
													200	4.53	184.3	102.9	64.4	30,734	30,734	1.00	52,755	45,563	0.864					
1000	-10	30	-11.5	72.0	54.0	70.1	76.1	50.94	41.30	66,823	15,830	82,653	0.81	2	1.69	120	1.50	103.7	65.9	62.8	16,260	16,260	1.00	98,913	83,083	0.840		
														160	1.43	133.8	74.8	52.4	25,922	25,922	1.00	108,575	92,745	0.854				
														200	1.36	162.9	84.3	56.3	36,165	36,165	1.00	118,818	102,988	0.867				
														4	3.38	120	5.10	110.9	67.6	49.3	18,120	18,120	1.00	100,773	84,943	0.843		
														160	4.82	145.4	77.5	53.6	28,818	28,818	1.00	111,471	95,641	0.858				
														200	4.58	179.8	87.4	57.5	39,590	39,590	1.00	122,243	106,413	0.871				
	20	30	14.8	72.0	54.0	69.8	75.7	59.08	45.71	42,174	14,427	56,601	0.75	2	1.69	120	1.49	105.5	72.3	51.7	14,371	14,371	1.00	70,972	56,545	0.797		
														160	1.42	135.7	81.2	55.4	24,023	24,023	1.00	80,624	66,197	0.821				
														200	1.35	164.9	90.6	59.0	34,196	34,196	1.00	90,797	76,370	0.841				
														4	3.38	120	5.08	111.9	73.8	52.3	15,993	15,993	1.00	72,594	58,167	0.801		
														160	4.80	146.5	83.7	58.4	26,677	26,677	1.00	83,278	68,851	0.827				
														200	4.57	180.9	93.6	60.1	37,438	37,428	1.00	94,039	79,602	0.846				
50	30	38.4	72.0	54.0	69.5	75.4	66.71	50.34	17,761	8,504	26,265	0.68	2	1.69	120	1.48	107.3	78.3	55.2	12,592	12,592	1.00	38,857	30,353	0.781			
													160	1.41	137.5	87.2	58.7	22,237	22,237	1.00	48,502	39,998	0.825					
													200	1.35	166.8	96.5	62.0	32,350	32,350	1.00	58,615	50,111	0.855					
													4	3.38	120	5.07	112.9	79.6	55.7	13,996	13,996	1.00	40,261	31,757	0.789			
													160	4.78	147.5	89.5	59.5	24,669	24,669	1.00	50,934	42,430	0.833					
													200	4.56	181.9	99.4	63.0	35,421	35,421	1.00	61,686	53,182	0.862					

NOTES: 1. Return air conditions are constant at 72.0 db and 54.0 wb. 2. Outdoor air relative humidity is constant at 30%. 3. Enthalpy Wheel leaving temperatures do not include the effect of Pre-Heater (optional) for frost control. 4. All data based on balanced system (Exhaust cfm = Supply cfm). 5. Coil face area is 3.89 sq. ft.

EVT-019

## HOT WATER COIL TOTAL UNIT HEATING CAPACITY

EVT-019

### EVT-019 TOTAL UNIT HEATING CAPACITY -- HOT WATER COIL

AIR VOLUME (cfm)	WINTER APPLICATION RATINGS - ENTHALPY WHEEL											PERFORMANCE RATINGS - HOT WATER COIL											UNIT PERFORMANCE				
	OA CONDITIONS			RA CONDITIONS		EFFECTIVENESS		AIR-LVG WHL / ENT HWC		HEATING CAP-ENTHALPY WHEEL				FLUID DATA				LEAVING AIR DATA			COOLING CAP--HW COIL				COMBINED HEATING 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	FR (gpm)	VEL (ft/sec)	ENT TEMP (deg F)	PR DROP (fwc)	LVG TEMP (deg F)	DB (deg F)	WB (deg F)	TOTAL (Btuh)	SENS (Btuh)	S/T	TOTAL (Btuh)	SENS (Btuh)	S/T	
900	-10	30	-11.5	72.0	54.0	72.6	77.7	52.46	42.36	61,410	14,767	76,177	0.81	8	1.93	120	1.69	113.4	79.4	54.6	26,316	26,316	1.00	102,493	87,726	0.856	
														160	1.62	149.2	95.8	60.8	42,268	42,268	1.00	118,445	103,678	0.875			
														200	1.57	185.0	112.2	66.4	58,354	58,354	1.00	134,531	119,764	0.890			
														16	3.86	120	6.25	116.5	80.8	55.1	27,625	27,625	1.00	103,802	89,035	0.858	
														160	6.03	154.4	97.8	61.5	44,220	44,220	1.00	120,397	105,630	0.877			
														200	5.86	192.2	114.9	67.2	60,898	60,898	1.00	137,075	122,308	0.892			
	24	5.79	120	13.52	117.6	81.3	55.3	28,109	28,109	1.00	104,286	89,519	0.858														
	160	13.08	156.2	98.5	61.8	44,933	44,933	1.00	121,110	106,343	0.878																
	200	12.74	194.7	115.8	67.5	61,819	61,819	1.00	137,996	123,229	0.893																
	8	1.93	120	1.69	114.1	84.0	56.7	23,376	23,376	1.00	75,607	62,149	0.822														
	160	1.62	150.0	100.3	62.6	39,303	39,303	1.00	91,534	78,076	0.853																
	200	1.57	185.8	116.7	68.0	55,370	55,370	1.00	107,601	94,143	0.875																
16	3.86	120	6.25	116.9	85.2	57.1	24,534	24,534	1.00	76,765	63,307	0.825															
160	6.03	154.8	102.1	63.3	41,113	41,113	1.00	93,344	79,886	0.856																	
200	5.86	192.6	119.3	68.8	57,780	57,780	1.00	110,011	96,553	0.878																	
24	5.79	120	13.51	117.9	85.6	57.3	24,964	24,964	1.00	77,195	63,737	0.826															
160	13.07	156.4	102.8	63.5	41,776	41,776	1.00	94,007	80,549	0.857																	
200	12.74	195.0	120.1	69.1	58,653	58,653	1.34	110,884	117,426	1.059																	
8	1.93	120	1.69	114.8	88.2	59.1	20,621	20,621	1.00	44,889	36,956	0.823															
160	1.62	150.7	104.5	64.9	36,525	36,525	1.00	60,793	52,860	0.870																	
200	1.57	186.5	121.0	70.0	52,576	52,576	1.00	76,844	68,911	0.897																	
16	3.86	120	6.24	117.3	89.3	66.1	21,640	21,640	1.00	45,908	37,975	0.827															
160	6.03	155.1	106.2	65.4	38,204	38,204	1.00	62,472	54,539	0.873																	
200	5.86	192.9	123.3	70.7	54,859	54,859	1.00	79,127	71,194	0.900																	
24	5.79	120	13.51	118.1	89.7	59.7	22,018	22,018	1.00	46,286	38,353	0.829															
160	13.07	156.7	106.9	65.6	38,818	38,818	1.00	63,086	55,153	0.874																	
200	12.73	195.2	124.2	70.9	55,687	55,687	1.00	79,955	72,022	0.901																	
1400	-10	30	-11.5	72.0	54.0	66.5	71.5	49.92	38.73	87,956	20,972	108,928	0.81	8	1.93	120	1.70	110.9	73.6	50.2	35,992	35,992	1.00	144,920	123,948	0.855	
														160	1.63	145.5	87.6	58.1	57,183	57,183	1.00	166,111	145,139	0.874			
														200	1.58	179.9	101.7	61.4	78,612	78,612	1.00	187,540	166,568	0.888			
														16	3.86	120	6.26	115.1	75.3	51.0	38,505	38,505	1.00	147,433	126,461	0.858	
														160	6.04	152.2	90.0	57.0	60,917	60,917	1.00	169,845	148,873	0.877			
														200	5.87	189.3	104.9	62.5	83,480	83,480	1.00	192,408	171,436	0.891			
	24	5.79	120	13.53	116.7	75.9	51.2	39,449	39,449	1.00	148,377	127,405	0.859														
	160	13.10	154.7	91.0	57.4	62,298	62,298	1.00	171,226	150,254	0.878																
	200	12.75	192.7	106.1	62.9	85,260	85,260	1.00	194,188	173,216	0.892																
	8	1.93	120	1.69	111.8	78.0	53.8	32,581	32,581	1.00	107,170	88,059	0.822														
	160	1.63	146.3	92.0	59.2	53,735	53,735	1.00	128,324	109,213	0.851																
	200	1.58	180.7	106.1	64.2	75,136	75,136	1.00	149,725	130,614	0.872																
16	3.86	120	6.26	115.6	79.5	54.4	34,844	34,844	1.00	109,433	90,322	0.825															
160	6.04	152.7	94.3	60.1	57,231	57,231	1.00	131,820	112,709	0.855																	
200	5.87	189.7	109.1	65.2	79,775	79,775	1.00	154,364	135,253	0.876																	
24	5.79	120	13.52	117.0	80.1	54.6	35,697	35,697	1.00	110,286	91,175	0.827															
160	13.10	155.0	95.1	60.5	58,526	58,526	1.00	133,115	114,004	0.856																	
200	12.75	193.0	110.3	65.6	81,476	81,476	1.00	156,065	136,954	0.878																	
8	1.93	120	1.69	112.9	84.1	57.3	27,927	27,927	1.00	62,542	51,278	0.820															
160	1.63	147.5	98.0	62.4	49,033	49,033	1.00	83,648	72,384	0.865																	
200	1.58	182.0	112.0	67.0	70,396	70,396	1.00	105,011	93,747	0.893																	
16	3.86	120	6.25	116.2	85.3	57.8	29,854	29,854	1.00	64,469	53,205	0.825															
160	6.04	153.4	100.1	63.1	52,207	52,207	1.00	86,822	75,558	0.870																	
200	5.87	190.4	114.9	67.9	74,726	74,726	1.00	109,341	98,077	0.897																	
24	5.79	120	13.52	117.4	85.8	58.0	30,582	30,582	1.00	65,197	53,933	0.827															
160	13.10	155.5	100.8	63.4	53,385	53,385	1.00	88,000	76,736	0.872																	
200	12.75	193.5	115.9	68.2	76,313	76,313	1.00	110,928	99,664	0.898																	
1900	-10	30	-11.5	72.0	54.0	60.2	65.3	41.48	34.97	108,944	25,725	134,669	0.81	8	1.93	120	1.71	107.9	64.8	47.0	48,038	48,038	1.00	182,707	156,982	0.859	
														160	1.65	141.4	77.1	52.4	73,499	73,499	1.00	208,168	182,443	0.876			
														200	1.59	174.6	89.7	57.5	99,296	99,296	1.00	233,965	208,240	0.890			
														16	3.86	120	6.28	113.4	66.9	48.0	52,278	52,278	1.00	186,947	161,222	0.862	
														160	6.06	149.9	80.1	53.7	79,600	79,600	1.00	214,269	188,544	0.880			
														200	5.89	186.3	93.5	59.0	107,137	107,137	1.00	241,806	216,081	0.894			
	24	5.79	120	13.55	115.5	67.6	48.3	53,887	53,887	1.00	188,556	162,831	0.864														
	160	13.13	153.0	81.2	54.2	81,873	81,873	1.00	216,542	190,817	0.881																
	200	12.78	190.6	94.9	59.5	110,020	110,020	1.00	244,689	218,964	0.895																
	8	1.93	120	1.70	109.7	73.1	51.2	40,921	40,921	1.00	133,006	109,568	0.824														
	160	1.64	143.2	85.4	56.2	66,296	66,296	1.00	158,381	134,943	0.852																
	200	1.59	176.5	97.9	60.9	92,024	92,024	1.00	184,109	160,671	0.873																
16	3.86	120	6.27	114.4	74.8	51.9	44,491	44,491	1.00	136,576	113,138	0.828															
160	6.06	150.9	88.0	57.2	71,748	71,748	1.00	163,833	140,395	0.857																	
200	5.88	187.3	101.4	62.2	99,236	99,236	1.00	191,321	167,883	0.877																	
24	5.79	120	13.55	116.1	75.5	52.2	45,852	45,852	1.00	137,937	114,499	0.830															
160	13.12	153.7	89.0	57.6	73,786	73,786	1.00	165,871	142,433	0.859																	
200	12.78	191.3	102.7	62.6	101,895	101,895	1.00	193,980	170,542	0.879																	
8	1.93	120	1.70	111.4	80.9	55.8	34,187	34,187	1.00	76,863	63,051	0.820															
160	1.64	144.9	93.1	60.4	59,484	59,484	1.00	102,160	88,348	0.865																	
200	1.59	178.2	105.6	64.8	85,150	85,150	1.00	127,826	114,014	0.892																	
16	3.86	120	6.26	115.3	82.3	56.3	37,138	37,138	1.00	79,814	66,002	0.827															
160	6.05	151.8	95.5	61.3	64,334	64,334	1.00	107,010	93,198	0.871																	
200	5.88	188.2	108.8	65.8	91,777	91,777	1.00	134,453	120,641	0.897																	
24	5.79	120	13.53	116.8	82.8	56.5	38,267	38,267	1.00	80,943	67,131	0.829															
160	13.10	154.4	96.4	61.6	66,153	66,153	1.00	108,829	95,017	0.873																	
200	12.78	191.9	110.0	66.2	94,227	94,227	1.00	136,903	123,091																		