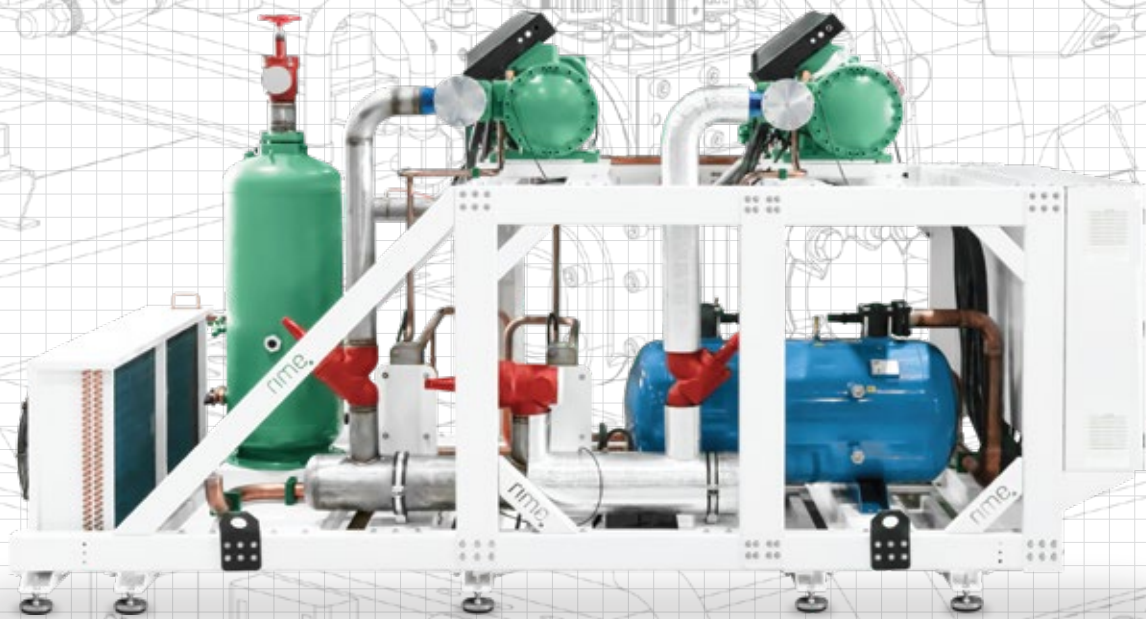
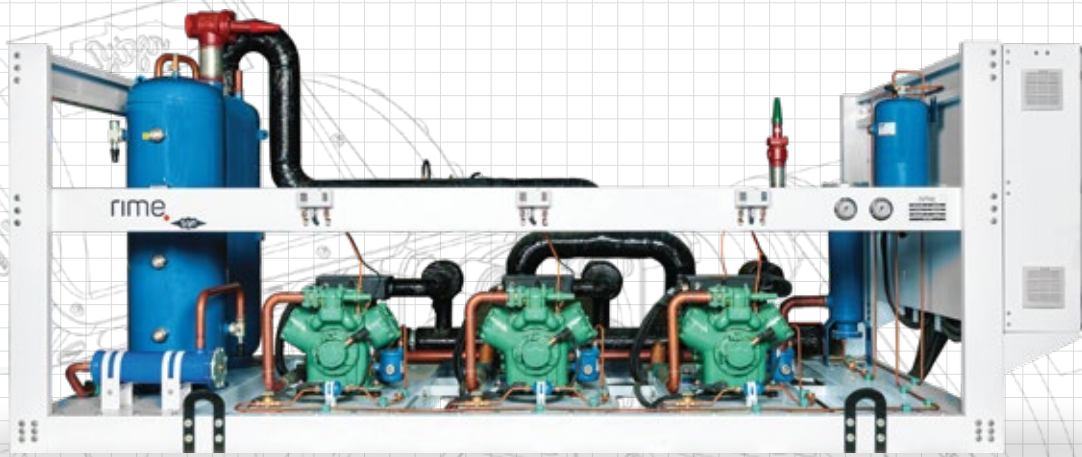


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RECIPROCATING | SCREW COMPRESSOR RACKS



ENGINEERED TO ENDURE
MANUFACTURED FOR SUCCESS

www.rimegroup.com

CONTENTS

01

Introduction

02-03

Screw Compressor Racks

Overview | Design & Features

04-05

Reciprocating Compressor Racks

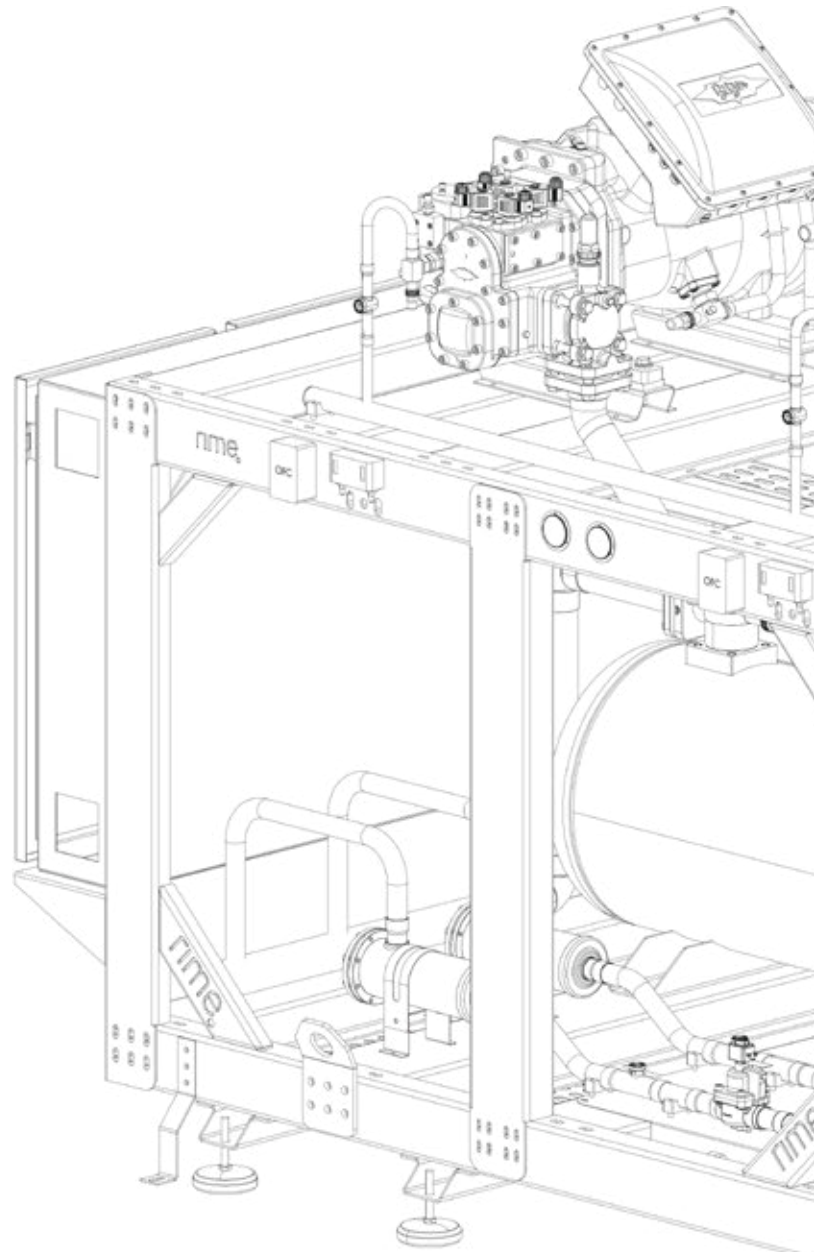
Overview | Design & Features

06

Advantages

07

Key Benefits and Comparison



Contact

For inquiries, consultations, or to learn more about our innovative refrigeration solutions, please get in touch with us:

sales@rimegroup.com

For customer support email us:

support@rimegroup.com





Company Overview

rime manufactures refrigeration products for commercial and industrial sectors worldwide. The extensive product range includes heat exchangers, condensing units, compressor racks, evaporators, cold room doors, HVAC copper products, and more. Strategically located in the UAE, rime ensures efficient distribution and timely deliveries, driving growth and excellence in the HVAC and refrigeration industry. Our headquarters is based in Jebel Ali Free Zone, Dubai.

Our Mission

We strive to deliver high-quality, cost-effective refrigeration solutions focusing on advanced manufacturing and assembly. We aim to provide superior products and exceptional service, ensuring a seamless customer experience and ongoing support.

Our Vision

To lead the HVAC and Refrigeration industry from the GCC to the global stage, setting the benchmark for cost-effective and innovative solutions. Through advanced manufacturing and assembly practices, we strive to pioneer cutting-edge technologies that optimize energy efficiency, minimize environmental impact, and make a significant, positive difference worldwide.

Core Values

Responsiveness: We value responsiveness in our interactions with clients, partners, and team members. We prioritize open communication and timely actions to address their needs efficiently.

Integrity: It is at the core of our business. We uphold ethical practices, transparency, and honesty in all our endeavors, building trust and long-lasting relationships with our stakeholders.

Mindfulness: Extends to our workplace culture. We are committed to fostering a supportive and inclusive environment where employees' well-being and personal growth are prioritized, ensuring a positive and collaborative work atmosphere.

Empowerment: We believe in empowering our team members to foster creativity, growth, and professional development. We encourage collaboration and foster an environment where everyone's ideas and contributions are valued.

rime Compressor Racks Overview

Compressor racks are integral to advanced refrigeration systems and are designed by our engineers to manage cooling requirements efficiently across commercial and industrial applications. Rime specializes in manufacturing both screw and reciprocating compressor racks, utilizing high-quality Bitzer compressors. Our offerings include versatile systems that handle various capacities, ensuring robust and reliable performance. We are also developing innovative scroll compressor racks to expand our product range. These racks are engineered for ease of installation and maintenance, providing economical and high-efficiency solutions tailored to diverse refrigeration needs.

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SCREW COMPRESSOR RACKS

OVERVIEW

rime's screw compressor racks offer a wide range of cooling capacities, from 20 kW to 700 kW, making them ideal for various industrial applications, including ice rinks and production areas. Utilizing Bitzer HS screw compressors, these racks are designed to meet medium-temperature (MT) cooling needs ranging from 30 kW to 700 kW and low-temperature (LT) cooling requirements from 20 kW to 500 kW. With 2 to 6 compressor options, the racks can integrate seamlessly with existing condensers or Rime-manufactured condensers. Built on an open welded frame with a double-deck construction, they come equipped with refrigerant filters, a receiver, sight glass, a safety valve, pressure switches, and enhanced security features.

Each rack is fully customizable to meet specific needs, ensuring reliability and efficiency in larger refrigeration systems.



SCREW COMPRESSOR RACKS

Design & Features

Electrical Panel

- Equipped with Carel Controller
- Optimized Algorithms for Efficient Compressor Rack Control
- Easy to Configure & Flexible
- Easy to Monitor

Mounting Frame

- Robust & Sturdy Frame to Reduce Noise & Vibration
- Galvanized Steel Grade DX51D, Powder Painted
- All Fasteners are Stainless Steel

Measurement and Control

- Dual Pressure Switches (Compressor Protection Against Abnormal Pressures, Adjustable Pressures and Differential)
- Oil flow controller

BITZER Screw Compressors

- High Performance
- High Reliability
- Quiet Operation
- HS compressors specially designed for low-temperature cold room application

Suction Line Filter

- Compressor Protection against Particles
- Replaceable Core, Easy for Servicing

Suction Header

- Smooth & Optimized Distribution of Refrigerant
- Adequately Sized & Insulated
- Designed to Facilitate Oil Return to the Compressor

Plate Heat Exchanger

- Highly efficient brazed plate heat exchanger
- Selected & designed based on subcooling capacity

Industrial Main Valves

- SVA Valve for Suction Line
- SCA Valve for Discharge Line

Liquid Receiver

- Pressure Relief Safety Valve
- Sight Glass
- Service Valve

Liquid Line Filter Drier

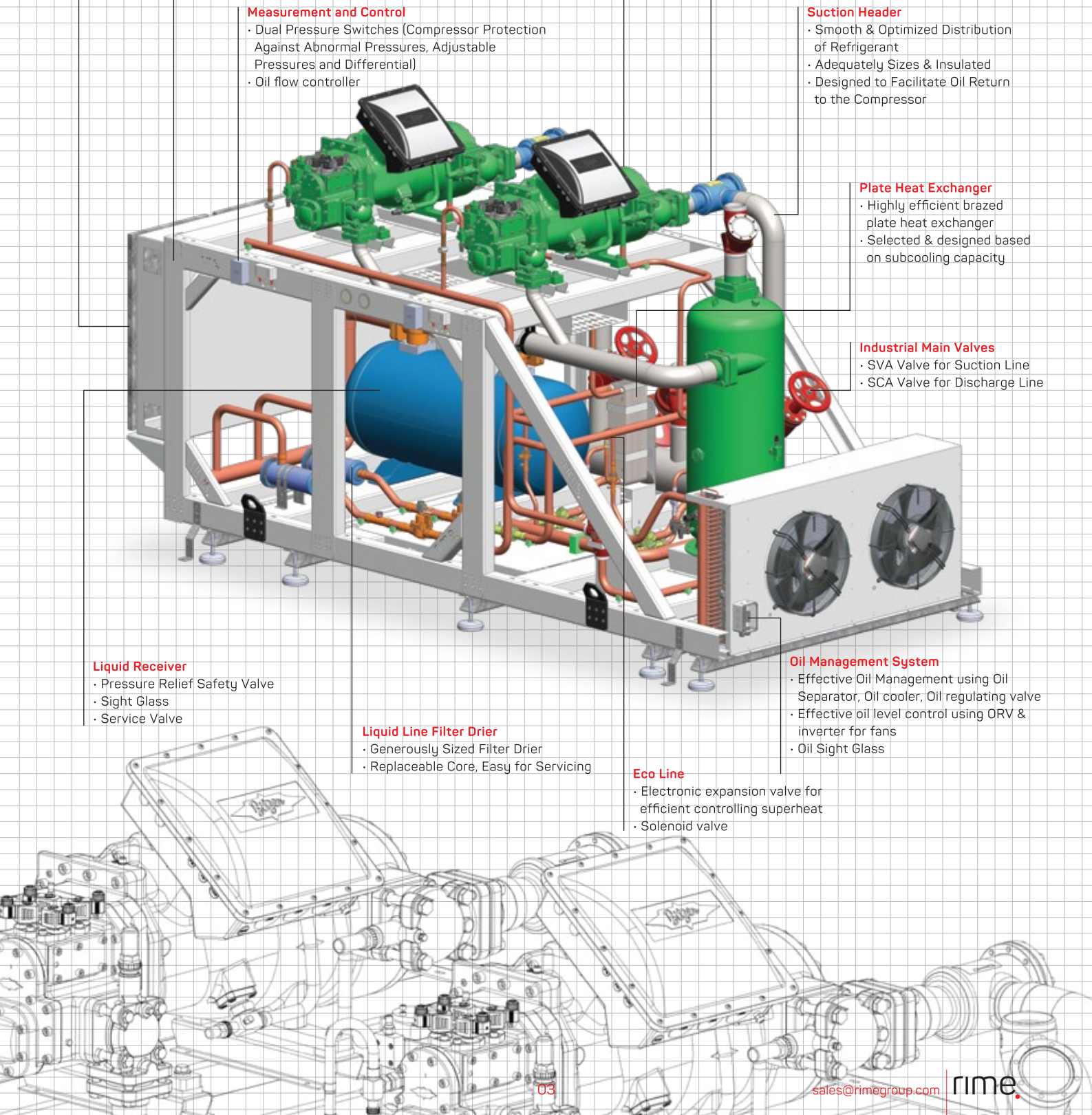
- Generously Sized Filter Drier
- Replaceable Core, Easy for Servicing

Oil Management System

- Effective Oil Management using Oil Separator, Oil cooler, Oil regulating valve
- Effective oil level control using ORV & inverter for fans
- Oil Sight Glass

Eco Line

- Electronic expansion valve for efficient controlling superheat
- Solenoid valve



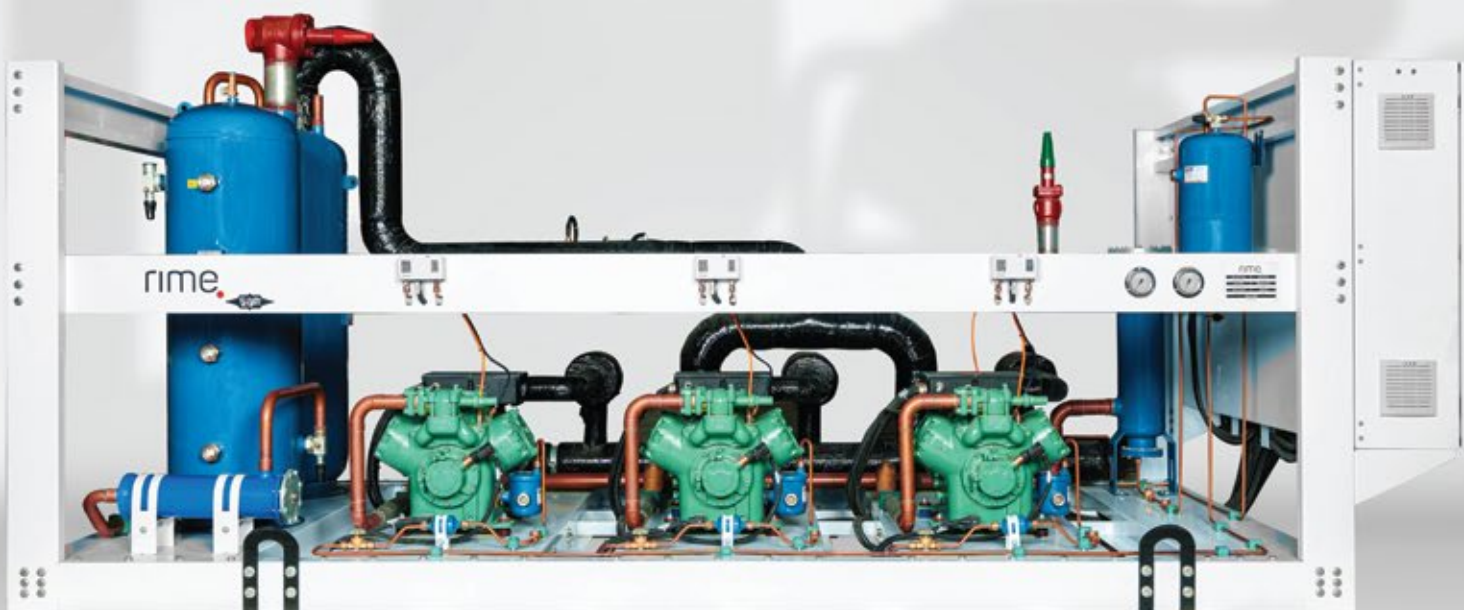


RECIPROCATING COMPRESSOR RACKS

OVERVIEW

rime's reciprocating compressor racks, equipped with Bitzer Ecoline compressors, offer a wide range of cooling capacities, from 30 kW to 700 kW for medium-temperature (MT) cooling and 20 kW to 500 kW for low-temperature (LT) applications. These compressor racks are ideal for the cooling of large warehouse areas and industrial buildings, providing reliable performance in larger refrigeration systems. Designed with an open welded frame construction, they integrate seamlessly with both existing condensers and rime-manufactured condensers. The racks include essential components such as refrigerant filters, receivers, sight glasses, safety valves, and pressure switches, ensuring optimal security and operational efficiency.

Each rack is fully customizable to meet specific needs, ensuring reliability and efficiency in larger refrigeration systems.



RECIPROCATING COMPRESSOR RACKS

Design & Features

Suction Accumulator

- Compressor Protection from Entering Liquid Refrigerant
- Increasing Liquid Line Subcooling

Industrial Main Valves

- SVA Valve for Suction Line
- SCA Valve for Discharge Line

Suction Line Filter

- Compressor Protection against Particles
- Replaceable Core, Easy for Servicing

Suction Header

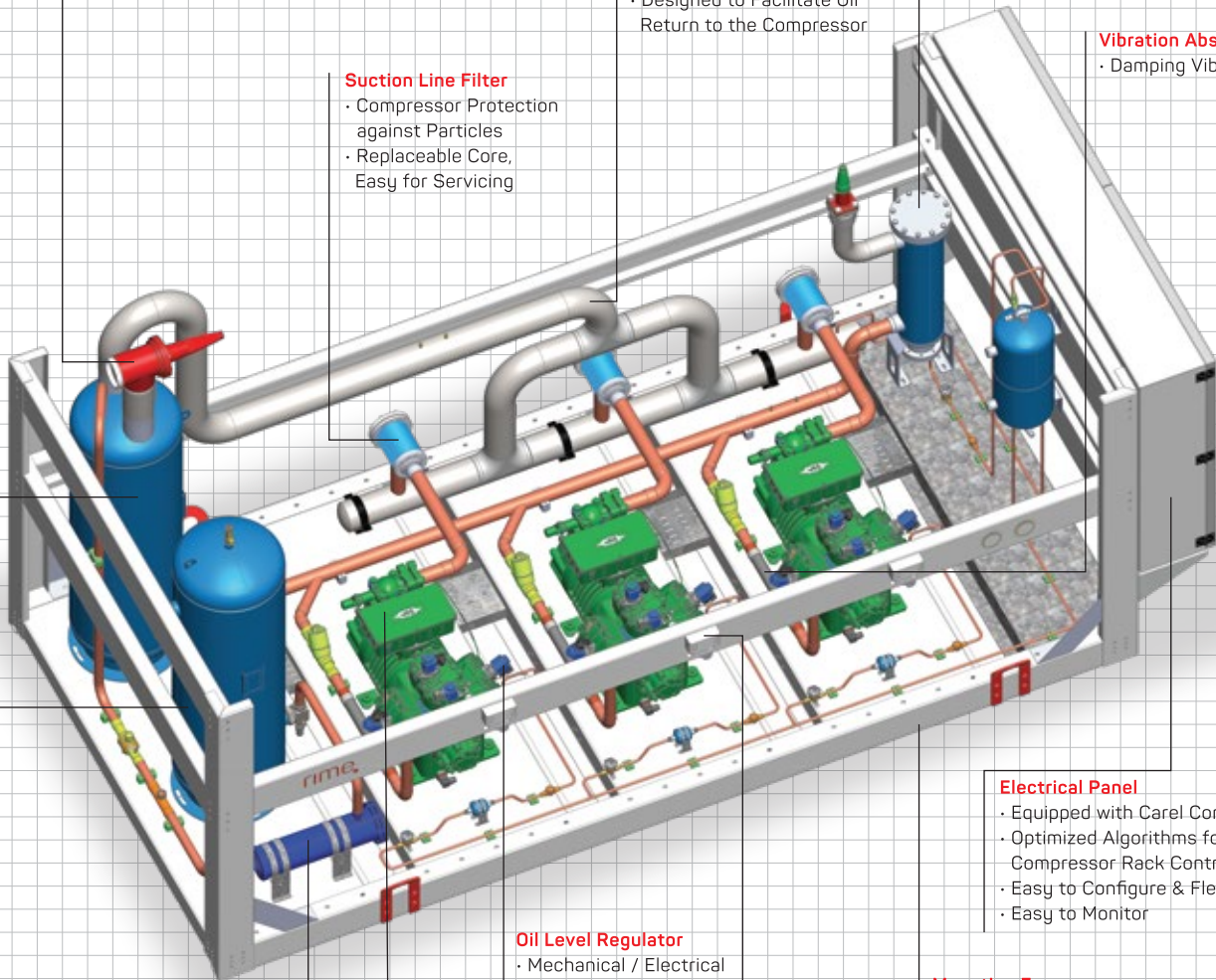
- Smooth & Optimized Distribution of Refrigerant
- Adequately Sized & Insulated
- Designed to Facilitate Oil Return to the Compressor

Oil Management System

- Effective Oil Management using an Oil Separator, Oil Reservoir & Oil filter
- Maintains Stable Oil Level
- Removes Impurities
- Oil Sight Glass

Vibration Absorber

- Damping Vibration



Liquid Receiver

- Pressure Relief Safety Valve
- Sight Glass
- Service Valve

Oil Level Regulator

- Mechanical / Electrical Oil Level Regulator
- Controls Oil Level
- Robust Design

Electrical Panel

- Equipped with Carel Controller
- Optimized Algorithms for Efficient Compressor Rack Control
- Easy to Configure & Flexible
- Easy to Monitor

Mounting Frame

- Robust & Sturdy Frame to Reduce Noise & Vibration
- Galvanized Steel Grade DX51D, Powder Painted
- All Fasteners are Stainless Steel

Liquid Line Filter Drier

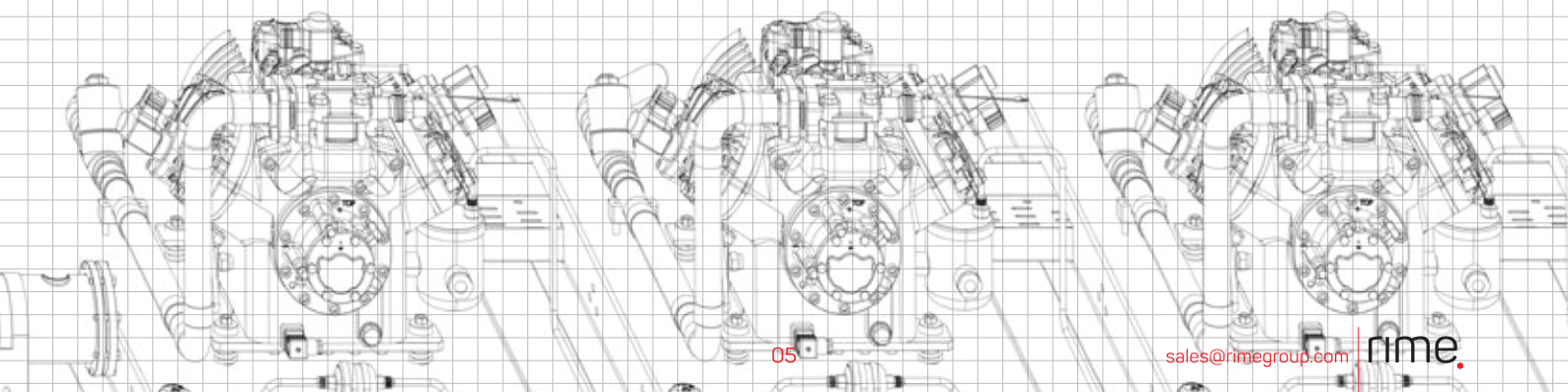
- Generously Sized Filter Drier
- Replaceable Core, Easy for Servicing

BITZER Reciprocating Compressors

- High Performance
- High Reliability
- Quiet Operation
- Crankcase Heater

Dual Pressure Switches

- Compressor Protection Against Abnormal Pressures
- Adjustable Pressures and Differential



RIME COMPRESSOR RACKS

ADVANTAGES

Rime Compressor Racks are designed and engineered to deliver efficient and reliable cooling solutions for various industrial applications. These systems optimize performance and offer significant operational and cost-saving benefits, ensuring long-term value for your refrigeration projects.

- Reduce initial investment cost of projects
- Considerable reduction in energy consumption
- Reduce the number of required compressors
- Maintain equal working hours between compressors
- Increase compressor lifespan by decreasing the number of start/stops
- If one compressor fails, the others will automatically pick up the load until repairs can be made
- Faster cooling down
- Greater cooling capacity using Eco line (for screw compressors)
- Integrated control system
- Reliable oil management system by using an oil reservoir (for reciprocating compressors)

APPLICATION

Reciprocating Compressor Racks	Screw Compressor
Supermarkets & Grocery Stores: Cooling for display cases, walk-in coolers, and freezers.	Cold Storage Warehouses: Consistent, high-capacity refrigeration for large storage facilities.
Restaurants & Foodservice: Refrigeration for cold storage rooms and walk-in freezers.	Industrial Refrigeration: For food processing, chemical manufacturing, and pharmaceutical needs.
Small to Medium-Sized Warehouses: For temperature-controlled storage with medium capacity needs.	Hypermarkets & Large Supermarkets: Handles extensive cooling for large retail environments.
Convenience Stores: Efficient cooling for small refrigeration units like beverage coolers.	Dairy & Meat Processing Plants: Large-scale cooling for continuous operation in food processing.
Pharmacies & Medical Facilities: Reliable for pharmaceutical refrigeration with moderate cooling demands.	Beverage Industry: Ideal for breweries, bottling plants, and large beverage storage areas.
Food & Beverage Processing: Suitable for smaller processes needing precise temperature control.	Logistics & Distribution Centers: Refrigeration for perishable goods in large-scale transportation and storage.

RIME COMPRESSOR RACKS

COMPARISON

Feature	Reciprocating Compressor Racks	Screw Compressor Racks
Best for Various Applications	Ideal for small to medium refrigeration loads with precise control and flexibility.	Suited for large-scale refrigeration, delivering superior performance for high-demand environments.
Efficiency	High efficiency at part load, minimizing energy costs during varying demand.	Optimized for full load efficiency, ensuring reliable performance in high-capacity settings.
Capacity Range	Adaptable to medium capacities, ideal for supermarkets, restaurants, and retail cooling needs.	Perfect for large-capacity operations, including industrial refrigeration and large cold storage.
Quiet Operation	Reliable with manageable sound levels, suitable for indoor applications.	Low noise and vibration, delivering powerful cooling with minimal disruption.
Maintenance	Straightforward maintenance ensures long-term system reliability.	Fewer moving parts require less maintenance, offering long-lasting, uninterrupted operation.
Initial Investment	Cost-effective with a lower upfront cost, providing solid performance for its price.	A premium investment offering long-term value with high efficiency and durability.
Energy Savings	Excellent energy savings, particularly in applications with fluctuating cooling needs.	Engineered for maximum energy efficiency at full load, reducing long-term energy costs.
Application Flexibility	Easily customized to meet a wide range of refrigeration requirements.	Designed for high-capacity and continuous operation, providing reliability and peace of mind.

KEY BENEFITS

Reciprocating Compressor Racks: Best suited for small to medium-sized operations. They provide efficient and flexible cooling with lower initial costs. These racks are ideal for supermarkets, restaurants, and retail environments where varying demand requires precise control and energy savings.

Screw Compressor Racks: Tailored for large-scale, high-capacity refrigeration needs, offering robust performance and long-term efficiency. Perfect for industrial facilities and large cold storage environments, screw compressor racks provide continuous, reliable operation with lower maintenance requirements.

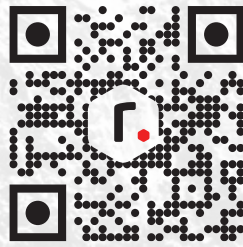
Both options offer high-quality, reliable refrigeration solutions that can be tailored to specific needs, ensuring optimal performance and energy efficiency. Whether you're looking for flexibility and cost-efficiency or durability and high capacity, these compressor racks are designed to meet your operational demands.

NOTES

NOTES

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Contact Us

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