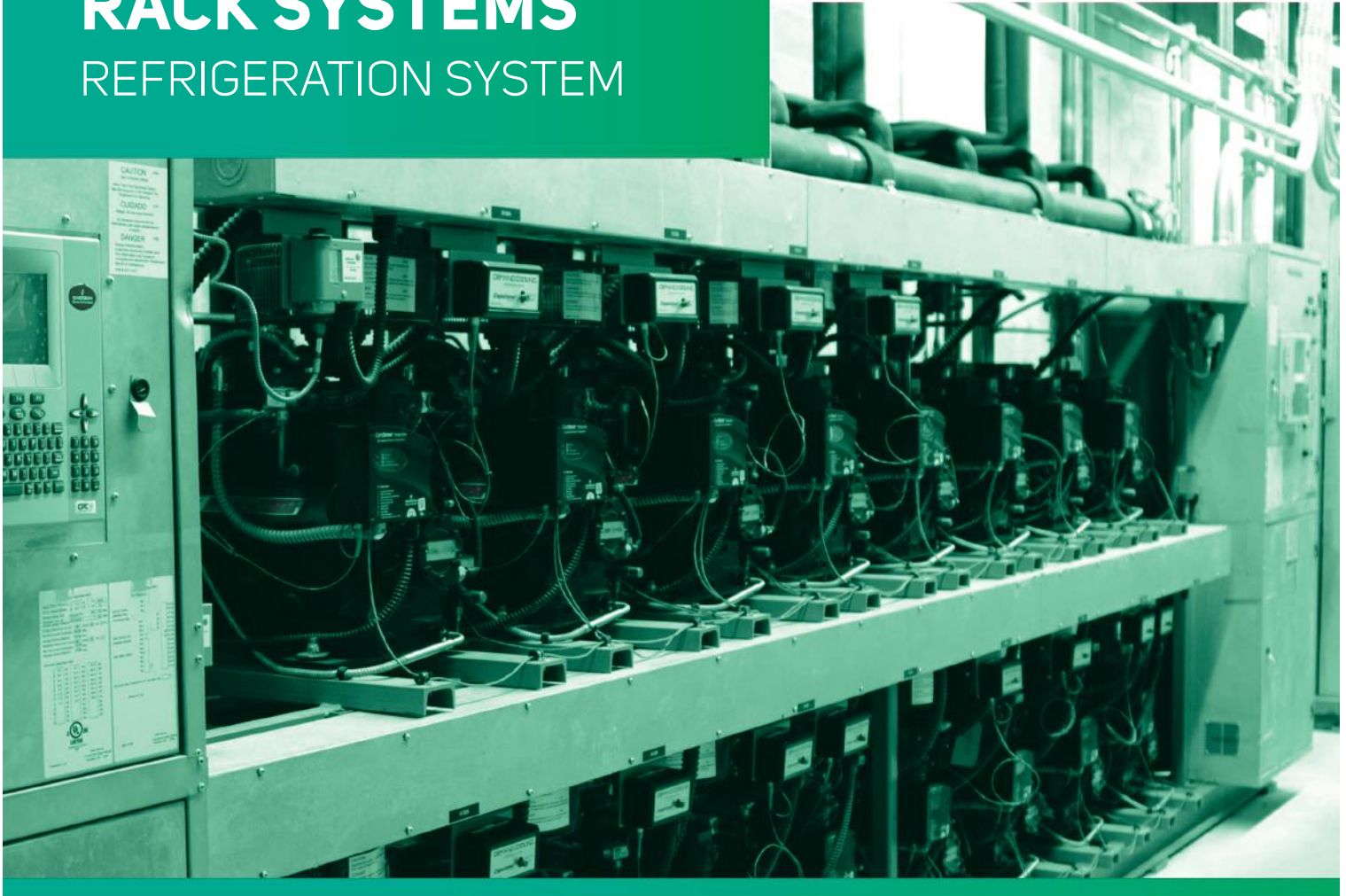




INDOOR PARALLEL RACK SYSTEMS REFRIGERATION SYSTEM



KYSOR WARREN
eptarefrigeration

INDOOR PARALLEL RACK SYSTEMS REFRIGERATION SYSTEM

Kysor Warren Indoor Parallel Rack Systems are designed to be a complete refrigeration system—significantly simplifying the installation process and providing improved total cost of ownership.

Kysor Warren Indoor Parallel Rack Systems provide significant benefits to food retail customers:

- Optimizes floor space with narrow design
- Reduces the risk of leaks with less vibration throughout the system with its welded construction - some frames are huck bolt
- Energy savings
- Ease of installation, serviceability and maintenance

Our indoor product portfolio contains three market leading platforms:

- Narrow Horizontal SlimLine (NHS)
- Narrow Horizontal 2nd Generation (NH2)
- Dual Vertical Rack (DBV)



Narrow Horizontal SlimLine



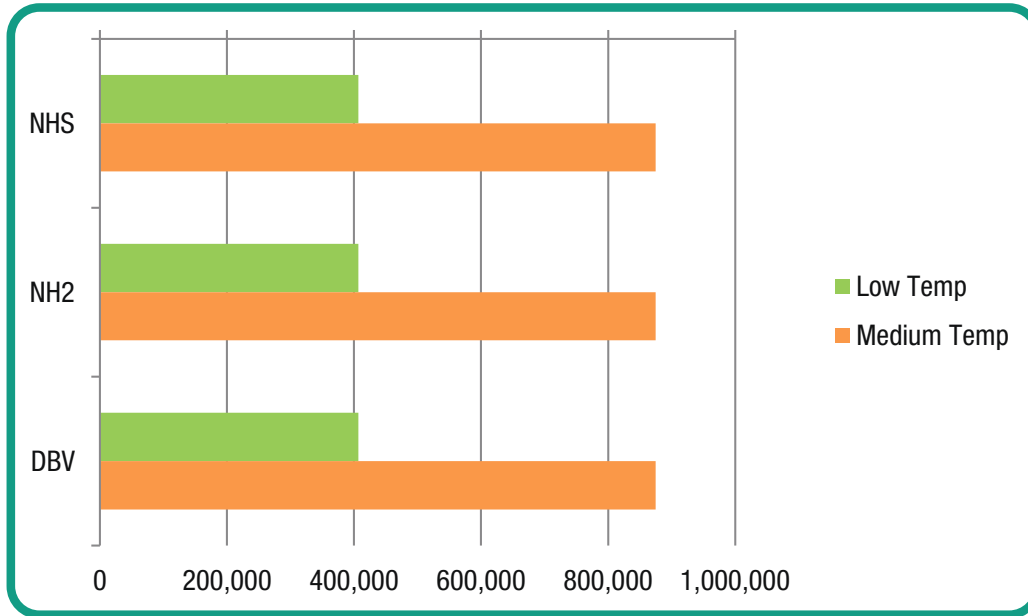
Narrow Horizontal 2nd Generation



Dual Vertical Rack



INDOOR PARALLEL RACK SYSTEMS CAPACITY RANGES



| | NHS | | NH2 | | DBV | |
|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| | LOW END OF CAPACITY | TOP END OF CAPACITY | LOW END OF CAPACITY | TOP END OF CAPACITY | LOW END OF CAPACITY | TOP END OF CAPACITY |
| LOW TEMPERATURE | 44,000 BTUH | 407,000 BTUH | 44,000 BTUH | 407,000 BTUH | 44,000 BTUH | 407,000 BTUH |
| MEDIUM TEMPERATURE | 47,000 BTUH | 875,000 BTUH | 47,000 BTUH | 875,000 BTUH | 47,000 BTUH | 875,000 BTUH |

ASSUMPTIONS:

-LOW TEMPERATURE: 100°F AMBIENT/110 SCT/-20 SST/50°F SUBCOOLING (LT LOW END IS NON-SUBCOOLED)

-MEDIUM TEMPERATURE: 100°F AMBIENT/115 SCT/20 SST/ NON-SUBCOOLED

Typical Applications

| SYSTEM TYPE | | | |
|---------------------|--|--|--|
| | NARROW HORIZONTAL SLIMLINE (NHS) | NARROW HORIZONTAL 2ND GENERATION (NH2) | DOUBLE VERTICAL RACK |
| Common Applications | <ul style="list-style-type: none"> indoor, existing machine rooms machine houses | <ul style="list-style-type: none"> indoor, existing machine rooms machine houses | <ul style="list-style-type: none"> indoor, existing machine rooms machine houses |

NARROW HORIZONTAL SLIMLINE REFRIGERATION SYSTEM & SPECIFICATIONS

Reduced Refrigerant Charge. Ease of Installation. Accessibility.

The NHS (Narrow Horizontal Slimline) rack is designed to meet specific customer needs for floor space. The NHS has a 36" front to back depth compared to our standard narrow rack of 42" front to back depth. The NHS design saves floor space for our customers.

Features

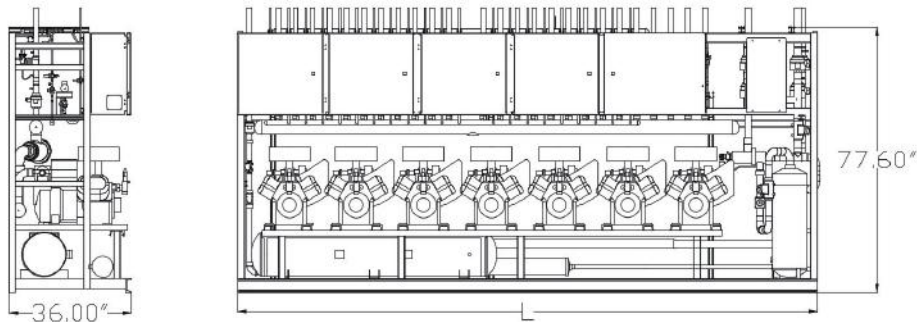
- Designed to minimize footprint and maximize useable floor space
- 36" depth vs 42" depth for standard narrow rack
- Can be mounted in most existing machine rooms with adequate space remaining



| STANDARD | |
|--------------------------------|--|
| Design and Construction | <ul style="list-style-type: none"> ■ Single point electrical connection available in 280V, 460V, or 575V power input (dependent upon compressor availability) |
| Compressors and Piping | <ul style="list-style-type: none"> ■ Available with single or split suction groups ■ Loop or circuit piping ■ Hot gas, electric or off-cycle defrost ■ Economized vapor injected compressors available for low temperature ■ Up to 12 large scroll or 9 semi-hermetic compressors |

| OPTIONS | |
|-------------------------------|--|
| Compressors and Piping | <ul style="list-style-type: none"> ■ Copeland, Carlyle and Bitzer compressors available ■ Sub-cooled liquid ■ Heat reclaim ■ Split condenser valve |
| Electrical Components | <ul style="list-style-type: none"> ■ Emerson Climate Technologies ■ Novar ■ Danfoss ■ Micro-Thermo ■ RDM |

NHS Dimensional Diagrams



NARROW HORIZONTAL 2ND GENERATION REFRIGERATION SYSTEM & SPECIFICATIONS

Ease of Installation. Accessibility. Maximized Merchandising Space.

The NH2 Narrow Rack is the second generation Narrow Horizontal parallel compressor system and has long been recognized for its operational advantages. The simplicity and compactness of the design makes the addition of split suctions, sub-cooling, hot gas defrost, heat reclaim and and/or split condenser valves simple and economical features.

Sustainable

- Use of pre-bent tubing to reduce brazed joints - significantly reducing leak potential
- Elimination of fabrication welding and painting in the factory significantly reduces harmful emissions and environmental impact

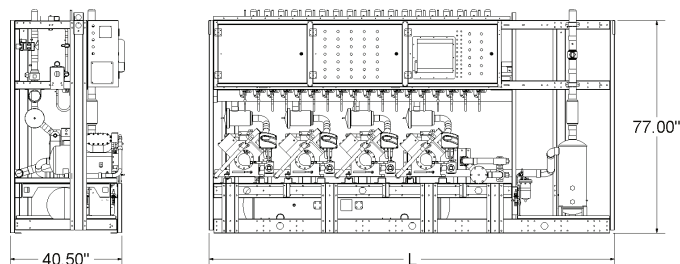
Flexible

- Configurable to meet a wide range of customer requirements
- Ease of Installation and Service
- Narrow design enables this system to be installed in a wide variety of applications - including many preexisting facilities



| | STANDARD | OPTIONS (CONTACT FACTORY) |
|-------------------------|--|---|
| Design and Construction | <ul style="list-style-type: none"> ■ Single point electrical connection available in 280V, 460V, or 575V power input (dependent upon compressor availability) | <ul style="list-style-type: none"> ■ Copeland, Carlyle and Bitzer compressors available ■ Sub-cooled liquid ■ Heat reclaim |
| Compressors and Piping | <ul style="list-style-type: none"> ■ Available with single or split suction groups ■ Loop or circuit piping ■ Hot gas, electric or off-cycle defrost ■ Economized vapor injected compressors available for low temperature ■ Up to 12 large scroll or 9 semi-hermetic compressors | <ul style="list-style-type: none"> ■ Emerson Climate Technologies ■ Novar ■ Danfoss ■ Micro-Thermo ■ RDM |

NH2 Dimensional Diagrams



DUAL VERTICAL RACK REFRIGERATION SYSTEM & SPECIFICATIONS

Ease of Installation. Accessibility. Maximized Merchandising Space.

The Dual Vertical (DBV) rack consists of two independent refrigeration systems on a common frame. This combination yields the minimum footprint while maximizing the refrigeration capacity.

Features

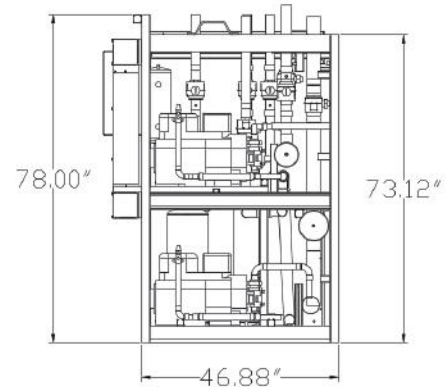
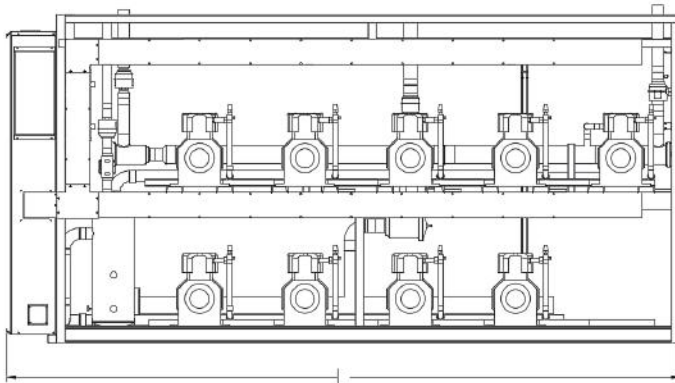
- Consists of two independent conventional systems on a common frame
- Minimizes footprint for applications where space is critical



| STANDARD | |
|--------------------------------|--|
| Design and Construction | <ul style="list-style-type: none"> Single point electrical connection available in 280V, 460V, or 575V power input (dependent upon compressor availability) |
| Compressors and Piping | <ul style="list-style-type: none"> Available with single or split suction groups Loop or circuit piping Hot gas, electric or off-cycle defrost Economized vapor injected compressors available for low temperature Up to 12 large scroll or 9 semi-hermetic compressors |

| OPTIONS (CONTACT FACTORY) | |
|-------------------------------|--|
| Compressors and Piping | <ul style="list-style-type: none"> Copeland, Carlyle and Bitzer compressors available Sub-cooled liquid Heat reclaim Split condenser valve |
| Electrical Components | <ul style="list-style-type: none"> Emerson Climate Technologies Novar Danfoss Micro-Thermo RDM |

DBV Dimensional Diagrams



| | | | |
|-----|------|------|------|
| "L" | 108" | 132" | 157" |
|-----|------|------|------|