

RATING CONDITIONS

18.3 C Return Gas
 0 K Subcooling
 35 C Ambient Air Over

50 Hz Operation

HIGH TEMPERATURE

4RA3-2000-FSD

COPELAMETIC® HCFC-22
 COMPRESSOR
 FSD 380/420-3-50

Evaporating Temperature C (Sat Dew Pt Pressure, bar)

		-15(3)	-10(3.5)	-5(4.2)	0(5)	5(5.8)	10(6.8)	12(7.2)
Condensing Temperature C (Sat Dew Pt Pressure, bar)	60 (24) C	16600	20200	24900	31000	38000	46500	50500
	P	10400	12000	13400	14700	16000	17300	17800
	A	21.4	23.9	26.3	28.5	30.6	32.5	33.2
	M	115	140	175	219	273	339	368
	E	1.6	1.7	1.9	2.1	2.4	2.7	2.8
	%	70.1	66.6	65.7	65.8	65.9	65.4	64.9
	55 (22) C	17900	21900	27200	33500	41500	50500	54500
	P	10400	11700	13000	14100	15200	16300	16700
	A	21.4	23.6	25.7	27.6	29.3	30.9	31.5
	M	118	145	181	226	281	347	377
E	1.7	1.9	2.1	2.4	2.7	3.1	3.3	
%	68	65.7	65.4	65.6	65.7	64.8	64.2	
50 (19) C	19300	23800	29500	36500	44500	54000	58500	
P	10300	11500	12500	13500	14400	15200	15600	
A	21.4	23.3	25	26.6	28	29.4	29.9	
M	121.5	150	187	233	289	355	385	
E	1.9	2.1	2.4	2.7	3.1	3.6	3.8	
%	66.4	65	65	65.2	65	63.7	62.8	
45 (17) C	20900	25700	32000	39000	48000	58000	62500	
P	10100	11100	12000	12800	13500	14200	14500	
A	21.1	22.7	24.2	25.5	26.7	27.7	28.1	
M	126	156	194	240	297	363	393	
E	2.1	2.3	2.6	3.1	3.5	4.1	4.3	
%	65.2	64.4	64.4	64.5	63.8	61.9	60.6	
40 (15) C	22600	27800	34500	42000	51000	61500	66000	
P	9900	10700	11400	12100	12600	13100	13300	
A	20.8	22.1	23.3	24.4	25.3	26.1	26.4	
M	131	162	201	248	304	371	400	
E	2.3	2.6	3	3.5	4	4.7	5	
%	64.3	63.7	63.6	63.3	62	59.2	57.6	
35 (14) C	24500	30000	37000	45000	54500	65000	70000	
P	9600	10300	10800	11300	11700	12000	12200	
A	20.3	21.4	22.3	23.1	23.8	24.4	24.6	
M	137	168	207	255	311	377	407	
E	2.5	2.9	3.4	4	4.6	5.4	5.7	
%	63.5	62.9	62.5	61.5	59.3	55.4	53.1	
30 (12) C	26500	32500	39500	48000	57500	68500	73500	
P	9200	9750	10200	10500	10700	10900	11000	
A	19.7	20.5	21.3	21.9	22.4	22.7	22.9	
M	143	175	215	262	318	384	413	
E	2.9	3.3	3.9	4.5	5.4	6.3	6.7	
%	62.9	61.9	60.8	59	55.7	50.1	47.3	
25 (10) C	28700	35000	42000	51000	61000	72000	77000	
P	8750	9200	9450	9650	9750	9800	9800	
A	18.9	19.6	20.1	20.5	20.8	21	21.1	
M	150	182	222	269	325	390	419	
E	3.3	3.8	4.5	5.3	6.2	7.4	7.9	
%	62.2	60.5	58.6	55.5	50.6	43.1	39.3	

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice. Current @ 380 V

C:Capacity(Watts), P:Power(W), A:Current(Amps), M:Mass Flow(g/s), E:COP(W/W), %:Isentropic Efficiency(%)

4RE2-2000-FSD

HCFC, R-22, 50Hz, 3- Phase, 380/420 V
High Temperature



Production Status: Non U.S. model with restricted sales - Contact your Emerson Climate Technologies Representative.

Performance

Evap(°C)/Cond(°C)	<u>7.2 / 54.4</u>	<u>-6.7 / 48.9</u>
RG(°C)/Liq(°C)	<u>18.3 / 54.4</u>	<u>18.3 / 48.9</u>
Capacity (Watts)	45500	27900
Power (Watts):	15600	12100
Current (Amps):	29.90	24.30
EER (COP):	2.93	2.32
Mass Flow (g/s):	310	175
Sound Power (dBA):	0 Avg	0 Max
Vibration (mm(peak-))	0.0 Avg	0.0 Max
Record Date:	1995-03-24	

Mechanical

Number of Cylinders:	4	Displ(cm ³ /Rev):	629.00
Bore Size(mm):	63.50	Displ(meters ³ /hr):	55.99
Stroke(mm):	50.80		
Overall Length (mm):	625.6	Mounting Length (mm):	381.00
Overall Width (mm):	471.4	Mounting Width (mm):	304.80
Overall Height (mm):	431.0	Mounting Height (mm):	461.2 *
Suction Size (mm):	1 5/8 Sweat		
Discharge Size (mm):	1 1/8 Sweat		
Oil Recharge (liter):	4		
Initial Oil Charge (liter):	4		
Net Weight (kg):	204.12		
Internal Free Volume (cm ³):			
Horse Power:			
*Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	135.0	MCC (Amps):	45.3	UL File No:	SA-2337
LRA-Half Winding:	82.0	RPM:		UL File Date:	07-Apr-1971
LRA Low*:		Max Operating Current:			
RLA(=MCC/1.4;use for contactor selection):		32.4			
RLA(=MCC/1.56;use for breaker & wire size)		29			
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					

Alternate Applications

<u>Refrigerant</u>	<u>Freq (Hz)</u>	<u>Phase</u>	<u>Voltage</u>	<u>Application</u>
R-22 HCFC	60	3	460	High Temperature