RUSKIN®

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

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	OA CONDITIONS			RA CONDITIONS		EFFECTIVENESS		AIR--LVG WHL / ENT HWC		HEATING CAP--ENTHALPY WHEEL				FLUID DATA					LVG AIR TEMP		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
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
														6	5.06	120	10.51	115.8	75.8	53.4	12,433	12,433	1.00	66,460	55,881	0.841
																160	9.92	154.3	88.0	58.4	20,371	20,371	1.00	74,398	63,819	0.858
																200	9.44	190.3	100.3	62.8	28,339	28,339	1.00	82,366	71,787	0.872
	20		14.8			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	100.7	63.2	24,748	24,748	1.00	61,845	52,203	0.844
														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	28,524	1.08	63,621	55,979	0.880
														6	5.06	120	10.51	116.2	80.0	55.0	11,267	11,267	1.00	48,364	38,722	0.801
																160	9.90	153.5	92.2	53.0	19,200	19,200	1.00	56,297	46,655	0.829
																200	9.42	190.7	104.4	64.4	27,165	27,165	1.00	64,262	54,620	0.850
	50		38.4			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	92,216	92,216	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
														6	5.06	120	10.50	116.6	83.8	57.7	10,181	10,181	1.00	27,441	21,757	0.793
																160	9.90	153.9	96.0	62.2	18,111	18,111	1.00	35,371	29,687	0.839
																200	9.42	191.1	108.2	66.2	26,072	26,072	1.00	43,332	37,648	0.869
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
														6	5.06	120	10.56	114.7	71.9	51.6	15,672	15,672	1.00	84,782	71,395	0.842
																160	9.97	151.4	83.0	58.1	25,266	25,266	1.00	94,376	80,989	0.858
																200	9.49	188.1	94.1	60.3	34,903	34,903	1.00	104,013	90,626	0.871
	20		14.8			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
														6	5.06	120	10.54	115.3	77.0	54.0	14,007	14,007	1.00	61,398	49,197	0.801
																160	9.95	152.0	88.1	58.4	23,593	23,593	1.00	70,984	58,783	0.828
																200	9.48	188.6	99.2	62.4	33,224	33,224	1.00	80,615	68,414	0.849
	50		38.4			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
														6	5.06	120	10.54	115.8	81.8	56.8	12,450	12,450	1.00	34,471	27,279	0.791
																160	9.94	152.5	92.8	60.9	22,029	22,029	1.00	44,050	36,858	0.837
																200	9.46	189.2	103.9	64.7	31,655	31,655	1.00	53,676	46,484	0.866
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
														6	5.06	120	10.61	113.7	68.3	49.6	18,821	18,821	1.00	101,474	85,644	0.844
																160	10.01	149.9	78.5	54.0	29,884	29,884	1.00	112,537	96,707	0.859
																200	9.54	186.0	88.7	58.0	41,004	41,004	1.00	123,657	107,827	0.872
	20		14.8			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
														6	5.06	120	10.58	114.4	74.4	52.6	16,606	16,606	1.00	73,207	58,780	0.803
																160	10.01	150.6	84.6	56.7	27,659	27,659	1.00	84,260	69,833	0.829
																200	9.53	186.7	94.8	60.5	38,770	38,770	1.00	95,371	80,944	0.849
	50		38.4			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
														6	5.06	120	10.56	115.1	80.1	55.9	14,530	14,530	1.00	40,795	32,291	0.792
																160	9.97	151.3	90.3	59.8	25,572	25,572	1.00	51,837	43,333	0.836
																200	9.50	187.5	100.5	63.4	36,675	36,675	1.00	62,940	54,436	0.865

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.

RUSKIN®

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

HOT WATER COIL
TOTAL UNIT HEATING CAPACITY

EVT-019

EVT-019 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
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
	20		14.8			72.3	77.4	60.02	46.40	38,773	13,458	52,231	0.74	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	78,653	1.34	110,884	117,426	1.059
	50		38.4			72.0	77.0	67.10	50.64	16,335	7,933	24,268	0.67	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
	20		14.8			66.1	71.2	56.59	44.14	55,478	19,111	74,589	0.74	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
	50		38.4			65.8	70.8	65.68	49.70	23,351	11,264	34,615	0.67	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
	20		14.8			59.8	64.9	53.20	41.82	68,647	23,438	92,085	0.75	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
	50		38.4			59.4	64.5	64.26	48.74	28,864	13,812	42,676	0.68	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	0.899

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.