

AIR COOLED MULTI-COMPRESSOR CONDENSING UNIT

Smarter Cooling. Greater Efficiency. One Integrated Solution.

RIGID's parallel-compressor outdoor condensing unit consolidates multiple refrigeration systems into a single, remotely located solution - enhancing energy efficiency, reducing noise, and streamlining operations. Ideal for supermarkets, retailers, and commercial kitchens, this condensing unit brings powerful advantages to modern refrigeration infrastructure.



01. ENERGY EFFICIENCY

Traditionally, each refrigeration unit - whether a glass-door freezer, multideck display chiller, or freezer cabinet - has its own compressor, releasing excess heat into the store or kitchen. This heat increases the burden on air conditioning system, leading to higher energy consumption and operating costs.

By centralizing all refrigeration into a single remote system, you not only eliminate localized heat but also significantly reduce HVAC loads, lower energy bills, and extend equipment lifespan. Roof-mounted systems also help reduce in-store noise levels for a better customer and staff experience.

02. DESIGN EFFICIENCY

Parallel-compressor outdoor condensing unit is composed of one INVERTER Panasonic scroll compressor and one FIXED SPEED Panasonic scroll compressor to handle the refrigeration load from individual pieces equipment. The minimum refrigeration load can reach 30% of the inverter Panasonic scroll compressor.

03. INSTALLATION EFFICIENCY

With conventional refrigeration systems, each roof mounted condensing unit requires a hole through the roof so that refrigerant piping can be run to the equipment. The more remote systems you have, the more holes you have in your roof. However, RIGID Parallel-compressor outdoor condensing unit has one hole only. This single roof penetration point reduce installation costs and roof leakage.

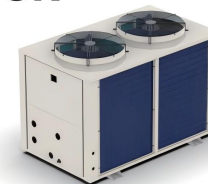
>PARALLEL-COMPRESSOR CONDENSING UNIT ARE USED IN MANY PLACES.



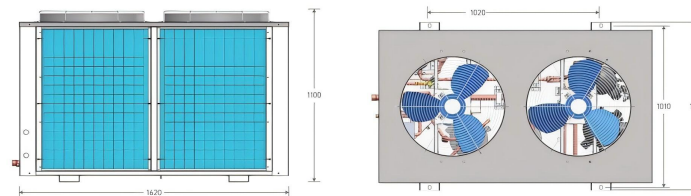
PARALLEL-COMPRESSOR CONDENSING UNIT

R448A R449A R404A

HIGH-MEDIUM-LOW TEMPERATURE
THREE PHASE 380V/50HZ



Model	RG-BSN120FL	RG-BSN140FL	RG-BSN160FL	RG-BSN180FL
Horsepower(HP)	12 HP	14 HP	16 HP	18 HP
Power supply	Three phase 380V/50Hz			
Evap.temp. range(°C)	-30°C~10°C			
Ambient temperature(°C)	0~40°C			
Refrigerant	R404A			
Compressor	Type	Variable speed	Variable speed	Variable speed
	Model	3CB084ZA0M	3CB084ZA0M	3CB084ZA0M
	Type	Fixed speed	Fixed speed	Fixed speed
	Model	C-SBN303L8A	C-SBN453L8A	3CC171SA03
Pressure controller		High pressure: Fixed		Low pressure: Adjustable
Fan motor	Fan QTY (PCS)	2	2	2
	Power supply	Single phase 220V/50Hz		
	Input power (W)	280W*2	280W*2	280W*2
Pipe (mm/in)	Suction inlet OD	34.93(1-3/8")		
	Liquid outlet OD	19.05(3/4")		
Refrigeration capacity	Evap. temp.(°C)	Refrigeration capacity: W		Ambient temp.: 32°C
	-30°C	11860	13330	15360
	-20°C	17630	19820	22390
	-15°C	21220	24020	26880
	-10°C	25450	29130	32280
	-5°C	30755	35675	39115
	0°C	36060	42220	46020
Product dimension (mm)*W*H	Length	1620		
	Width	1050		
	Height	1100		
Install dimension (mm) Hole- L*W		1020*1010		



HOT GAS DEFROST SYSTEM

The Advanced Hot Gas Defrost System

RIGID's Hot Gas Defrost System offers fast, reliable, and energy-efficient defrosting, enhancing productivity and preserving perishables. Available in two versions - cooling only and heating & cooling - RIGID's hot gas defrost systems are engineered for simplicity and high performance across various applications, including:

01. Cold storage warehouses
02. Agricultural processing
03. Fruit ripening chambers
04. Mushroom cultivation rooms
05. Temperature-controlled environments for produce during winter

> SMART REFRIGERATION STARTS WITH SMARTER DEFROSTING.

Hot gas defrost is an energy-saving alternative to traditional electric defrost systems. It works by redirecting hot discharge gas from the compressor through the evaporator coil. This rapidly melts accumulated frost without activating coil heaters. The gas then condenses back into liquid and returns to the system. This approach leads to faster defrost cycles, less temperature fluctuation, and lower energy consumption.

Choose RIGID's Hot Gas Defrost System for maximum efficiency, stable performance, and long-term savings.

> HOT GAS DEFROST VS. ELECTRIC DEFROST

ELECTRIC DEFROST vs. HOT GAS DEFROST		
Number of defrost	4@40 minutes/day	4@10 minutes/day
Steaming	Steaming is produced by excessive heat generated by coil heaters	Limited steaming is created because of the efficient use of hot gas as well as shorter defrost times
Overall investment	Lower initial investment Higher monthly energy bills Higher labor cost	Slightly higher initial investment Lower monthly energy bills Lower labor cost
Run time	18 hours	22 hours
Average box temperature rise	15-20°F	2-3°F

> HOT GAS DEFROST BENEFITS

DEPENDABLE PERFORMANCE

Fast and efficient defrosting, reduce downtime and improve system reliability, it is ideal for demanding commercial and industrial applications.

ENHANCED PRODUCT INTEGRITY

Shorter defrost cycles mean more stable box temperatures, preserving the freshness and quality of your perishable goods.

SIGNIFICANT ENERGY SAVINGS

Compared to electric defrost systems, hot gas defrost offers substantial reductions in power usage, saving thousands of dollars annually with intelligent defrost management.

HOT GAS DEFROST REFRIGERATION SYSTEM (COOLING ONLY)



HOT GAS DEFROST REFRIGERATION SYSTEM (HEATING AND COOLING)



> APPLICATIONS

