RUSSELL
COIL COMPANY

FINNED
GRAVITY COILS
AND
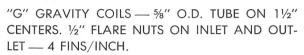MODEL "J"
CONDENSER
SURFACE

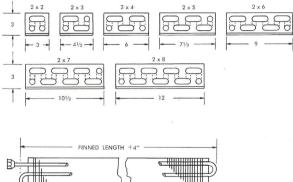**"G" GRAVITY COILS** — ⅝" O.D. TUBE ON 1½" CENTERS. ½" FLARE NUTS ON INLET AND OUTLET — 4 FINS/INCH.

CAPACITIES AT 15° TD PER LINEAL FT. FINNED TUBING IN COIL:

2 FINS/INCH — 18.55 BTU/HR./LIN. FT./TUBE

3 FINS/INCH — 23.67 BTU/HR./LIN. FT./TUBE

4 FINS/INCH — 28.03 BTU/HR./LIN. FT./TUBE

MODEL "J" CONDENSER SURFACE

⅜" OD copper tubing on 1" centers. Capacities below are based on:

| 3 ROW DEEP COIL | 8 FINS PER INCH |
| 500 FPM FACE VELOCITY | 40° F. SUCTION TEMP. |

BASE CAPACITY BTU/HR/FT. SQ. FACE AREA

ENT. AIR °F	CONDENSING TEMPERATURE				
	105	110	115	120	130
80	5450	6500			
90	3360	4410	5450	6500	
100		2200	3360	4410	6500
105			2200	3360	5450

ABOVE CAPACITIES ALLOW 25% FOR HEAT OF COMPRESSION

FOR 4 ROW DEEP COIL, MULTIPLY BASE CAPACITY BY 1.13
FOR 6 ROW DEEP COIL, MULTIPLY BASE CAPACITY BY 1.35
FOR 600 FPM FACE VELOCITY, MULTIPLY BASE CAPACITY BY 1.10
FOR 700 FPM FACE VELOCITY, MULTIPLY BASE CAPACITY BY 1.21
FOR 10 FINS PER INCH, MULTIPLY BASE CAPACITY BY 1.07
FOR 12 FINS PER INCH, MULTIPLY BASE CAPACITY BY 1.13

SUCTION TEMP. MULTIPLIERS

SUCT. TEMP.	MULTIPLIER
30	.98
25	.96
20	.95
15	.92

HOW TO USE MULTIPLIERS: What is capacity per sq. ft. face area for a 4 row "J" Condenser Coil, with the evaporator operating at 20° suction, Condenser in 100° ambient and a 130° condensing temperature desired, with 10 FPI and a face velocity of 600 FPM?

FROM ABOVE FACTORS: Base capacity 6500 BTU/hr. x 1.13 (4 row coil) x 0.95 (20° suction multiplier) x 1.07 (10 FPI multiplier) x 1.10 (600 FPM multiplier) = 8210 BTU/hr. FT² face area. Should your evaporator have a 24,000 BTU/hr. capacity at 20° suction, the 4 row condenser would require 3 sq. ft. of surface area.

RUSSELL COIL COMPANY • 11711 EAST SLAUSON AVE. • SANTA FE SPRINGS, CALIF. • OX 3-7751 RA 3-4519