



# FRIO VERDE <sup>TM</sup>

## REFRIGERATION



**15% to 25%  
MORE EFFICIENT**

**Supermarkets  
Convenience Stores  
Restaurants  
Cold Storage Facilities  
Warehouses  
Food Processing Plants**



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# M E D I U M T E M P

Ambient Temp. Deg F / C	Frio Verde Model R404A MEDIUM TEMP	Medium Temp Subcooled Ratings +35 F Room 60 HZ BMIL Patent Pending			Frio Verde Model Refrig Compressor R404A	Frio Verde Model Subcooling Compressor R410A	Medium Temp Subcooled Ratings +2 C Room 50 HZ BMIL Patent Pending		
		+25 F SST MBH 60 HZ	Combined Comp EER	% Efficiency Increase			+2 C SST MBH 50 HZ	Combined Comp EER	% Efficiency Increase
		60 HZ					50 HZ		
90 / 32	OCZ-020-1S4-FV-MT	35.8	12.4	19%	020 ZB19KCE	RGA5494BXD 0.8 hp Tecumseh	29.9	12.4	19%
95 / 35		34.1	11.0	17%			28.5	11.0	17%
100 / 38		32.5	9.8	16%			27.1	9.8	16%
105 / 41		30.8	8.6	15%			25.7	8.6	15%
90 / 32	OCZ-025-1S4-FV-MT	39.8	12.1	17%	025 ZB21KCE	RGA5494BXD 0.8 hp Tecumseh	33.2	12.1	17%
95 / 35		37.9	10.8	15%			31.6	10.8	15%
100 / 38		36.0	9.6	14%			30.0	9.6	14%
105 / 41		34.1	8.5	13%			28.4	8.5	13%
90 / 32	OCZ-030-1S4-FV-MT	44.6	11.9	14%	030 ZB26K4E	RGA5494BXD 0.8 hp Tecumseh	37.2	11.9	14%
95 / 35		42.5	10.6	13%			35.4	10.6	13%
100 / 38		40.3	9.4	12%			33.6	9.4	12%
105 / 41		38.3	8.3	11%			32.0	8.3	11%
90 / 32	OCZ-049-1S4-FV-MT	54.1	12.5	18%	040 ZB30KCE	RGA5512BXD 1.2 HP Tecumseh	45.1	12.5	18%
95 / 35		51.9	11.2	17%			43.2	11.2	17%
100 / 38		49.7	9.8	16%			41.4	9.8	16%
105 / 41		47.0	8.8	15%			39.1	8.8	15%
90 / 32	OCZ-050-1S4-FV-MT	63.1	12.1	14%	050 ZB38KCE	RGA5512BXD 1.2 HP Tecumseh	52.5	12.1	14%
95 / 35		60.3	10.9	14%			50.3	10.9	14%
100 / 38		57.4	9.6	13%			47.8	9.6	13%
105 / 41		54.3	8.6	13%			45.3	8.6	13%
90 / 32	OCZ-060-1S4-FV-MT	82.4	11.5	17%	060 ZB45KCE	ZP25K5E 2.5 hp Copeland	68.7	11.5	17%
95 / 35		78.6	10.3	17%			65.5	10.3	17%
100 / 38		75.2	9.2	17%			62.7	9.2	17%
105 / 41		72.1	8.3	18%			60.1	8.3	18%
90 / 32	OCZ-070-1S4-FV-MT	90.3	11.2	16%	070 ZB50KCE	ZP25K5E 2.5 hp Copeland	75.2	11.2	16%
95 / 35		85.7	10.0	15%			71.4	10.0	15%
100 / 38		81.7	9.1	15%			68.1	9.1	15%
105 / 41		78.0	8.1	16%			65.0	8.1	16%
90 / 32	OCZ-075-1S4-FV-MT	99.6	11.7	12%	075 ZB58KCE	ZP25K5E 2.5 hp Copeland	83.0	11.7	12%
95 / 35		94.2	10.5	12%			78.5	10.5	12%
100 / 38		89.4	9.4	12%			74.5	9.4	12%
105 / 41		84.7	8.5	12%			70.6	8.5	12%
90 / 32	OCZ-080-1S4-FV-MT	117.6	11.6	11%	080 ZB66KCE	ZPS30K4E 4 HP Copeland	98.0	11.6	11%
95 / 35		112.3	10.4	12%			93.6	10.4	12%
100 / 38		106.8	9.4	13%			89.0	9.4	13%
105 / 41		101.7	8.6	12%			84.7	8.6	12%
90 / 32	OCZ-090-1S4-FV-MT	140.3	11.8	14%	090 ZB76KCE	ZPD42K5E 5 HP Copeland	116.9	11.8	14%
95 / 35		133.6	10.6	14%			111.4	10.6	14%
100 / 38		128.5	9.7	17%			107.1	9.7	17%
105 / 41		122.6	9.0	17%			102.2	9.0	17%
90 / 32	OCZ-120-1S4-FV-MT	165.5	11.0	12%	120 ZB92KCE	ZPD42K5E 5 HP Copeland	137.9	11.0	12%
95 / 35		158.2	10.0	13%			131.9	10.0	13%
100 / 38		152.6	9.3	14%			127.1	9.3	14%
105 / 41		145.4	8.5	15%			121.1	8.5	15%
90 / 32	OCZ-150-1S4-FV-MT	192.6	10.7	17%	150 ZS11MCE	ZP50K3E 7 HP Copeland	160.5	10.7	17%
95 / 35		183.5	10.1	18%			152.9	10.1	18%
100 / 38		174.4	9.4	20%			145.3	9.4	20%
105 / 41		166.2	8.3	15%			138.5	8.3	15%
		60 HZ					50 HZ		

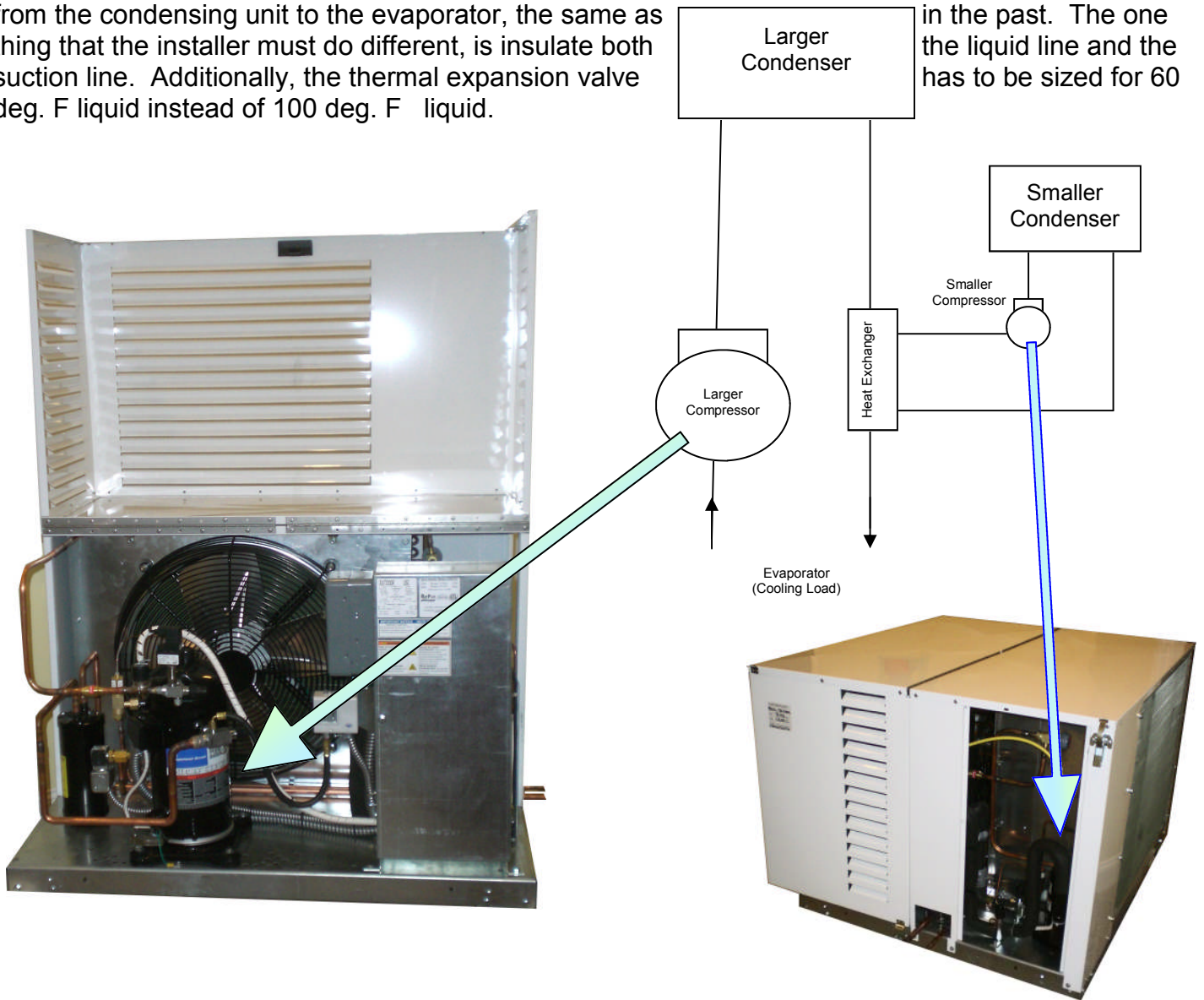
# LOW TEMPERATURE

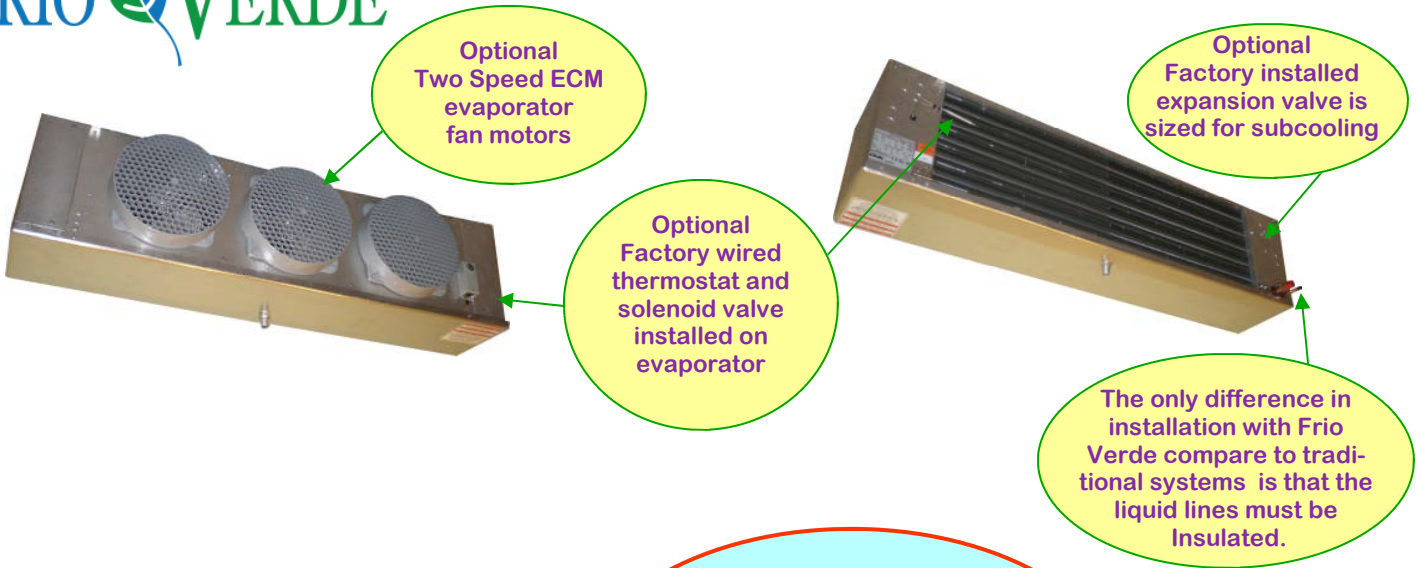
Amb. Temp. Deg F / C	Frio Verde Model R404A LOW TEMP	Low Temp Subcooled Ratings -10 F Room 60HZ BMIL Patent Pending			Frio Verde Model Refrig Compressor R404A	Frio Verde Model Subcooling Compressor R410A	Low Temp Subcooled Ratings -23 C Room 50HZ BMIL Patent Pending		
		-20 F SST MBH	Combined Comp EER	% Efficiency Increase			-28 C SST MBH	Combined Comp EER	% Efficiency Increase
		60 HZ					50 HZ		
90 / 32	OCZ-020-1T4-FV-LT	13.6	5.7	22%	020 ZF08K4E	RGA5453BXD 0.3 hp Tecumseh	11.3	5.7	22%
95 / 35		13.3	5.3	23%			11.1	5.3	23%
100 / 38		12.9	4.7	19%			10.7	4.7	19%
105 / 41		12.6	4.3	19%			10.5	4.3	19%
90 / 32	OCZ-025-1T4-FV-LT	15.6	6.6	28%	025 ZF09K4E	RGA5453BXD 0.3 hp Tecumseh	13.0	6.6	28%
95 / 35		15.1	5.9	29%			12.6	5.9	29%
100 / 38		14.5	5.2	26%			12.1	5.2	26%
105 / 41		14.0	4.8	27%			11.7	4.8	27%
90 / 32	OCZ-030-1T4-FV-LT	19.1	6.6	30%	030 ZF11K4E	RGA5453BXD 0.3 hp Tecumseh	15.9	6.6	30%
95 / 35		18.5	6.1	30%			15.5	6.1	30%
100 / 38		18.0	5.5	27%			15.0	5.5	27%
105 / 41		17.3	5.0	29%			14.4	5.0	29%
90 / 32	OCZ-035-1T4-FV-LT	21.0	6.4	25%	035 ZF13K4E	RGA5453BXD 0.3 hp Tecumseh	17.5	6.4	25%
95 / 35		20.3	5.8	25%			16.9	5.8	25%
100 / 38		19.5	5.2	23%			16.3	5.2	23%
105 / 41		18.7	4.6	25%			15.6	4.6	25%
90 / 32	OCZ-040-1T4-FV-LT	25.0	6.4	25%	040 ZF15K4E	RGA5453BXD 0.3 hp Tecumseh	20.9	6.4	25%
95 / 35		24.1	5.9	26%			20.1	5.9	26%
100 / 38		23.2	5.2	24%			19.3	5.2	24%
105 / 41		22.3	4.9	25%			18.6	4.9	25%
90 / 32	OCZ-050-1T4-FV-LT	30.5	6.4	23%	050 ZF18K4E	RGA5471BXD 0.6 hp Tecumseh	25.5	6.4	23%
95 / 35		29.5	5.8	22%			24.6	5.8	22%
100 / 38		28.4	5.4	22%			23.7	5.4	22%
105 / 41		27.2	4.9	23%			22.7	4.9	23%
90 / 32	OCZ-070-1T4-FV-LT	36.4	5.9	22%	070 ZF24K4E	RGA5494BXD 0.8 hp Tecumseh	30.3	5.9	22%
95 / 35		35.2	5.5	22%			29.3	5.5	22%
100 / 38		33.9	5.0	23%			28.3	5.0	23%
105 / 41		32.6	4.7	23%			27.2	4.7	23%
90 / 32	OCZ-090-1T4-FV-LT	48.8	5.7	18%	090 ZF33K4E	RGA5494BXD 0.8 hp Tecumseh	40.7	5.7	18%
95 / 35		47.2	5.2	18%			39.3	5.2	18%
100 / 38		45.3	4.9	19%			37.7	4.9	19%
105 / 41		43.4	4.4	19%			36.2	4.4	19%
90 / 32	OCZ-100-1T4-FV-LT	63.3	5.9	20%	100 ZF40K4E	RGA5512BXD 1.2 HP Tecumseh	52.8	5.9	20%
95 / 35		66.2	5.3	19%			55.1	5.3	19%
100 / 38		63.6	4.9	19%			53.0	4.9	19%
105 / 41		61.0	4.4	20%			50.8	4.4	20%
90 / 32	OCZ-150-1T4-FV-LT	71.2	5.5	17%	150 ZF48K4E	RGA5512BXD 1.2 HP Tecumseh	59.3	5.5	17%
95 / 35		68.7	5.1	18%			57.3	5.1	18%
100 / 38		66.1	4.6	18%			55.0	4.6	18%
105 / 41		63.3	4.2	20%			52.8	4.2	20%
		60 HZ					50 HZ		

# Preliminary Data BMIL

BMIL patent pending refrigeration systems utilize cascade mechanical subcooling to achieve efficiencies not available on standard single compressor refrigeration systems. This system uses a high efficiency refrigerant in the high temperature system to give the low temperature system more capacity at lower power consumption. The high temperature system operates at very high efficiency, so the overall cascade system is much more efficient than standard single compressor refrigeration systems on the market.

For quality (which includes consistency), the high temperature cascade system is factory assembled and charged with refrigerant. This means that the installer will run a liquid line and a suction line from the condensing unit to the evaporator, the same as in the past. The one thing that the installer must do different, is insulate both the liquid line and the suction line. Additionally, the thermal expansion valve has to be sized for 60 deg. F liquid instead of 100 deg. F liquid.



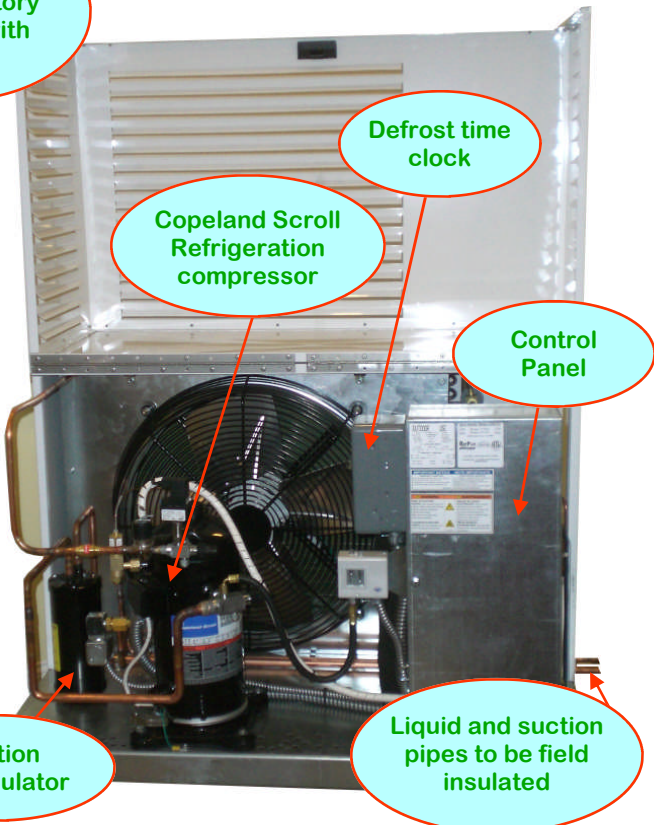


**BMIL Patent Pending mechanical subcooling design delivers highest efficiency available.**

**PATENT PENDING**



Optional Anti-corrosion Condenser fin coating





### Condensing Unit Features:

Heavy-gauge galvanized steel base  
Painted outdoor protective cabinet  
Corrosion resistant condenser fin coating  
BMIL Technologies patent pending subcooling design.  
Subcooling system is factory charged with R410A  
Fixed head pressure flooding valve  
Liquid receiver with isolating valves and safety relief device  
Direct-drive thermally protected condenser fan motors  
Aluminum fan blades  
Baked-on powder epoxy coated fan guards  
Rubber-mounted hermetic compressor  
Refrigeration compressor crankcase heater  
Electrical control panel complete with compressor and fan contactors, and control transformer  
Pump down switch included for field wiring  
High pressure switch on both compressors  
Automatic reset, adjustable low pressure switch with flexible hose on the refrigeration compressor.  
Suction accumulator  
Copeland Scroll refrigeration compressor  
Copeland or Tecumseh subcooling compressor  
Other options available by contacting your BMIL sales person.  
ETL Listed.



### Evaporator Features:

Consult with your BMIL sales person for a full line of evaporators.



**PATENT  
PENDING**