ADDENDUM FOR EC SERIES IOM MANUAL
(PART 8 733 823 400 Initial Release 11-18)

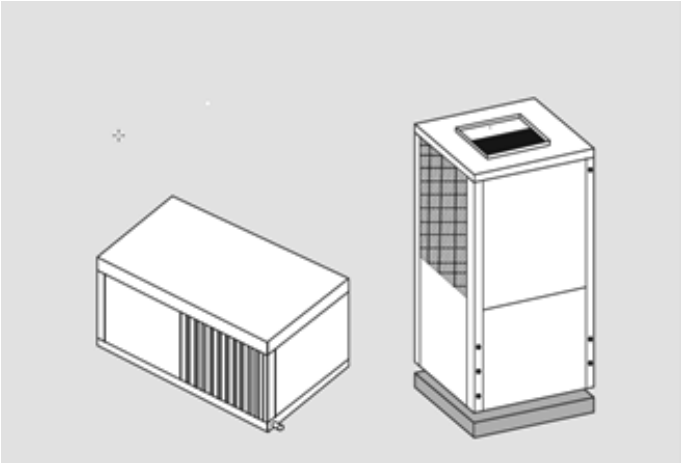

Figure 1 – EC VT/HZ Mod

TABLE OF CONTENTS

MODEL NOMENCLATURE

1-2	3-5	6	7	8-9	10	11	12	13	14	15	16	17
EC	300	-	4	VT	C	-	S	B	S	I	U	B

Rev Code
B = Current

ABOUT THE ADDENDUM

This addendum's intention is to provide information on changes to the EC072 and EC096 models, highlighting only the difference from the current EC072 and EC096 models where applicable, with reference to the main EC IOM (P/N 8733970289)

i	EC072 and EC096 are no longer available with Bristol Compressors

GENERAL DESCRIPTION

The compressor on EC072 models will change from a reciprocating compressor to a scroll compressor. This change will take place on (208/230V 1Ph), (208/230V 3Ph), and (460V 3Ph) voltages and apply only to units under "B" revision.

The compressor on EC096 models will change from a reciprocating compressor to a scroll compressor. This change will take place on (208/230V 1Ph) and (208/230V 3Ph), (460V 3Ph) and (575V 3Ph) voltages and apply only to units under "B" revision.

This addendum provides updated production information for this EC072 and EC096 models.

- Certified Performance
- Electrical Data Tables
- Pressure Temp Table

CERTIFIED PERFORMANCE

EC Series AHRI Ratings

Unit Characteristics				Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
				Cooling 86° F		Heating 68° F		Cooling 59° F		Heating 50° F		Cooling 77° F		Heating 32° F	
Series	Model	Water coil	Rev	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
EC	072	Cu	B	72,400	13.45	81,900	5.00	82300	19.9	68700	4.25	76,000	15.6	54,200	3.50
EC	072	CuNi	B	72,900	13.85	79,500	4.75	82200	20.15	67000	4.20	76,500	16.05	53,800	3.45
EC	096	Cu	B	95,800	13.45	115,700	4.90	107800	22.00	96300	4.35	100,600	16.15	75,500	3.55
EC	096	CuNi	B	93,300	13.10	114,800	4.85	106500	21.15	94700	4.30	98,000	15.6	75,100	3.50

ELECTRICAL DATA TABLES

Belt Drive Motor - No VFD												
Models	Voltage Code	Rated Voltage	Voltage Min/Max	Compressor			"Total Unit w/ Standard Duty Motor"					
				QTY	RLA (each)	LRA (each)	Motor Qty	Motor HP	FLA	Min Circuit Amps	MOP CALC	Max Fuse/ HACR
072	1	208-230/1/60	197/253	2	16.7	79	1	1.0	7.0	44.6	61.3	60
	1	208-230/1/60	197/253	2	16.7	79	1	1.5	8.5	46.1	62.8	60
	1	208-230/1/60	197/253	2	16.7	79	1	2.0	9.8	47.4	64.1	60
	3	208-230/3/60	197/253	2	10.4	73	1	1.0	3.6	27.0	37.4	35
	3	208-230/3/60	197/253	2	10.4	73	1	1.5	4.8	28.2	38.6	35
	3	208-230/3/60	197/253	2	10.4	73	1	2.0	6.2	29.6	40.0	40
	3	208-230/3/60	197/253	2	10.4	73	1	3.0	8.0	31.4	41.8	40
	4	460/3/60	414/506	2	5.8	38	1	1.0	1.8	14.9	20.7	20
	4	460/3/60	414/506	2	5.8	38	1	1.5	2.4	15.5	21.3	20
	4	460/3/60	414/506	2	5.8	38	1	2.0	3.1	16.2	22.0	20
	4	460/3/60	414/506	2	5.8	38	1	3.0	3.9	17.0	22.8	20
096	1	208-230/1/60	197/253	2	19.6	130	1	1.5	8.5	52.6	72.2	70
	1	208-230/1/60	197/253	2	19.6	130	1	2.0	9.8	53.9	73.5	70
	3	208-230/3/60	197/253	2	13.7	83	1	1.5	4.8	35.6	49.3	45
	3	208-230/3/60	197/253	2	13.7	83	1	2.0	6.2	37.0	50.7	50
	3	208-230/3/60	197/253	2	13.7	83	1	3.0	8.0	38.8	52.5	50
	4	460/3/60	414/506	2	6.2	41	1	1.5	2.4	16.4	22.6	20
	4	460/3/60	414/506	2	6.2	41	1	2.0	3.1	17.1	23.3	20
	4	460/3/60	414/506	2	6.2	41	1	3.0	3.9	17.9	24.1	20
	5	575/3/60	518/632	2	4.8	33	1	1.5	2.0	12.8	17.6	15
	5	575/3/60	518/632	2	4.8	33	1	2.0	2.6	13.4	18.2	15
	5	575/3/60	518/632	2	4.8	33	1	3.0	3.7	14.5	19.3	15

Compressor Characteristics					
MODEL	Voltage Code	Cold Winding Resistance			Run Capacitor (µF/V)
		Single Phase R-C	Single Phase S-C	"Three Phase Line-Line"	
072	1	0.82	1.63	-	40/370
	3	-	-	1.15	-
	4	-	-	4.61	-
096	1	0.50	0.81	-	70/370
	3	-	-	1.13	-
	4	-	-	4.60	-
	5	-	-	6.32	-

PRESSURE TEMP

OPERATING DATA										
			Cooling				Heating			
Model	Enter Fluid Temp (°F)	Water flow (GPM/Ton)	Suction Pressure (PSIG)	Discharge Pressure (PSIG)	Water Temp Rise (°F)	Air Temp Drop (°F)	Suction Pressure (PSIG)	Discharge Pressure (PSIG)	Water Temp Rise (°F)	Air Temp Drop (°F)
072	30	10.0					65-80	282-344	5-7	14-17
		16.0					73-89	294-358	3-4	15-18
	40	10.0	121-148	184-225	17-21	18-22	80-98	299-365	7-9	16-20
		16.0	117-143	167-204	10-13	19-23	98-108	311-380	4-5	17-21
	50	10.0	123-151	222-271	17-20	17-21	95-116	315-385	9-11	19-23
		16.0	119-145	202-247	10-12	18-23	105-125	329-402	5-7	20-24
	60	10.0	125-153	260-318	16-19	17-21	109-133	332-406	11-13	21-26
		16.0	120-147	237-289	10-12	18-22	121-148	346-423	6-8	22-27
	70	10.0	127-155	298-365	15-19	17-20	124-151	349-427	12-15	23-28
		16.0	122-149	271-331	9-11	18-21	138-168	364-444	7-9	25-30
	80	10.0	129-158	336-411	14-18	16-20	138-169	366-447	14-17	26-31
		16.0	124-152	306-374	9-11	17-21	154-188	381-466	8-10	27-33
	90	10.0	131-160	374-458	14-17	16-19	153-187	383-468	16-19	28-34
		16.0	126-154	340-416	8-10	17-20	170-208	399-467	9-12	29-36
	100	10.0	133-162	413-504	13-16	15-19				
		16.0	128-156	375-458	8-10	16-20				

OPERATING DATA										
			Cooling				Heating			
Model	Enter Fluid Temp (°F)	Water flow (GPM/Ton)	Suction Pressure (PSIG)	Discharge Pressure (PSIG)	Water Temp Rise (°F)	Air Temp Drop (°F)	Suction Pressure (PSIG)	Discharge Pressure (PSIG)	Water Temp Rise (°F)	Air Temp Drop (°F)
096	30	13.0					72- 87	296-361	5- 6	21-25
		22.0					75- 92	301-368	3- 4	22-26
	40	13.0	114-139	155-190	14-17	22-27	88-107	314-384	6- 7	24-29
		22.0	108-132	147-180	10-12	23-28	92-112	321-392	4- 5	25-30
	50	13.0	116-142	192-234	13-16	21-26	104-127	333-407	7- 9	27-33
		22.0	111-135	182-222	9-12	22-27	109-133	340-415	5- 6	28-34
	60	13.0	119-146	228-279	13-16	21-26	120-146	352-430	8-10	30-37
		22.0	113-138	217-265	9-11	22-27	125-153	359-439	6- 7	32-39
	70	13.0	122-149	264-323	13-15	20-25	136-166	371-453	9-12	33-41
		22.0	116-142	251-307	9-11	21-26	142-174	378-462	7- 8	35-43
	80	13.0	125-152	301-368	12-15	20-24	152-185	389-476	11-13	36-44
		22.0	118-145	286-349	9-11	21-26	159-194	397-485	8- 9	38-47
	90	13.0	127-156	337-412	12-15	19-24	168-205	408-499	12-15	39-48
		22.0	121-148	320-392	9-10	20-25	176-215	416-509	8-10	41-51
	100	13.0	130-159	374-457	12-14	19-23				
		22.0	124-151	355-434	8-10	20-24				