MRCOOL®
COMFORT MADE SIMPLE

COMPACT REFRIGERATION SYSTEM

3 YEAR COMPRESSOR WARRANTY

1 YEAR PARTS WARRANTY

1 YEAR UNIT REPLACEMENT COMPRESSOR

OPERATES FROM
0° – 50° F
TEMPERATURES

Intertek 5032483

Intertek 5032483



SCAN HERE ›
for the most up-to-date version of this brochure.

Leading the Future of Refrigeration.

MRCOOL®
COMFORT MADE SIMPLE



The MRCOOL® Compact Refrigeration System is a compact, energy-efficient cooling unit designed for walk-in cooler spaces. With inverter technology, it adjusts power use to maintain the right temperature while saving energy. It works in ambient temperatures from 5°F to 113°F and can keep your storage space between 0°F and 50°F—ideal for preserving food, drinks, and other perishable items.

FIVE INNOVATIVE CORE TECHNOLOGIES

1. **Compact, All-in-One Design**
   Smaller Footprint, Lighter Weight and Easier Installation
2. **DC Inverter Technology**
   Enhanced Reliability, Energy Efficiency, and Stability
3. **Low-GWP R-32 Refrigerant**
   Advancing Sustainability and Environmental Protection
4. **WiFi Connectivity**
   Remote Management and Monitoring Via MRCOOL® Connect App
5. **Supplemental Solar Support**
   Significant Savings on Monthly Energy Bill





Optional Direct Solar Power Supply

Save on power costs by using hybrid power supplied to the system with a direct solar module. This will use grid power, as well as solar panels (supplied by third-party vendor) to supply the system with power, reducing your total electrical bill.

Cooling Modes
Standard cooling mode and forced cooling mode.

Dual-layer Casing Protection
Galvanized steel plate with epoxy-coating, offering high corrosion resistance.

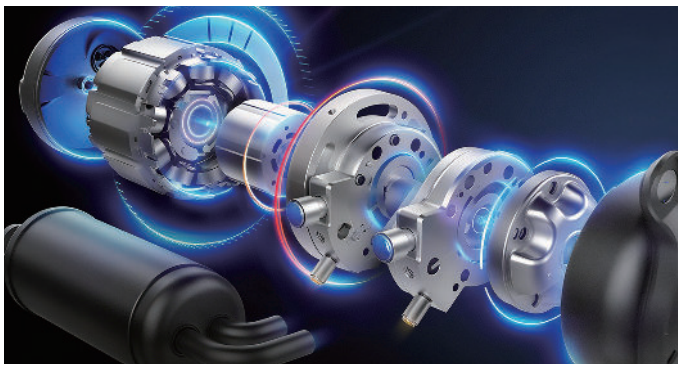
Compact, All-in-One Design

The Compact Refrigeration System adopts a packaged design that incorporates the evaporator and condenser into a single cabinet, maximizing structural optimization. This design results in a smaller footprint and lighter weight.

Additionally, there is no need for on-site refrigerant piping connections, making installation simpler and more time-efficient.



Fully DC Inverter Technology







This system adopts the latest EVI DC inverter and BLDC technology, paired with a smart variable frequency drive and control system. This cutting-edge combination guarantees precise and stable temperature control at all times, regardless of fluctuations in the outdoor ambient temperature.

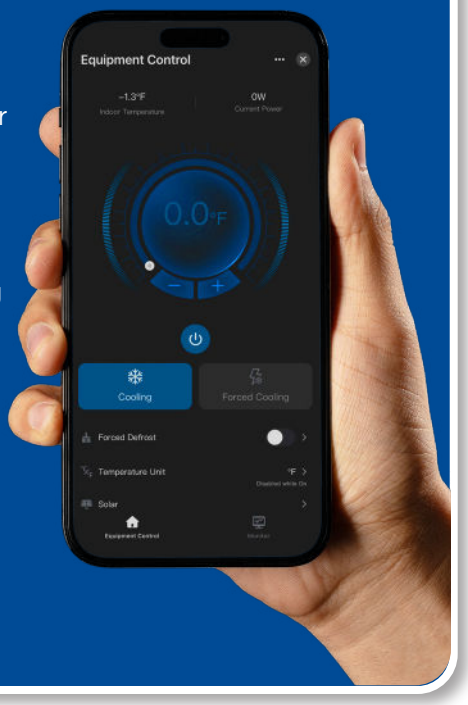
WiFi Connectivity

Remote Management and Real-Time Equipment Monitoring Via MRCOOL® Connect App

The MRCOOL® COMPACT REFRIGERATION SYSTEM supports WiFi network configuration, enabling remote management and real-time monitoring of operational status via the MRCOOL Connect App.

In the event of a cooling failure, the system will send a notification to the user via the app for timely awareness and action.

Compatible with both iOS and Android systems, users can log in and manage their devices using Google, or Apple accounts for seamless operation and effortless control.



iOS

Superior Defrosting with Hot Gas Technology

Keep your cold storage running at its best without the extra energy costs. This system uses **Hot Gas Defrost**—a process that uses the unit's own natural heat to clear away frost.

Compared to traditional electric heaters, this method is a game-changer for your bottom line and your inventory:

- **Higher Efficiency:** It's up to 50% more energy efficient than standard electric defrosting.
- **Faster Results:** It melts frost quickly, so your system spends less time "thawing" and more time cooling.
- **Better Preservation:** Because the cycle is so fast, freezer temperatures stay more stable, keeping your products in peak condition.
- **Lower Costs:** By ditching expensive heating elements, you'll see the difference in your monthly energy bills.



SPECIFICATIONS

MODEL		UNIT	MMFDW12D
Prime Power Supply		Vac-Ph-Hz	208 / 230-1-50 (60)
Auxiliary Power Supply		Vdc	370
Cross-sectional Area of Power Cable Conductor		mm2	2.5
Recommended Power Cable (Core)		/	3 (L1 / L2 / PE)
MCA-Min. Current Ampacity		A	14.9
MOP-Max. Overcurrent Protection		A	25.0
Cooling Capacity @95/25˚ (Ambient Temp / Evaporating Temp)		W	3,500
		Btu/h	12,000
Horsepower		hp	1.5
Cooling Power Input		W	1,842
COP		W/W	1.9
Cooling Current		A	8.01
AWEF (Medium-Temp)		/	8.2
Refrigerant		/	R32
Max. Application Volume		m3	≤20
Multi-Application Zones Up to 3		m3	≤7 / Zone
Maximum Recommended Cold box Size,(L×W×H)	Use as cooler	ft (ft^3)/m (m^3)	11' x 11' x 8' (918ft^3) / 3.35m x 3.35m x 2.29m (25.99m^3)
	Use as freezer	ft (ft^3)/m (m^3)	8' x 8' x 6.5' (416ft^3) / 2.44m x 2.44m x 1.98m (11.79m^3)
Suggested Cold box Insulation Minimums	Use as cooler	/	R-25
	Use as freezer	/	R-32
Compressor	Compressor Type	/	EVI DC Inverter Rotary
	Oil	/	POE VG75R
	Power	W	2,200
Condenser Fan	Fan Type	/	Axial-flow
	Air Flow Volume	CFM	942
	Fan Motor Power	W	30
Evaporator Fan	Fan Type	/	Axial-flow
	Air Flow Volume	CFM	942
	Max. External Static Pressure	W	30
	Fan Motor Power	W	377
Cooling Throttling Method		/	EEV
Ambient Temperature Range		˚C/˚F	-15~45 / 5~113
Cold Storage Temperature Range		˚C/˚F	-18~10 / 0~50
Max. Noise Level @1 Meter Away	External Side	dB (A)	76
	Internal Side	dB (A)	66
Dimension (W×D×H)		in	28.15 x 38.58 × 21.65
		mm	980 × 715 × 550
Dimension of Package (W×D×H, With Pallet)		in	30.12 × 39.37 × 28.74
		mm	1000 x 765 x 730
Net Weight		kg / lbs	82 / 180
Shipping Weight		kg / lbs	102 / 231
Defrosting Method		/	Hot gas defrost
IP Class		/	IPX4

OPTIONAL PARTS

1	2	3
Duct Connection Kit	**Induced Fan Kit**	**PVGo**
For duct connection.	For duct connection, the total length ≥ 50ft.	For PV power supply input. If you want to know more, refer to PVGo instructions.

MRCOOL®
COMFORT MADE SIMPLE