MRS & DRS SERIES
MULTI-COMPRESSOR REFRIGERATION SYSTEMS
**Why Choose Remote Refrigeration?**

By remoting all refrigerated equipment in your establishment, including reach-ins, walk-ins and ice machines, to a single multi-compressor system, you can remove the heat produced by multiple refrigeration units from your kitchen or store and reduce your air conditioning load and energy bill. A remote system, typically roof-mounted, also reduces noise level, service calls and extends the life of equipment.

**Why Choose Master-Bilt®?**

Master-Bilt®’s MRS series offers many advantages over similar systems including:
- A galvanized housing with louvred doors for condenser coil protection (optional stainless steel finish available)
- A single roof penetration point that reduces installation cost and chances of roof leakage
- Modular system design that simplifies configuration, service and upgrading
- Modules that contain head pressure controls and crankcase heaters for low ambient protection
- Condensers are also modular and are sized for 110°F ambient application
- Time clocks for both low and medium temp compressors for ease of service and optional defrost scheduling

Master-Bilt® also provides options to further boost the efficiency of MRS systems. The patented* Master Controller Reverse Cycle Defrost system, a custom-designed electronic controller for walk-in refrigeration, saves up to 27% in energy usage over an all-mechanical system.

The integrated reverse cycle defrost performs a completely “clean” defrost in walk-in evaporator coils in as little as 3-5 minutes in a freezer or 1½ – 2 minutes in a cooler with up to an 80% reduction in defrost energy usage.

The MRS series is part of a diverse product line including walk-ins, reach-ins and other equipment, making Master-Bilt® a single source refrigeration provider. This convenience saves the hassle and expense of shopping for multiple sources to supply each need.

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**DRS Series Dual Compressor Systems**

When your requirements call for two-compressor unit, the DRS series is the answer. An economical complement to the MRS series, DRS models still share many of the same quality construction and features as well as fitting the same range of applications.

**DRS systems feature:**
- Compressors that use a separate refrigerant circuit providing independent function of each system
- Scroll compressors for freezer applications up to 5 HP
- Hermetic compressors for cooler applications up to 3 HP
- Common base and frame assembly
- Standard galvanized housing with louvred doors for condenser coil protection (optional stainless steel finish available)

The Master Controller Reverse Cycle Defrost system is also an option on the DRS series.

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*U.S. patent no. 7,073,344
MRS and DRS systems can be utilized in a wide variety of applications including:

<table>
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<tr>
<th>QSRs and casual restaurants</th>
<th>Hotels</th>
<th>Corporate cafeterias and commercial kitchens</th>
<th>Convenience stores</th>
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- Walk-in Cooler Evaporator
- Walk-in Freezer Evaporator
- Refrigerant lines inside ceiling and walls
- Reach-in cooler/freezer
- Undercounter cooler/freezer
- Ice machine
REFRIGERATION MODULES
Modular design sets the MRS series apart. Each system is composed of individual modules containing a condenser, compressor, generously-sized receiver, dryer, sight glass, dual pressure control and other appropriate components all enclosed within a single housing. Modules can be configured individually as medium or low temp. Compressors are available as hermetic, semi-hermetic or scroll.

This modularity maximizes configuration flexibility, simplifies service and provides for future expandibility.

HEAD PRESSURE CONTROLS,
standard on all MRS systems, provide protection in low ambient conditions. Modules also come with crankcase heaters for further protection.
PITCH POCKET inside each MRS unit decreases roof leaks.

MODULAR CONDENSER COILS are designed so that each refrigeration module utilizes an individual coil section. If necessary, a section can be replaced without shutting down the entire system.

PRE-WIRED ELECTRICAL PANEL with one-point connection allows simple, cost-effective installation and service.

Shown in optional stainless steel finish.
DRS Series Dual Compressor Systems

PRE-WIRED ELECTRICAL PANEL with one-point connection and a disconnect switch included.

MULTI-CIRCUITED CONDENSER COIL designed for 110°F ambient.

Shown in optional stainless steel finish.
Typical Engineering Details

MRS Series

- AIR IN
- AIR OUT
- MAIN POWER ELECTRICAL DISCONNECT (INTER-LOK)
- ROOF OR GROUND FLOOR LEVEL
- TYPICAL PLATFORM (SEE DETAIL BELOW)
- ELEVATION DETAIL (TYPICAL)
- PLATFORM DETAIL (TYPICAL)
- GENERAL CONTRACTOR TO SUPPLY

5 FT. MINIMUM CLEARANCE REQUIRED ALL SIDES

NOTES:
- General contractor to provide leveled platform to local code height
- Provide sheet metal cap as shown (hat section) with water tight soldered joints where applicable
- Provide pitch pocket in the platform with 1" high collar to prevent water ingress through roof
- Back fill opening with hot pitch or tar after completion of electrical and refrigeration piping

DRS Series

- DISCONNECT SWITCH
- ELECTRICAL CONNECTIONS INSIDE WEATHER HOOD COVER
- ELECTRICAL CONNECTIONS WEATHER HOOD COVER
- DISCONNECT SWITCH