MH/MV-120 CFM 2000 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	143170	74638	68.5	5613	25.5	20.0	9.2	162206
65 degrees	139023	73245	65.8	6120	22.7	20.0	9.1	159746
85 degrees	130326	70395	59.9	7369	17.7	20.0	9.1	155211
95 degrees	125761	68943	56.8	8132	15.5	20.0	9.0	153190

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	116674	72971	43.7	5460	21.4	20.0	9.2	135112
65 degrees	113170	71354	41.8	5945	19.0	20.0	9.1	133214
85 degrees	105863	68052	37.8	7159	14.8	20.0	9.1	129940
95 degrees	102020	66456	35.6	7916	12.9	20.0	9.0	128617

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	112422	55746	56.7	5439	20.7	20.0	9.2	130733
65 degrees	108971	54084	54.9	5920	18.4	20.0	9.1	128877
85 degrees	101776	50823	51.0	7133	14.3	20.0	9.1	125708
95 degrees	98045	48962	49.1	7875	12.5	20.0	9.0	124448

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	98366	52281	46.1	5374	18.3	20.0	9.2	116390
65 degrees	95155	50501	44.7	5845	16.3	20.0	9.1	114739
85 degrees	88502	46873	41.6	7041	12.6	20.0	9.1	112051
95 degrees	85037	45013	40.0	7769	10.9	20.0	9.0	111069

MH/MV-140 CFM 3600 Max. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	183561	108073	75.5	7242	25.4	30.0	10.8	208149
65 degrees	178258	106473	71.8	7706	23.1	30.0	10.7	204398
85 degrees	167006	103199	63.8	9025	18.5	30.0	10.6	197555
95 degrees	161040	101546	59.5	9909	16.3	30.0	10.5	194555

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	150698	103740	47.0	6935	21.7	30.0	10.8	174163
65 degrees	146222	101876	44.3	7454	19.6	30.0	10.7	171420
85 degrees	136785	98022	38.8	8839	15.5	30.0	10.6	166607
95 degrees	131812	96038	35.8	9734	13.5	30.0	10.5	164626

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	144796	73508	71.3	6881	21.0	30.0	10.8	168022
65 degrees	140407	71597	68.8	7411	18.9	30.0	10.7	165400
85 degrees	131176	67637	63.5	8807	14.9	30.0	10.6	160832
95 degrees	126312	65583	60.7	9705	13.0	30.0	10.5	158970

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	126710	67319	59.4	6714	18.9	30.0	10.8	149309
65 degrees	122682	65271	57.4	7284	16.8	30.0	10.7	147178
85 degrees	114089	60903	53.2	8730	13.1	30.0	10.6	143409
95 degrees	110019	58926	51.1	9593	11.5	30.0	10.5	142220

MH/MV-140 CFM 3100 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	179915	100512	79.4	7207	25.0	30.0	10.8	204387
65 degrees	174812	98909	75.9	7679	22.8	30.0	10.7	200856
85 degrees	163982	95605	68.4	9005	18.2	30.0	10.6	194460
95 degrees	158244	93914	64.3	9890	16.0	30.0	10.5	191686

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	147026	97082	49.9	6901	21.3	30.0	10.8	170375
65 degrees	142744	95232	47.5	7428	19.2	30.0	10.7	167850
85 degrees	133702	91396	42.3	8823	15.2	30.0	10.6	163465
95 degrees	128930	89413	39.5	9720	13.3	30.0	10.5	161693

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	141302	70788	70.5	6848	20.6	30.0	10.8	164416
65 degrees	137100	68896	68.2	7386	18.6	30.0	10.7	162009
85 degrees	128250	64975	63.3	8793	14.6	30.0	10.6	157855
95 degrees	123577	62946	60.6	9696	12.7	30.0	10.5	156199

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	123420	65372	58.0	6685	18.5	30.0	10.8	145918
65 degrees	119562	63359	56.2	7265	16.5	30.0	10.7	143993
85 degrees	111483	59816	51.7	8787	12.7	30.0	10.6	140990
95 degrees	107602	57190	50.4	9545	11.3	30.0	10.5	139638

MH/MV-140

CFM 2600 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	174902	92600	82.3	7161	24.4	30.0	10.8	199215
65 degrees	170075	91000	79.1	7641	22.3	30.0	10.7	195990
85 degrees	159812	87674	72.1	8977	17.8	30.0	10.6	190195
95 degrees	154368	85955	68.4	9864	15.7	30.0	10.5	187721

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	142032	90011	62.0	6855	20.7	30.0	10.8	165221
65 degrees	138005	88187	49.8	7393	18.7	30.0	10.7	162988
85 degrees	129462	84431	45.0	8800	14.7	30.0	10.6	159144
95 degrees	124946	82475	42.6	9702	12.9	30.0	10.5	157644

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	136538	67759	68.8	6804	20.1	30.0	10.8	159501
65 degrees	132586	65895	66.7	7353	18.0	30.0	10.7	157379
85 degrees	124239	62036	62.2	8777	14.2	30.0	10.6	153784
95 degrees	119837	60077	59.8	9693	12.4	30.0	10.5	152444

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	118971	63059	55.9	6647	17.9	30.0	10.8	141337
65 degrees	115347	61128	54.2	7250	15.9	30.0	10.7	139718
85 degrees	108005	57149	50.9	8646	12.5	30.0	10.6	137034
95 degrees	104191	55130	49.1	9504	11.0	30.0	10.5	136081

MH/MV-140 CFM 2100 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	167575	84245	83.3	7093	23.6	30.0	10.8	191657
65 degrees	163136	82662	80.5	7586	21.5	30.0	10.7	188864
85 degrees	153678	79365	74.3	8939	17.2	30.0	10.6	183928
95 degrees	148643	77649	71.0	9829	15.1	30.0	10.5	181874

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	134867	82318	52.5	6786	19.9	30.0	10.8	157818
65 degrees	131191	80545	50.6	7340	17.9	30.0	10.7	155991
85 degrees	123354	76806	46.5	8768	14.7	30.0	10.6	152921
95 degrees	119280	74628	44.7	9633	12.4	30.0	10.5	151739

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	129693	64207	65.5	6741	19.2	30.0	10.8	152438
65 degrees	126080	62392	63.7	7308	17.3	30.0	10.7	150713
85 degrees	118456	58700	59.8	8772	13.5	30.0	10.6	147977
95 degrees	114378	56612	57.8	9632	11.9	30.0	10.5	145772

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	112670	60106	52.6	6601	17.1	30.0	10.8	134871
65 degrees	109338	58475	50.9	7239	15.1	30.0	10.7	133664
85 degrees	102779	54505	48.3	8587	12.0	30.0	10.6	131597
95 degrees	99247	52551	46.7	9454	10.5	30.0	10.5	130958

MH/MV-180 CFM 5600 Max. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	219785	150057	69.7	8951	24.6	40.0	12.5	250151
65 degrees	213488	147231	66.3	9504	22.5	40.0	12.3	245704
85 degrees	200054	143401	56.7	10858	18.4	40.0	12.1	236797
95 degrees	192658	142301	50.4	11714	16.5	40.0	12.0	232264

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	181370	141194	40.2	8023	22.6	40.0	12.5	208505
65 degrees	175784	138756	37.0	8690	20.2	40.0	12.4	205147
85 degrees	164182	133719	30.5	10204	16.1	40.0	12.1	198603
95 degrees	157816	132035	25.8	11135	14.2	40.0	12.0	195348

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	174201	92795	81.4	7861	22.2	40.0	12.5	200725
65 degrees	168529	90510	78.0	8547	19.7	40.0	12.4	197347
85 degrees	160952	73742	87.2	10161	15.8	40.0	12.1	195166
95 degrees	154888	70339	84.5	11061	14.0	40.0	12.0	192110

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	152436	82405	70.0	7446	20.5	40.0	12.5	177490
65 degrees	146971	79893	67.1	8171	18.0	40.0	12.4	174444
85 degrees	136412	75243	61.2	9800	13.9	40.0	12.1	169323
95 degrees	131453	72583	58.9	10661	12.3	40.0	12.0	167235

MH/MV-180

CFM 5100 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	218121	141454	76.7	8886	24.5	40.0	12.5	248268
65 degrees	211233	140404	70.8	9469	22.3	40.0	12.3	243328
85 degrees	197616	136599	61.0	10826	18.3	40.0	12.1	234251
95 degrees	191178	133676	57.5	11667	16.4	40.0	12.0	230626

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	179236	134003	45.2	7965	22.5	40.0	12.5	206174
65 degrees	173552	132338	41.2	8650	20.1	40.0	12.4	202780
85 degrees	162039	127727	34.3	10186	19.9	40.0	12.1	196397
95 degrees	156248	124761	31.5	11089	14.1	40.0	12.0	193624

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	172256	90245	82.0	7821	22.0	40.0	12.5	198646
65 degrees	166700	87962	78.7	8514	19.6	40.0	12.4	195404
85 degrees	159640	71361	88.3	10127	15.8	40.0	12.1	193738
95 degrees	153287	69856	83.4	11062	13.9	40.0	12.0	190510

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	150586	80839	69.7	7478	20.3	40.0	12.5	175546
65 degrees	145465	78555	66.9	8185	17.8	40.0	12.4	172984
85 degrees	135356	73457	61.9	9732	13.9	40.0	12.1	168035
95 degrees	130056	71332	58.7	10636	12.2	40.0	12.0	165753

MH/MV-180 CFM 4600 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	215375	134314	81.1	8833	24.4	40.0	12.5	245341
65 degrees	209219	131748	77.5	9404	22.3	40.0	12.3	241094
85 degrees	195898	127821	68.1	10775	18.2	40.0	12.1	232357
95 degrees	188618	126773	61.8	11639	16.2	40.0	12.0	227968

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	176724	127184	49.5	7913	22.3	40.0	12.5	203483
65 degrees	171212	124984	46.2	8596	19.9	40.0	12.4	200256
85 degrees	159647	120758	38.9	10148	15.7	40.0	12.1	193876
95 degrees	153803	118725	35.2	11094	13.9	40.0	12.0	191294

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	169888	87581	82.3	7774	21.9	40.0	12.5	196116
65 degrees	164468	86304	79.2	8478	19.4	40.0	12.4	193037
85 degrees	157700	70059	87.6	10104	15.6	40.0	12.1	191719
95 degrees	151681	67710	84.0	11034	13.8	40.0	12.0	188805

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	148344	79159	69.2	7389	20.1	40.0	12.5	173205
65 degrees	143401	77036	66.4	8183	17.5	40.0	12.4	170912
85 degrees	133618	71846	61.8	9694	13.8	40.0	12.1	166168
95 degrees	128528	69378	59.2	10606	12.1	40.0	12.0	164122

MH/MV-180 CFM 4100 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	212353	126182	86.2	8754	24.3	40.0	12.5	242051
65 degrees	205990	124561	81.4	9347	22.0	40.0	12.4	237673
85 degrees	193317	119827	73.5	10724	18.0	40.0	12.1	229602
95 degrees	186253	118634	67.6	11593	16.1	40.0	12.0	225449

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	173640	120120	53.5	7847	22.1	40.0	12.5	200177
65 degrees	168288	117941	50.3	8541	19.7	40.0	12.4	197144
85 degrees	157111	113593	43.5	10110	15.5	40.0	12.1	191207
95 degrees	151186	111601	39.6	11044	13.7	40.0	12.0	188407

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	166943	84776	82.2	7716	21.6	40.0	12.5	192974
65 degrees	161688	82514	79.2	8426	19.2	40.0	12.4	190093
85 degrees	155325	68458	86.9	10073	15.4	40.0	12.1	189236
95 degrees	149496	66192	83.3	11017	13.6	40.0	12.0	186561

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	145307	76911	68.4	7307	19.9	40.0	12.5	169891
65 degrees	140577	74488	66.1	8075	17.4	40.0	12.4	167724
85 degrees	131411	70086	61.3	9652	13.6	40.0	12.1	163814
95 degrees	126463	67639	58.8	10571	12.0	40.0	12.0	161934

MH/MV-240

CFM 6500 Max. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	323014	189934	133.1	14490	22.3	50.0	9.3	375976
65 degrees	314419	186190	128.2	15762	20.0	50.0	9.2	370294
85 degrees	294993	180341	114.7	18859	15.6	50.0	8.9	358481
95 degrees	284231	178241	106.0	20743	13.7	50.0	8.9	352624

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	261619	180102	81.5	13813	18.9	50.0	9.3	310459
65 degrees	253963	176903	77.1	15148	16.8	50.0	9.2	305869
85 degrees	237414	170780	66.6	18298	13.0	50.0	8.9	297007
95 degrees	228919	167397	61.5	20167	11.4	50.0	8.9	293330

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	249792	126515	123.3	13695	18.2	50.0	9.3	296693
65 degrees	242333	123322	119.0	15040	16.1	50.0	9.2	292323
85 degrees	227082	116107	111.0	18178	12.5	50.0	8.9	284719
95 degrees	218475	113177	105.3	20056	10.9	50.0	8.9	280939

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	216055	114358	101.7	13361	16.2	50.0	9.3	260493
65 degrees	209452	111050	98.4	14741	14.2	50.0	9.2	257057
85 degrees	195476	104348	91.1	17981	10.9	50.0	9.0	250944
95 degrees	188044	100371	87.7	19832	9.5	50.0	8.9	248242

MH/MV-240 CFM 6000 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	320006	181776	138.2	14439	22.2	50.0	9.2	372842
65 degrees	310911	178989	131.9	15726	19.8	50.0	9.1	366698
85 degrees	291317	174009	117.3	18838	15.5	50.0	8.9	354752
95 degrees	281310	171048	110.3	20713	13.6	50.0	8.8	349624

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	257624	174070	83.6	13785	18.7	50.0	9.3	306395
65 degrees	250125	170950	79.2	15125	16.5	50.0	9.2	301974
85 degrees	234366	164487	69.9	18273	12.8	50.0	8.9	293896
95 degrees	226499	160621	65.9	20134	11.3	50.0	8.9	290823

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	246861	123358	123.5	13653	18.1	50.0	9.3	293663
65 degrees	239221	120631	118.6	15010	15.9	50.0	9.2	289139
85 degrees	223936	114065	109.9	18163	12.3	50.0	8.9	281535
95 degrees	216245	110034	106.2	20023	10.8	50.0	8.9	278620

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	213274	112129	101.1	13326	16.0	50.0	9.3	257626
65 degrees	206867	108816	98.1	14709	14.1	50.0	9.2	254392
85 degrees	192807	103071	89.7	18101	10.7	50.0	9.0	248574
95 degrees	185567	97959	87.6	19780	9.4	50.0	8.9	245625

MH/MV-240

CFM 5500 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	315135	175082	140.1	14402	21.9	50.0	9.3	367881
65 degrees	306263	172340	133.9	15694	19.5	50.0	9.1	361972
85 degrees	287640	166658	121.0	18802	15.3	50.0	8.9	350985
95 degrees	278414	162821	115.6	20668	13.5	50.0	8.8	346610

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	253878	167047	86.8	13736	18.5	50.0	9.3	302532
65 degrees	246630	163910	82.7	15081	16.4	50.0	9.2	298372
85 degrees	231357	157404	74.0	18232	12.7	50.0	8.9	290785
95 degrees	222868	154505	68.4	20114	11.1	50.0	8.9	287140

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	242862	120655	122.2	13617	17.8	50.0	9.3	289575
65 degrees	235827	117474	118.4	14971	15.8	50.0	9.2	285648
85 degrees	220623	111425	109.2	18138	12.2	50.0	8.9	278156
95 degrees	213109	107489	105.6	20000	10.7	50.0	8.9	275423

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	209596	110112	99.5	13295	15.8	50.0	9.3	253871
65 degrees	203382	106853	96.5	14684	13.9	50.0	9.2	250843
85 degrees	189465	98820	90.6	17848	10.6	50.0	8.9	244590
95 degrees	183005	96811	86.2	19756	9.3	50.0	8.9	242998

MH/MV-240

CFM 5000 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	310538	166725	143.8	14338	21.7	50.0	9.2	363127
65 degrees	301968	163916	138.1	15635	19.3	50.0	9.1	357533
85 degrees	283934	158106	125.8	18748	15.1	50.0	8.9	347142
95 degrees	274427	155110	119.3	20625	13.3	50.0	8.9	342511

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	248535	160497	88.0	13696	18.2	50.0	9.3	297093
65 degrees	241528	157444	84.1	15047	16.1	50.0	9.2	293189
85 degrees	227148	150687	76.5	18199	12.5	50.0	8.9	286492
95 degrees	219340	147337	72.0	20072	10.9	50.0	8.9	283501

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	237886	118039	119.8	13579	17.5	50.0	9.3	284509
65 degrees	231090	114947	116.1	14940	15.5	50.0	9.2	280837
85 degrees	216816	108443	108.4	18105	12.0	50.0	8.9	274267
95 degrees	209206	105091	104.1	19984	10.5	50.0	8.9	271476

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	205090	108033	97.1	13265	15.5	50.0	9.3	249289
65 degrees	199095	104885	94.2	14666	13.6	50.0	9.2	246509
85 degrees	186306	98794	87.5	17994	10.4	50.0	9.0	241794
95 degrees	180212	95106	85.1	19600	9.2	50.0	8.9	239794

MH/MV-300

CFM 9600 Max. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	380262	246266	134.0	16225	23.4	60.0	15.3	435336
65 degrees	373639	247033	126.6	16197	23.1	60.0	15.2	428524
85 degrees	349246	240607	108.6	18994	18.4	60.0	15.0	413476
95 degrees	337085	235911	101.2	20804	16.2	60.0	14.9	407370

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	314796	236204	78.6	14195	22.2	60.0	15.3	362782
65 degrees	305062	232398	72.7	15409	19.8	60.0	15.2	357094
85 degrees	279201	219241	60.0	18366	15.2	60.0	15.0	341154
95 degrees	273884	220082	53.8	20159	13.6	60.0	14.9	341766

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	301053	156212	144.8	14029	21.5	60.0	15.3	348356
65 degrees	290990	153320	137.7	15266	19.1	60.0	15.2	342416
85 degrees	271076	145063	126.0	18242	14.9	60.0	15.0	332424
95 degrees	261109	139615	121.5	20044	13.0	60.0	14.9	328467

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	261658	139785	121.9	13618	19.2	60.0	15.3	307435
65 degrees	252668	136311	116.4	14900	17.0	60.0	15.2	302711
85 degrees	235160	126790	108.4	17938	13.1	60.0	15.0	295316
95 degrees	225595	122061	103.5	19781	11.4	60.0	14.9	291892

MH/MV-300

CFM 7500 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	368248	216417	151.8	16119	22.8	60.0	15.3	422962
65 degrees	361763	217471	144.3	16025	22.6	60.0	15.2	416068
85 degrees	339309	210015	129.3	16905	18.0	60.0	15.0	403234
95 degrees	327548	206102	121.4	20675	15.8	60.0	14.9	397393

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	303658	209263	94.4	14057	21.6	60.0	15.3	351175
65 degrees	293923	206162	87.8	15295	19.2	60.0	15.2	345565
85 degrees	275147	197558	77.6	18268	15.1	60.0	15.0	336703
95 degrees	264871	193450	71.4	20080	13.2	60.0	14.9	332474

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	289541	147189	142.4	13918	20.8	60.0	15.3	336466
65 degrees	280712	143324	137.4	15164	18.5	60.0	15.2	331787
85 degrees	262449	134400	128.0	18156	14.5	60.0	15.0	323495
95 degrees	252468	130216	122.3	19973	12.6	60.0	14.9	319578

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	250979	133558	117.4	13522	18.6	60.0	15.3	296422
65 degrees	243075	129522	113.6	14814	16.4	60.0	15.2	292818
85 degrees	226661	120360	106.3	17885	12.7	60.0	15.0	286623
95 degrees	217051	114850	102.2	19708	11.0	60.0	14.9	283085

MH/MV-300 CFM 6500 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	360172	201198	159.0	16021	22.5	60.0	15.3	414553
65 degrees	354822	201062	153.8	15928	22.3	60.0	15.2	408796
85 degrees	332071	195494	136.6	18836	17.6	60.0	15.0	395758
95 degrees	320417	191936	128.5	20628	15.5	60.0	14.9	390099

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	295009	196494	98.5	13978	21.1	60.0	15.3	342254
65 degrees	286852	192195	94.7	15213	18.9	60.0	15.2	338213
85 degrees	267777	185039	82.7	18217	14.7	60.0	15.0	329153
95 degrees	257985	180949	77.0	20034	12.9	60.0	14.9	325426

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	282576	140979	141.6	13833	20.4	60.0	15.3	329210
65 degrees	274121	137168	137.0	15090	18.2	60.0	15.2	324940
85 degrees	256147	129208	126.9	18104	14.2	60.0	15.0	317010
95 degrees	246591	125043	121.5	19927	12.4	60.0	14.9	313536

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	244522	128938	115.6	13448	18.2	60.0	15.3	289708
65 degrees	236970	124991	112.0	14752	16.1	60.0	15.2	286493
85 degrees	220780	116634	104.1	17852	12.4	60.0	15.0	280617
95 degrees	212471	112419	100.1	19649	10.8	60.0	14.9	278295

MH/MV-300 CFM 5000 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	342557	176862	165.7	15809	21.7	60.0	15.3	396221
65 degrees	337296	178022	159.3	15750	21.4	60.0	15.2	390666
85 degrees	317721	170288	147.4	18672	17.0	60.0	15.0	380847
95 degrees	306320	167862	138.5	20484	15.0	60.0	14.9	375505

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	277806	174501	103.3	13794	20.1	60.0	15.3	324423
65 degrees	269933	170977	99.0	15062	17.9	60.0	15.2	320772
85 degrees	253679	162986	90.7	18088	14.0	60.0	15.0	314603
95 degrees	244754	159008	85.7	19919	12.3	60.0	14.9	311787

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	265904	131823	134.1	13671	19.5	60.0	15.3	311978
65 degrees	258320	128209	130.1	14952	17.3	60.0	15.2	308660
85 degrees	242115	120608	121.5	18004	13.5	60.0	15.0	302621
95 degrees	233436	116613	116.8	19848	11.8	60.0	14.9	300092

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	229220	121555	107.7	13309	17.2	60.0	15.3	273922
65 degrees	222471	117844	104.6	14641	15.2	60.0	15.2	271600
85 degrees	208274	110233	98.0	17706	11.8	60.0	15.0	267596
95 degrees	201033	106332	94.7	19448	10.3	60.0	14.9	266154

MH/MV-360 CFM 11400 Max. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	501994	304936	197.1	25432	19.7	70.0	21.5	588205
65 degrees	488151	300732	187.4	27186	18.0	70.0	21.4	580222
85 degrees	458481	292001	166.5	30819	14.9	70.0	21.2	562677
95 degrees	442558	287454	155.1	33706	13.1	70.0	21.1	556425

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	405110	288545	116.6	24278	16.7	70.0	21.5	487106
65 degrees	393673	283958	109.7	26124	15.1	70.0	21.4	481829
85 degrees	369123	274705	94.4	29900	12.4	70.0	21.2	469869
95 degrees	356162	269554	86.6	32331	11.0	70.0	21.1	465025

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	387084	196594	190.5	24080	16.1	70.0	21.5	468222
65 degrees	375973	191853	184.1	25931	14.5	70.0	21.4	463285
85 degrees	352338	181868	170.5	29725	11.9	70.0	21.2	452297
95 degrees	339748	176635	163.1	32053	10.6	70.0	21.1	447475

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	333754	175586	158.2	23464	14.2	70.0	21.5	412532
65 degrees	323902	170690	153.2	25352	12.8	70.0	21.4	409004
85 degrees	302977	160391	142.6	29232	10.4	70.0	21.2	400999
95 degrees	291828	154952	136.9	31326	9.3	70.0	21.1	396822

MH/MV-360

CFM 10900 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	499268	298313	201.0	26399	19.7	70.0	21.5	585368
65 degrees	485567	294118	191.4	27157	17.9	70.0	21.4	577539
85 degrees	455906	286131	169.8	30783	14.8	70.0	21.2	559982
95 degrees	440440	280823	159.6	33670	13.1	70.0	21.1	554184

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	402440	282722	119.7	24247	16.6	70.0	21.5	484326
65 degrees	391144	278152	113.0	26096	15.0	70.0	21.4	479202
85 degrees	366881	268943	97.9	29877	12.3	70.0	21.2	467547
95 degrees	354066	263817	90.2	32298	11.0	70.0	21.1	462814

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	384564	194246	190.3	24051	16.0	70.0	21.5	465589
65 degrees	373578	189529	184.0	25904	14.4	70.0	21.4	460797
85 degrees	350223	179616	170.6	29704	11.8	70.0	21.2	450106
95 degrees	337776	174389	163.4	32022	10.6	70.0	21.1	445395

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	331417	173961	157.5	23426	14.2	70.0	21.5	410098
65 degrees	321694	169099	152.6	25328	12.7	70.0	21.4	406710
85 degrees	301030	158866	142.2	29213	10.3	70.0	21.2	398984
95 degrees	289963	153614	136.3	31300	9.3	70.0	21.1	394865

MH/MV-360

CFM 10400 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	496292	291570	204.7	25364	19.6	70.0	21.5	582273
65 degrees	482747	287383	195.4	27125	17.8	70.0	21.4	574610
85 degrees	453709	278651	175.1	30768	14.8	70.0	21.2	557730
95 degrees	438122	274082	164.0	33631	13.0	70.0	21.1	551732

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	399534	276776	122.8	24213	16.5	70.0	21.5	481303
65 degrees	388390	272223	116.2	26065	14.9	70.0	21.4	476340
85 degrees	364441	263061	101.4	29852	12.2	70.0	21.2	465020
95 degrees	351784	257963	93.8	32262	10.9	70.0	21.1	460407

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	381801	191825	190.0	24018	15.9	70.0	21.5	462723
65 degrees	370972	187135	183.8	25875	14.3	70.0	21.4	458089
85 degrees	347919	177275	170.6	29680	11.7	70.0	21.2	447719
95 degrees	335627	172077	163.6	31989	10.5	70.0	21.1	449128

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	328878	172263	156.6	23397	14.1	70.0	21.5	407455
65 degrees	319292	167436	151.9	25301	12.6	70.0	21.4	404214
85 degrees	298910	157277	141.6	29193	10.2	70.0	21.2	396791
95 degrees	287991	152039	136.0	31272	9.2	70.0	21.1	392793

MH/MV-360

CFM 9900 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	493037	284701	208.3	25326	19.5	70.0	21.5	578687
65 degrees	479659	280527	199.1	27090	17.7	70.0	21.4	571403
85 degrees	450975	271800	179.2	30739	14.7	70.0	21.2	554897
95 degrees	435576	267225	168.4	33589	13.0	70.0	21.1	549041

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	396358	270697	125.7	24176	16.4	70.0	21.5	477999
65 degrees	385381	266166	119.2	26031	14.8	70.0	21.4	473214
85 degrees	361773	257050	104.7	29825	12.1	70.0	21.2	462256
95 degrees	349289	251982	97.3	32223	10.8	70.0	21.1	457776

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	378790	189321	189.5	23983	15.8	70.0	21.5	459589
65 degrees	368121	184660	183.5	25843	14.2	70.0	21.4	455128
85 degrees	345399	174861	170.5	29655	11.7	70.0	21.2	445108
95 degrees	333275	169693	163.6	31952	10.4	70.0	21.1	440648

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	326107	170485	155.6	23365	14.0	70.0	21.5	404569
65 degrees	316670	165696	151.0	25273	12.5	70.0	21.4	401489
85 degrees	296592	155615	141.0	29171	10.2	70.0	21.2	394393
95 degrees	285832	150395	135.4	31242	9.2	70.0	21.1	390525

MH/MV-480

CFM 12400 Max. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	661064	368515	292.5	33085	20.0	80.0	18.7	773647
65 degrees	641822	362689	279.1	35648	18.0	80.0	18.5	763054
85 degrees	602282	348073	254.2	41889	14.4	80.0	18.3	744589
95 degrees	579760	343841	235.9	45731	12.7	80.0	18.2	735017

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	537243	354979	182.3	31449	17.1	80.0	18.7	644073
65 degrees	521067	348195	172.9	34094	15.3	80.0	18.5	636816
85 degrees	487685	332787	154.9	40381	12.1	80.0	18.3	624640
95 degrees	469634	325290	144.3	44155	10.6	80.0	18.2	619328

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	515977	252197	263.8	31177	16.6	80.0	18.7	621757
65 degrees	500314	245243	255.1	33836	14.8	80.0	18.5	615057
85 degrees	467158	230744	236.4	40147	11.6	80.0	18.3	603186
95 degrees	449628	223202	226.4	43914	10.2	80.0	18.2	598370

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	447884	230784	217.1	30332	14.8	80.0	18.7	550645
65 degrees	433956	223564	210.4	33042	13.1	80.0	18.5	545844
85 degrees	404456	208462	196.0	39375	10.3	80.0	18.3	537690
95 degrees	388828	200569	188.3	43120	9.0	80.0	18.2	534690

MH/MV-480

CFM 12000 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	658003	362596	295.4	33041	19.9	80.0	18.7	770437
65 degrees	638920	356757	282.2	35607	17.9	80.0	18.5	760014
85 degrees	599600	342347	257.3	41854	14.3	80.0	18.3	741785
95 degrees	577345	337836	239.5	45693	12.6	80.0	18.2	732503

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	534160	349742	184.4	31409	17.0	80.0	18.7	640853
65 degrees	518157	342965	175.2	34057	15.2	80.0	18.5	633778
85 degrees	485027	327715	157.3	40349	12.0	80.0	18.3	6218171
95 degrees	467143	320243	146.9	44123	10.6	80.0	18.2	616727

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	513002	250008	263.0	31138	16.5	80.0	18.7	618651
65 degrees	497505	243076	254.4	33801	14.7	80.0	18.5	612129
85 degrees	464678	228612	236.1	40115	11.6	80.0	18.3	600596
95 degrees	447313	221088	226.2	43882	10.2	80.0	18.2	595946

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	445078	229159	215.9	30297	14.7	80.0	18.7	547719
65 degrees	431309	221976	209.3	33010	13.1	80.0	18.5	543088
85 degrees	402124	206941	195.2	39347	10.2	80.0	18.3	535258
95 degrees	386655	199083	187.6	43092	9.0	80.0	18.2	532418

MH/MV-480

CFM 11500 Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	653880	355106	298.8	32982	19.8	80.0	18.7	766115
65 degrees	635016	349257	285.8	35552	17.9	80.0	18.5	755923
85 degrees	596003	335107	260.9	41806	14.3	80.0	18.3	738026
95 degrees	574121	330276	243.8	45642	12.6	80.0	18.2	729106

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	530019	343099	186.9	31355	16.9	80.0	18.7	636526
65 degrees	514245	336334	177.9	34007	15.1	80.0	18.5	629696
85 degrees	480808	322234	158.6	40322	11.9	80.0	18.3	617560
95 degrees	463118	314900	148.2	44099	10.5	80.0	18.2	612619

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	509011	247204	261.8	31087	16.4	80.0	18.7	614485
65 degrees	493733	240296	253.4	33754	14.6	80.0	18.5	608196
85 degrees	461350	225885	235.5	40072	11.5	80.0	18.3	597121
95 degrees	444207	218385	225.8	43840	10.1	80.0	18.2	592693

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	441318	227048	214.3	30251	14.6	80.0	18.7	543798
65 degrees	427759	219915	207.8	32967	13.0	80.0	18.5	539391
85 degrees	398997	204975	194.0	39309	10.2	80.0	18.3	531998
95 degrees	383739	197161	186.6	43054	8.9	80.0	18.2	529271

MH/MV-480 CFM 11000 Min. Air Flow

95 dry bulb, 80 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	649387	347515	301.9	32919	19.7	80.0	18.7	761407
65 degrees	635016	349257	285.8	35552	17.9	80.0	18.5	755923
85 degrees	592215	327529	264.7	41725	14.2	80.0	18.3	734051
95 degrees	571440	320888	250.6	45566	12.5	80.0	18.2	726163

80 dry bulb, 67 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	525520	336341	189.2	31297	16.8	80.0	18.7	631828
65 degrees	509996	329594	180.4	33954	15.0	80.0	18.5	625263
85 degrees	477058	315524	161.5	40273	11.9	80.0	18.3	613642
95 degrees	459619	308204	151.4	44050	10.4	80.0	18.2	608952

70 dry bulb, 65 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	504675	244310	260.4	31032	16.3	80.0	18.7	609960
65 degrees	489636	237432	252.2	33704	14.5	80.0	18.5	603926
85 degrees	457735	223080	234.7	40026	11.4	80.0	18.3	593347
95 degrees	440832	215607	225.2	43794	10.1	80.0	18.2	589160

60 dry bulb, 57 wet bulb

Water Temperature	Cooling - Btu	Sensi - Btu	Dehum. lbs/hr	Comp Watts	EER	GPM	water pd(wg)	Heat REJ
55 degrees	437251	224840	212.4	30200	14.5	80.0	18.7	539557
65 degrees	423913	217758	206.2	32922	12.9	80.0	18.5	535386
85 degrees	395608	202924	192.7	39267	10.1	80.0	18.3	528464
95 degrees	380577	195161	185.4	43014	8.9	80.0	18.2	526067

CLIMATEMASTER
Makeup Air Units
MH/MV SERIES SPECIFICATIONS

PART 1: General

1.01 Furnish and install as shown on plans and as specified, a complete makeup air dehumidification and heat recovery system for dehumidification and air conditioning applications.

1.02 System shall be installed per manufacturer's installation instructions. All controls shall be factory installed and set, except when the outside air is mixed in the return air duct.

PART 2: Products

2.01 The system design is based on a makeup air dehumidification unit as manufactured by ClimateMaster, Model MH/MV_____. Equipment of another manufacturer must be approved prior to bid date. Complete catalog data including model number and capacity must be submitted ten days prior to bid date for such approval. The unit selection must be based on the ARI 320 test conditions.

2.02 Unit shall be a packaged module consisting of a continuous evaporator coil for dehumidification, hot gas reheat coil, scroll compressors, refrigerant to water heat exchanger(s) with smooth variable/modulating condenser capacity control features. Refrigeration circuits shall be completely separate.

2.03 Unit cabinet enclosure shall be fabricated with 18 gauge paint bond galvanealed sheet steel and painted with a polyester powder baked finish. Unit base shall be fabricated of 14 gauge paint bond galvanealed sheet steel and painted with a polyester powder baked finish.

2.04 Unit shall be equipped with status lights to monitor unit functions: dehumidification, heat rejecting, auxiliary air heat, air conditioning and safety cutout.

2.05 The unit refrigerant circuit will be factory charged and tested in all modes of operation to assure peak performance. All internal refrigerant and water piping shall be fully insulated to assure peak efficiency. External water piping connections shall be FPT. The condensate drain shall also be FPT. All external piping, wiring, controls and circulators shall be installed in accordance with the manufacturer's recommendations. The air velocity across the evaporator coil shall not exceed 400 FPM.

2.06 Compressor(s) shall be fully hermetic scroll with crankcase heaters, designed and rated for heat pump applications. The refrigerant system shall be controlled by the thermostatic expansion valve's wide volume variance keyed to condensing efficiency. The refrigerant system shall also be capable of maintaining proper condensing pressure with a wide range of entering water temperatures and/or air temperatures. The water heat exchangers shall be steel/copper. They shall be tube-in-tube with the inner tube completely of copper and the outer tube completely of steel fitted with compatible connectors for permanent separation of water and refrigerant. A three way water regulating valve shall be factory installed to provide control of leaving air temperature. The compressor(s) shall not be mounted in the system air stream.

2.07 The unit(s) shall be capable of providing dehumidification, heating or air conditioning to the space as controls demand. When space temperature is satisfied, the heat shall modulate between the hot gas reheat coil and the water loop on a call for dehumidification so that the leaving air temperature is the same as the return air temperature.

2.08 Space temperature shall be maintained by rejecting excess heat to the water cooled condenser when the indoor space temperature rises above the thermostat set-point. The water cooled condenser shall be sized to handle all of the heat of rejecting.

2.09 System capacities and characteristics shall be as indicated on the equipment schedule.

2.10 System terminals for smoke alarm interlock shall be provided to turn the unit off.

2.11 System air filters: provide two sets of 2" thick 40% efficiency pleated throwaway filters. Provide one set of standard fiberglass throwaway filters to be used on start-up.

2.12 Fan shall be centrifugal type, double inlet, double width. They shall be of the forward curved, low speed type on all sizes. All fans shall be statically and dynamically balanced and tested in accordance with current AMCA Standards, Bulletin 210. The total fan shaft and other components shall be sprayed with a corrosion protection coating. Fan bearings shall be permanently lubricated self aligning ball bearing.

2.13 Fan motor shall be selected to properly accelerate and operate the fan without abnormal or prolonged starting current inrush. Motor shall be ball bearing, open drip proof, air cooled, constant speed. Motors over 1/2 horse power shall be fitted with an adjustable pitch V-belt drive sheave.

2.14 The evaporator coil shall be computer selected with face split design to provide optimum capacity for latent heat removal and matched to the selected refrigeration compressor. The copper tubes shall be ASTM B447 or ASTM B75 . The fins shall be plate aluminum with self spacing die formed collars. End plates shall be galvanized steel 16 gauge. Mounting flange shall be furnished as required for securing the coil. The fin-tube bond shall be permanent, tight and metal bond achieved by mechanical or hydrostatic expansion of the tube into the fin collar. The coil brazing shall be with inert gas inside tubes for bright, clean surfaces. The inside of the coil shall be commercially free from flux, scale and foreign matter. Cleanliness standard of 3.610 5 gm./sq. in. Linear tube length.

Each coil shall be pressure tested at 450 PSI minimum air pressure under warm water. Coil shall be oven baked at 350^0F minimum and flushed with -100^0F maximum dewpoint air to remove moisture vapor. After drying, coils shall be sealed for installation into the unit. Coils shall be UL listed under UL file SA2502 for R-22.

2.15 The hot gas reheat coil shall be a partial condensing face split to provide equal circuits for each compressor. The condenser coil shall be manufactured per specification **2.14**. The UL label shall be under UL file SA2503 for condensers.

2.16A All air coils shall be dip coated with corrosion protective finish to protect the coils from harsh environments. Standard coating shall provide protection against 1000 hour salt spray with an option of 3000 hour coating.

2.16B Optional coil coating is a state of art coating for corrosion control. Four step system consisting of 1. Etch prime; 2. Epoxy polyamide; 3. Epoxy-modified phenolic and 4. Phenolic sealer. All coils are dip-coated in a total immersion vat process. The result is a high density, thin film coating which can be applied to fins without bridging. Thermal efficiency loss must consistently test out at a negligible "under 1%." The salt spray resistance test must pass over 3100 hours without fin corrosion or degradation.

2.17 The unit(s) shall be equipped with a frost guard system to prevent coil freeze up and allow the unit to operate at low ambient temperatures

2.18 The drain pan shall be 18 gauge paint grip galvanized sheet steel with a heavy coating of powder baked enamel paint. The drain pan shall be located in an accessible place for cleaning. The piping connection shall be FPT.

2.19 Sequence of Operations: The dehumidification system shall be capable of providing dehumidification, space heating and space cooling as controls demand.

The compressor will be activated when the controllers sense an entering air temperature of 65^0F dry bulb or above, or when the RH is above 50%. The controller will monitor the leaving air temperature modulate a three way valve on the water cooled condenser to maintain the set point leaving air temperature (+/- 2 degrees). The water cooled condenser is sized for full condensing.

As the leaving air temperature falls, the valve will start to close, reducing the amount of heat loss to the water from the refrigerant, placing this heat of rejection into the air cooled condenser to heat the air up to the design condition.

At 50 degree bulb temperature or below the controller will bring on the auxiliary space heat. The controller will have a fan interlock with the heaters so that if the fan fails or the filters are blocked with dirt, the heater is locked out.

Unoccupied Times: When the building is unoccupied, the controller will turn off the fan and provide a signal to the outside air damper through a dry contact. During unoccupied time, the compressor will be deactivated.

2.20 The control panel shall be an integral part of the unit located in a compartment isolated from the air stream. The compressors and motors are controlled by internal overloads and starters. A power block is provided to facilitate electrical connections, and is equipped with lugs for proper wire sizes.

2.21 The controller shall be micro-computer based system mounted in the control panel. A control panel with LCD readouts which can be remotely mounted up to 500 feet away from the unit via an RS-232 connection will be supplied. The panel accesses the controller and allows the following set point changes and also displays the following system status and sensor readings:

<u>Sensor Readings</u>
Space Temperature
Space Relative Humidity

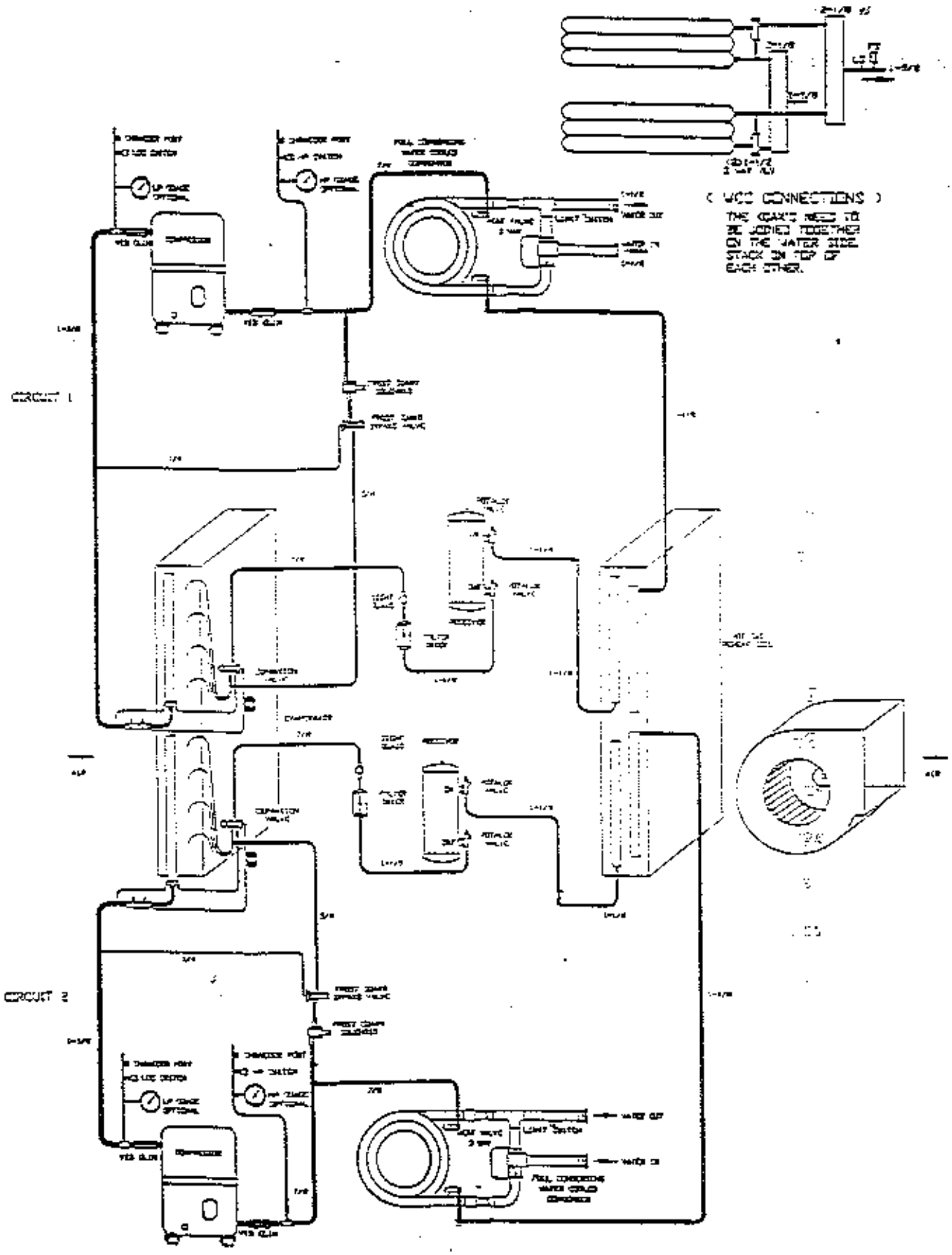
<u>Set Point Addressability</u>
Space Temperature
Space Relative Humidity
Occupied/Unoccupied Time Schedule

<u>Safety Status</u>
Compressor(s) Safety
Water Safety (low flow and/or high temperature)
Supply Fan Air Flow
Blinking Overall Alarm

<u>Operating Status</u>
Compressor(s) On

In addition to the LCD readouts on the micro-computer panel, status lights will be provided on the unit cabinet indicating power on, high and low pressure cut off, overload cut out and loss of refrigerant charge for each compressor.

PFI 69565923



CLIMATE MASTER Corporation	MH AND MV SERIES MAKE UP AIR DEHUMIDIFIERS WITH WATER COOLED CONDENSER	DRAWING #	SHEET #
		69565923 29 AUG 95	1