

## REFERENCE INFORMATION

AMBIENT TEMPERATURE CORRECTION FACTORS							
AMBIENT TEMPERATURE (°F)	85	90	95	100	105	110	115
TOTAL CAPACITY (Btu/h)	1.05	1.03	1.00	0.98	0.95	0.91	0.87
SENSIBLE CAPACITY (Btu/h)	1.03	1.02	1.00	0.99	0.97	0.97	0.93
ELECTRIC POWER (W)	0.95	0.98	1.00	1.03	1.05	1.08	1.11

RECOMMENDED REFRIGERANT LINE SIZES- AIR HANDLER LEVEL WITH OR ABOVE CONDENSING UNIT (IN OD)								
NOMINAL CAPACITY (Btu/h)	0-25 FT. EQUIVALENT LENGTH				26-50 FT. EQUIVALENT LENGTH			
	SUCTION	LIQUID	HOT GAS REHEAT	HOT GAS BYPASS	SUCTION	LIQUID	HOT GAS REHEAT	HOT GAS BYPASS
36,000	5/8, 5/8	3/8	1/2	3/8	3/4, 3/4	1/2	1/2	1/2
48,000	3/4, 3/4	3/8	5/8	3/8	3/4, 3/4	1/2	5/8	1/2
60,000	3/4, 3/4	1/2	5/8	1/2	7/8, 7/8	1/2	5/8	1/2
72,000	7/8, 7/8	1/2	5/8	1/2	7/8, 7/8	1/2	5/8	1/2
84,000	1-1/8, 1-1/8	1/2	3/4	1/2	1-1/8, 1-1/8	1/2	3/4	1/2
96,000	1-1/8, 1-1/8	5/8	3/4	1/2	1-1/8, 1-1/8	5/8	3/4	1/2
120,000	1-1/8, 1-1/8	5/8	3/4	5/8	1-3/8, 1-3/8	5/8	3/4	5/8
150,000	1-1/8, 1-1/8	5/8	7/8	5/8	1-3/8, 1-3/8	5/8	7/8	5/8
180,000	1-3/8, 1-3/8	5/8	7/8	5/8	1-3/8, 1-3/8	5/8	7/8	5/8
220,000	1-3/8, 1-3/8	5/8	1-1/8	5/8	1-3/8, 1-3/8	3/4	1-1/8	3/4
250,000	1-3/8, 1-3/8	5/8	1-1/8	3/4	1-3/8, 1-3/8	3/4	1-1/8	3/4
300,000	1-5/8, 1-5/8	7/8	1-1/8	3/4	1-5/8, 1-5/8	7/8	1-1/8	7/8

NOMINAL CAPACITY (Btu/h)	51-75 FT. EQUIVALENT LENGTH				76-100 FT. EQUIVALENT LENGTH			
	SUCTION	LIQUID	HOT GAS REHEAT	HOT GAS BYPASS	SUCTION	LIQUID	HOT GAS REHEAT	HOT GAS BYPASS
36,000	7/8, 5/8	1/2	5/8	1/2	7/8, 3/4	1/2	5/8	N/A
48,000	7/8, 3/4	1/2	3/4	1/2	7/8, 7/8	1/2	5/8	N/A
60,000	1-1/8, 7/8	1/2	3/4	1/2	1-1/8, 7/8	1/2	3/4	N/A
72,000	1-1/8, 7/8	1/2	3/4	5/8	1-1/8, 7/8	5/8	3/4	N/A
84,000	1-1/8, 1-1/8	5/8	7/8	5/8	1-1/8, 1-1/8	5/8	3/4	N/A
96,000	1-1/8, 1-1/8	5/8	7/8	5/8	1-1/8, 1-1/8	5/8	3/4	N/A
120,000	1-3/8, 1-3/8	5/8	7/8	3/4	1-3/8, 1-3/8	5/8	7/8	N/A
150,000	1-3/8, 1-3/8	5/8	1-1/8	3/4	1-3/8, 1-3/8	3/4	7/8	N/A
180,000	1-3/8, 1-3/8	3/4	1-1/8	3/4	1-3/8, 1-3/8	3/4	1-1/8	N/A
220,000	1-3/8, 1-3/8	3/4	1-1/8	7/8	1-5/8, 1-3/8	3/4	1-1/8	N/A
250,000	1-5/8, 1-3/8	3/4	1-1/8	7/8	1-5/8, 1-3/8	7/8	1-1/8	N/A
300,000	1-5/8, 1-5/8	7/8	1-1/8	7/8	2-1/8, 1-5/8	7/8	1-1/8	N/A

### NOTES:

- Line sizes are calculated assuming single scroll compressors in Models 044-064 and dual or dual tandem scroll compressors in Models 074-414. Contact the factory for any other compressor configuration.
- Line sizes are calculated assuming single circuits. For a dual circuit unit, calculate the capacity per circuit by dividing the total capacity by two. Use the result to calculate line sizes.
- All piping must comply with standard refrigeration piping techniques. Consult the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Handbook-Refrigeration.
- Suction, hot gas bypass and hot gas reheat lines should be insulated with a 5/8" minimum thickness closed cell foam insulation. Liquid line exposed to high ambient temperatures should be insulated with a 5/8" minimum thickness closed cell foam insulation.
- First suction line diameter size is for horizontal runs. Second suction line diameter size is for vertical risers.
- Maximum suction line vertical lift is 60'. Riser-sized traps are required for every 20' of vertical riser starting at the lowest point.
- If ordered, hot gas reheat and hot gas bypass require only one line per circuit.
- Standard hot gas bypass is not recommended for use with greater than 75' of equivalent line length. Internal hot gas bypass should be used as an alternative.
- Contact factory for applications with digital scroll compressors.
- Contact factory for layouts requiring more than 75' of actual line length.