RUSKIN®

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

HOT WATER COIL
TOTAL UNIT HEATING CAPACITY

EVT-028

EVT-028 TOTAL UNIT HEATING CAPACITY -- HOT WATER COIL

WINTER APPLICATION RATINGS - ENTHALPY WHEEL														PERFORMANCE RATINGS - HOT WATER COIL											UNIT PERFORMANCE		
AIR	OA CONDITIONS			RA CONDITIONS		EFFECTIVENESS		AIR--LVG WHL / ENT HWC		HEATING CAP--ENTHALPY WHEEL				FLUID DATA					LEAVING AIR DATA		COOLING CAP--HW COIL			COMBINED HEATNG CAP		
VOLUME (cfm)	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
1600	-10	30	-11.5	72.0	54.0	72.2	77.7	52.44	42.31	109,116	26,097	135,213	0.81	10	1.88	120	1.56	110.8	78.8	54.3	45,785	45,785	1.00	180,998	154,901	0.856
																160	1.49	145.0	94.8	60.4	73,515	73,515	1.00	208,728	182,631	0.875
																200	1.43	179.2	110.9	85.9	101,471	101,471	1.00	236,684	210,587	0.890
														20	3.75	120	5.65	115.1	80.4	54.9	48,548	48,548	1.00	183,761	157,664	0.858
																160	5.41	152.1	97.2	61.3	77,703	77,703	1.00	212,916	186,819	0.877
																200	5.22	189.0	114.1	67.0	106,999	106,999	1.00	242,212	216,115	0.892
														30	5.63	120	12.09	116.7	81.0	55.2	49,568	49,568	1.00	184,781	158,684	0.859
																160	11.63	154.6	98.1	61.6	79,227	79,227	1.00	214,440	188,343	0.878
																200	11.24	192.5	115.3	67.3	108,992	108,992	1.00	244,205	218,108	0.893
	20		14.8			71.9	77.3	60.01	46.36	68,899	23,786	92,685	0.74	10	1.88	120	1.56	111.8	83.4	56.4	40,668	40,668	1.00	133,353	109,567	0.822
																160	1.49	146.1	99.4	62.3	68,357	68,357	1.00	161,042	137,256	0.852
																200	1.43	180.3	115.5	67.6	96,282	96,282	1.00	188,967	165,181	0.874
														20	3.75	120	5.65	115.6	84.9	57.0	43,113	43,113	1.00	135,798	112,012	0.825
																160	5.41	152.6	101.6	63.1	72,239	72,239	1.00	164,924	141,138	0.856
																200	5.22	189.8	118.5	68.6	101,515	101,515	1.00	194,200	170,414	0.878
														30	5.63	120	5.63	117.0	85.4	57.2	44,016	44,016	1.00	136,701	112,915	0.826
																160	11.63	155.0	102.5	63.4	73,653	73,653	1.00	166,338	142,552	0.857
																200	11.24	192.9	119.5	68.9	103,403	103,403	1.00	196,088	172,302	0.879
	50		38.4			71.6	77.0	67.10	50.62	29,030	14,023	43,053	0.67	10	1.88	120	1.55	112.8	87.8	59.0	35,873	35,873	1.00	78,926	64,903	0.822
																160	1.48	147.1	103.7	64.6	63,524	63,524	1.00	106,577	92,554	0.868
																200	1.43	181.2	119.8	69.6	91,421	91,421	1.00	134,474	120,451	0.896
														20	3.75	120	5.65	116.2	89.0	59.4	38,021	38,021	1.00	81,074	67,051	0.827
																160	5.40	153.2	105.8	85.3	67,121	67,121	1.00	110,174	96,151	0.873
																200	5.22	190.1	122.6	70.5	96,378	96,378	1.00	139,431	125,408	0.899
														30	5.63	120	12.09	117.4	89.5	59.6	38,815	38,815	1.00	81,868	67,845	0.829
																160	11.63	155.3	106.5	65.5	68,433	68,433	1.00	111,486	97,463	0.874
																200	11.24	193.3	123.7	70.8	98,169	98,169	1.00	141,222	127,199	0.901
2200	-10	30	-11.5	72.0	54.0	65.4	72.4	47.85	39.18	139,892	32,460	172,352	0.81	10	1.88	120	1.57	108.0	72.8	51.2	59,446	59,446	1.00	231,798	199,338	0.860
																160	1.50	141.0	87.0	57.0	93,357	93,357	1.00	265,709	233,249	0.878
																200	1.44	173.9	101.3	62.2	127,606	127,606	1.00	299,958	267,498	0.892
														20	3.75	120	5.67	113.5	74.7	51.7	64,059	64,059	1.00	236,411	203,951	0.863
																160	5.43	149.8	89.9	58.1	100,229	100,229	1.00	272,581	240,121	0.881
																200	5.23	186.0	105.1	63.5	136,613	136,613	1.00	308,965	276,505	0.895
														30	5.63	120	12.12	115.6	75.4	52.3	65,780	65,780	1.00	238,132	205,672	0.864
																160	11.64	153.0	90.9	58.5	102,753	102,753	1.00	275,105	242,645	0.882
																200	11.27	190.4	106.5	64.0	139,887	139,887	1.00	312,239	279,779	0.896
	20		14.8			65.1	72.0	57.17	44.37	88,255	29,584	117,839	0.75	10	1.88	120	1.57	109.5	78.9	54.1	51,804	51,804	1.00	169,643	140,059	0.826
																160	1.50	142.6	93.1	59.6	85,645	85,645	1.00	203,484	173,900	0.855
																200	1.44	175.5	107.4	64.6	119,867	119,867	1.00	237,706	208,122	0.876
														20	3.75	120	5.66	114.4	80.6	54.8	55,796	55,796	1.00	173,635	144,051	0.830
																160	5.42	150.6	95.7	60.5	91,913	91,913	1.00	209,752	180,168	0.859
																200	5.23	186.8	110.9	65.7	128,259	128,259	1.00	246,098	216,514	0.880
														30	5.63	120	12.12	116.1	81.2	55.0	57,289	57,289	1.00	175,128	145,544	0.831
																160	11.63	153.6	96.7	60.9	94,221	94,221	1.00	212,060	182,476	0.860
																200	11.27	191.0	112.2	66.2	131,325	131,325	1.00	249,164	219,580	0.881
	50		38.4			64.8	71.7	65.92	49.77	37,155	17,441	54,596	0.68	10	1.88	120	1.56	111.0	84.6	57.5	44,620	44,620	1.00	99,216	81,775	0.824
																160	1.49	144.1	98.8	62.6	78,395	78,395	1.00	132,991	115,550	0.869
																200	1.44	177.0	113.1	67.4	112,537	112,537	1.00	167,133	149,692	0.896
														20	3.75	120	5.66	115.1	86.1	58.0	48,034	48,034	1.00	102,630	85,189	0.830
																160	5.42	151.4	101.2	63.5	84,103	84,103	1.00	138,699	121,258	0.874
																200	5.23	187.6	116.4	68.4	120,414	120,414	1.00	175,010	157,569	0.900
														30	5.63	120	12.11	116.7	86.6	58.2	49,315	49,315	1.00	103,911	86,470	0.832
																160	11.63	154.1	102.1	63.8	86,209	86,209	1.00	140,805	123,364	0.876
																200	11.26	191.5	117.6	68.7	123,286	123,286	1.00	177,882	160,441	0.902
2800	-10	30	-11.5	72.0	54.0	58.6	67.1	43.36	35.95	165,016	36,936	201,952	0.82	10	1.88	120	1.58	105.4	67.2	48.0	72,496	72,496	1.00	274,448	237,512	0.865
																160	1.51	137.4	80.1	53.6	111,633	111,633	1.00	313,585	276,649	0.882
																200	1.45	169.1	93.2	58.8	151,218	151,218	1.00	353,170	316,234	0.895
														20	3.75	120	5.69	112.0	69.5	49.1	79,289	79,289	1.00	281,241	244,305	0.869
																160	5.45	147.6	83.4	55.0	121,600	121,600	1.00	323,552	286,616	0.886
																200	5.26	183.2	97.4	60.3	164,200	164,200	1.00	366,152	329,216	0.899
														30	5.63	120	12.15	114.5	70.3	49.4	81,848	81,848	1.00	283,800	246,864	0.870
																160	11.66	151.5	84.6	55.5	125,288	125,288	1.00	327,240	290,304	0.887
																200	11.30	188.4	99.0	60.9	168,946	168,946	1.00	370,898	333,962	0.900
	20		14.8			58.3	66.7	54.37	42.35	104,017	33,661	137,678	0.76	10	1.88	120	1.58	107.5	74.8	51.8	62,163	62,163	1.00	199,841	166,180	0.832
																160	1.51	139.5	87.7	57.1	101,195	101,195	1.00	238,873	205,212	0.859
																200	1.45	171.3	100.7	61.9	140,695	140,695	1.00	278,373	244,712	0.879
														20	3.75	120	5.67	113.1	76.7	52.6	67,924	67,924	1.00	205,602	171,941	0.836
																160	5.44	148.8	90.6	58.3	110,151	110,151	1.00	247,829	214,168	0.864
																200	5.25	184.3	104.7	63.3	152,689	152,689	1.00	290,367	256,706	0.884
														30	5.63	120	12.13	115.3	77.5	53.0	70,103	70,103	1.00	207,781	174,120	0.838
																160	11.66	152.3	91.7	58.6	113,477	113,477	1.00	251,155	217,494	0.866
																200	11.27	189.2	106.1	63.7	157,086	157,086	1.00	294,764	261,103	0.886
	50		38.4			57.9	66.3	64.76	48.92	43,752	19,845	63,597	0.69	10	1.88	120	1.57	109.4	82.0	56.2	52,385	52,385	1.00	115,982	96,137	0.829
																160	1.50	141.5	94.8	61.0	91,323	91,323	1.00	154,920	135,075	0.872
																200	1.45	173.3	107.8	65.4	130,748	130,748	1.00	194,345	174,500	0.898
														20	3.75	120	5.66	114.2	83.6	56.8	57,191	57,191	1.00	120,788	100,943	0.836
																160	5.43	149.9	97.5	61.9	89,342	89,342	1.00	152,939	133,094	0.870
																200	5.25	185.4	111.5	66.6	141,821	141,821	1.00	205,418	185,573	0.903
														30	5.63	120	12.12	116.0	84.2	57.0	59,014	59,014	1.00	122,611	102,766	0.838
																160	11.66	153.1	98.5	62.3	102,327	102,327	1.00	165,924	146,079	0.880
																200	11.27	190.0	112.8	67.0	145,891	145,891	1.00	209,488	189,643	0.905

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 6.88 sq. ft.

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HOT WATER COIL
TOTAL UNIT HEATING CAPACITY

EVT-036 **EVT-036**

EVT-036 TOTAL UNIT HEATING CAPACITY -- HOT WATER COIL

WINTER APPLICATION RATINGS - ENTHALPY WHEEL														PERFORMANCE RATINGS - HOT WATER COIL										UNIT PERFORMANCE		
AIR	OA CONDITIONS			RA CONDITIONS		EFFECTIVENESS		AIR--LVG WHL / ENT HWC		HEATING CAP--ENTHALPY WHEEL				FLUID DATA					LEAVING AIR DATA		COOLING CAP--HW COIL			COMBINED HEATNG CAP		
VOLUME (cfm)	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
																120	1.57	106.4	75.2	52.4	67,523	67,523	1.00	260,263	223,663	0.859
														10	1.88	160	1.50	138.3	90.3	58.4	106,952	106,952	1.00	299,692	263,092	0.878
																200	1.44	170.0	105.7	63.9	146,844	146,844	1.00	339,584	302,984	0.892
																120	5.67	112.6	77.6	53.4	73,674	73,674	1.00	266,414	229,814	0.863
	-10		-11.5			67.6	74.1	49.25	40.15	156,140	36,600	192,740	0.81	20	3.75	160	5.43	148.2	93.9	59.8	116,214	116,214	1.00	308,954	272,354	0.882
																200	5.25	183.7	110.4	65.5	159,055	159,055	1.00	351,795	315,195	0.896
																120	12.12	114.9	78.4	53.7	75,994	75,994	1.00	268,734	232,134	0.864
														30	5.63	160	11.66	151.9	95.2	60.2	119,647	119,647	1.00	312,387	275,787	0.883
																200	11.27	188.8	112.1	66.0	163,528	163,528	1.00	356,268	319,668	0.897
																120	1.57	108.1	80.8	55.0	59,185	59,185	1.00	191,076	157,718	0.825
														10	1.88	160	1.50	140.0	95.9	60.8	98,527	98,527	1.00	230,418	197,060	0.855
																200	1.44	171.7	111.2	66.0	138,350	138,350	1.00	270,241	236,883	0.877
																120	5.66	113.5	82.8	55.8	64,537	64,537	1.00	196,428	163,070	0.830
2400	20	30	14.8	72.0	54.0	67.3	73.7	58.04	44.99	98,533	33,358	131,891	0.75	20	3.75	160	5.43	149.1	99.2	61.9	107,009	107,009	1.00	238,900	205,542	0.860
																200	5.24	184.6	115.6	67.4	149,800	149,800	1.00	281,691	248,333	0.882
																120	12.12	115.5	83.6	56.2	66,561	66,561	1.00	198,452	165,094	0.832
														30	5.63	160	11.65	152.5	100.4	62.4	110,161	110,161	1.00	242,052	208,694	0.862
																200	11.27	189.4	117.2	67.9	154,003	154,003	1.00	285,894	252,536	0.883
																120	1.56	109.6	86.0	58.1	51,355	51,355	1.00	112,514	92,848	0.825
														10	1.88	160	1.50	141.6	101.1	63.5	90,618	90,618	1.00	151,777	132,111	0.870
																200	1.44	173.3	118.4	69.1	130,378	130,378	1.00	191,537	171,871	0.897
																120	5.66	114.3	87.8	58.8	55,967	55,967	1.00	117,126	97,460	0.832
	50		38.4			67.0	73.4	66.28	50.04	41,493	19,666	61,159	0.68	20	3.75	160	5.42	150.0	104.1	64.5	98,378	98,378	1.00	159,537	139,871	0.877
																200	5.23	185.5	120.5	69.6	141,123	141,123	1.00	202,282	182,616	0.903
																120	12.12	116.1	88.5	59.0	57,715	57,715	1.00	118,874	99,208	0.835
														30	5.63	160	11.63	153.1	105.2	64.9	101,266	101,266	1.00	162,425	142,759	0.879
																200	11.27	190.1	122.0	70.1	145,073	145,073	1.00	206,232	186,566	0.905
																120	1.59	103.8	70.1	49.6	80,559	80,559	1.00	305,948	264,110	0.863
														10	1.88	160	1.52	134.6	83.9	55.4	125,369	125,369	1.00	350,758	308,920	0.881
																200	1.46	165.2	97.8	60.7	170,777	170,777	1.00	396,166	354,328	0.894
																120	5.69	111.0	72.8	50.8	89,303	89,303	1.00	314,692	272,854	0.867
	-10		-11.5			61.9	69.7	45.35	37.40	183,551	41,838	225,389	0.81	20	3.75	160	5.45	145.9	87.9	57.0	138,369	138,369	1.00	363,758	321,920	0.885
																200	5.26	180.7	103.1	62.6	187,830	187,830	1.00	413,219	371,381	0.899
																120	12.15	113.8	73.8	51.2	92,638	92,638	1.00	318,027	276,189	0.868
														30	5.63	160	11.68	150.3	89.4	57.6	143,231	143,231	1.00	368,620	326,782	0.887
																200	11.30	186.7	105.0	63.2	194,125	194,125	1.00	419,514	377,676	0.900
																120	1.58	106.0	77.0	53.0	69,582	69,582	1.00	223,461	185,331	0.829
														10	1.88	160	1.51	136.8	90.7	58.4	114,270	114,270	1.00	268,149	230,019	0.858
																200	1.45	167.4	104.7	63.5	159,577	159,577	1.00	313,456	275,326	0.878
																120	5.68	112.2	79.3	54.0	77,050	77,050	1.00	230,929	192,799	0.835
3000	20	30	14.8	72.0	54.0	61.6	69.3	55.62	43.26	115,749	38,130	153,879	0.75	20	3.75	160	5.45	147.2	94.4	59.8	126,013	126,013	1.00	279,892	241,762	0.864
																200	5.26	182.0	109.5	65.1	175,398	175,398	1.00	329,277	291,147	0.884
																120	12.14	114.8	80.2	54.3	79,910	79,910	1.00	233,789	195,659	0.837
														30	5.63	160	11.66	151.1	95.7	60.3	130,420	130,420	1.00	284,299	246,169	0.866
																200	11.29	187.6	111.3	65.6	181,253	181,253	1.00	335,132	297,002	0.886
																120	1.57	108.1	83.5	56.9	59,223	59,223	1.00	130,411	107,931	0.828
														10	1.88	160	1.51	138.9	97.2	62.0	103,803	103,803	1.00	174,991	152,511	0.872
																200	1.45	169.6	111.1	66.6	149,021	149,021	1.00	220,209	197,729	0.898
																120	5.67	113.4	85.4	57.6	65,515	65,515	1.00	136,703	114,223	0.836
	50		38.4			61.2	68.9	65.28	49.30	48,708	22,480	71,188	0.68	20	3.75	160	5.43	148.4	100.4	63.1	114,384	114,384	1.00	185,572	163,092	0.879
																200	5.25	183.2	115.6	68.0	163,698	163,698	1.00	234,886	212,406	0.904
																120	12.12	115.4	86.2	57.9	67,933	67,933	1.00	139,121	116,641	0.838
														30	5.63	160	11.66	152.0	101.7	63.5	118,367	118,367	1.00	189,555	167,075	0.881
																200	11.28	188.4	117.3	68.5	169,143	169,143	1.00	240,331	217,851	0.906
																120	1.60	101.3	65.3	46.9	93,017	93,017	1.00	344,700	299,211	0.868
														10	1.88	160	1.53	131.2	78.0	52.5	142,438	142,438	1.00	394,121	348,632	0.885
																200	1.47	160.8	90.8	57.7	192,586	192,586	1.00	444,269	398,780	0.898
																120	5.71	109.4	68.3	48.3	104,671	104,671	1.00	356,354	310,865	0.872
	-10		-11.5			56.2	65.2	41.50	34.57	206,194	45,489	251,683	0.82	20	3.75	160	5.47	143.8	82.4	54.3	159,569	159,569	1.00	411,252	365,763	0.889
																200	5.29	178.0	96.6	59.8	214,957	214,957	1.00	466,640	421,151	0.903
																120	12.18	112.7	69.5	48.8	109,156	109,156	1.00	360,839	315,350	0.874
														30	5.63	160	11.70	148.7	84.0	55.0	168,020	168,020	1.00	419,703	374,214	0.892
																200	11.34	184.7	98.7	60.6	223,257	223,257	1.00	474,940	429,451	0.904
																120	1.59	104.0	73.5	51.1	79,332	79,332	1.00	250,720	209,266	0.835
														10	1.88	160	1.52	134.0	86.1	56.3	128,601	128,601	1.00	299,989	258,535	0.862
																200	1.47	163.6	99.0	61.1	178,619	178,619	1.00	350,007	308,553	0.882
																120	5.70	111.0	76.0	52.1	89,117	89,117	1.00	260,505	219,051	0.841
3600	20	30	14.8	72.0	54.0	55.8	64.8	53.21	41.49	129,934	41,454	171,388	0.76	20	3.75	160	5.46	145.4	90.1	57.8	143,872	143,872	1.00	315,260	273,806	0.869
																200	5.28	179.6	104.2	62.9	199,150	199,150	1.00	370,538	329,084	0.888
																120	12.16	113.7	77.0	52.6	92,903	92,903	1.00	264,291	222,837	0.843
														30	5.63	160	11.69	149.8	91.5	58.3	149,649	149,649	1.00	321,037	279,583	0.871
																200	11.31	185.8	106.2	63.6	206,798	206,798	1.00	378,186	336,732	0.890
																120	1.58	106.6	81.3	55.8	68,340	68,340	1.00	147,419	122,978	0.834
														10	1.88	160	1.52	136.6	93.8	60.5	115,477	115,477	1.00	194,556	170,115	0.874
																200	1.46	166.3	106.6	64.9	165,381	165,381	1.00	244,460	220,019	0.900
																120	5.68	112.5	83.3	56.6	74,407	74,407	1.00	153,486	129,045	0.841
	50		38.4			55.5	64.4	64.27	48.56	54,638	24,441	79,079	0.69	20	3.75	160	5.45	146.9	97.3	61.8	129,030	129,030	1.00	208,109	183,668	0.883
																200	5.27	181.1	111.5	66.5	184,209	184,209	1.00	263,288	238,847	0.907
																120	12.15	114.8	84.1	56.9	11,543	11,543	1.00	90,622	66,181	0.730
														30	5.63	160	11.68	150.9	98.6	62.2	134,180	134,180	1.00	213,259	188,818	0.885
																200	11.31	186.9	113.3	67.1	191,248	191,248	1.00	270,327	245,886	0.910

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 6.88 sq. ft.