

SAMSUNG

DVM Chiller

Compromise no more.

By combining the benefits of chiller and VRF technology, the DVM Chiller provides performance, efficiency and incredible space savings.



Product Registration Required
Conditions Apply

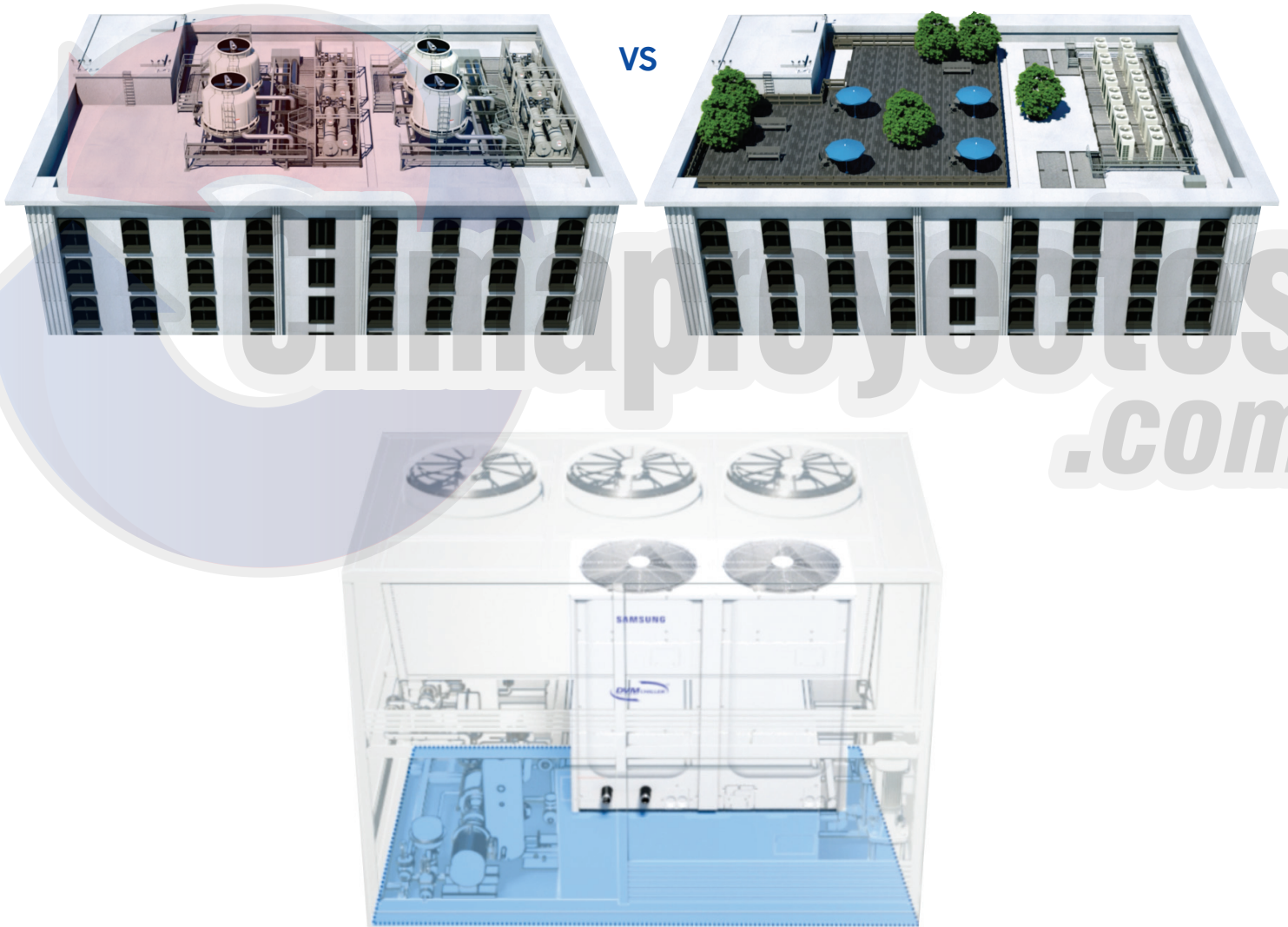


The ultimate combination of VRF and Chiller technologies.

So what exactly is a VRF system? Glad you asked.

Variable Refrigerant Flow (VRF) systems consist of outdoor units connected to multiple indoor units via refrigerant piping to provide cooling and heating to individual zones. The outdoor units can modulate capacity based on the requirements of the individual zones, thus saving energy by not always running at 100% capacity and improving occupant comfort by maintaining temperature as needed in each individual zone.

The DVM Chiller works in a similar way, except it's connected to multiple third-party Fan Coil Units (indoor units) via water piping to provide cooling and heating to individual zones. Like VRF outdoor units, the DVM Chiller can modulate its capacity depending on the requirements of the various zones, which saves energy and improves occupant comfort.



49% space saving*

*Comparison with conventional water-cooled chiller system (Cooling tower + Chiller + Boiler) and SAMSUNG DVM Chiller based on 160 tons.
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DVM Chiller



10 and 15 ton

- Heat Pump models
- 208-230V / 60Hz / 3 Ø or 460V / 60Hz / 3 Ø
- 10 and 15 ton modules
- Connect up to 16 units for system capacities up to 240 tons
- Outdoor unit static pressure up to 0.32" WC
- Water temperature ranges
 - Cooling: 41°F - 77°F (5°C - 25°C) as standard, 14°F - 77°F (-10°C - 25°C)*
 - Heating: 77°F - 131°F (25°C - 55°C)**

Modular Design and Compact Size

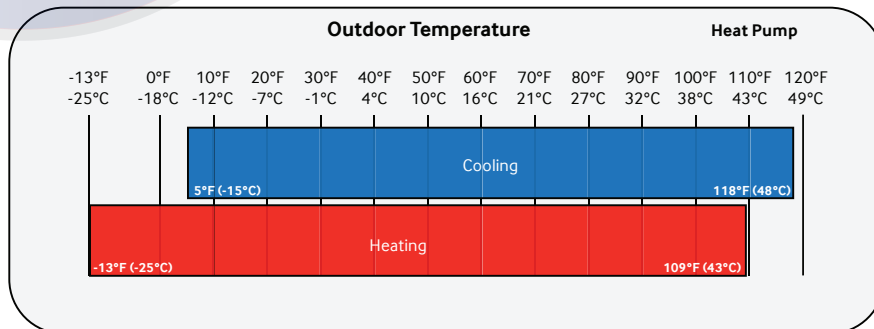
Easy to combine and fit multiple units even when space is limited. It's compact size reduces the time, cost and effort to transport, move and install a system.

- Dimensions: 71"L x 30"W x 67"H per module
- Weight: 959 lbs. per module



Wide Temperature Range

- Cooling operation outdoor temperature range from 5°F (-15°C) to 118°F (48°C)
- Heating operation outdoor temperature range from -13°F (-25°C) to 108°F (43°C)



Please refer to the Technical Data Book and installation manual for full details of operating ranges. Optional settings to automatically adjust leaving water temperature based on outdoor ambient temperature or indoor ambient temperature.

Operation Patterns

The DVM Chiller features three operational patterns. Patterns include standard, rotation and efficiency.

Flash Injection Technology

The DVM Chiller features flash injection compressor technology that increases heating performance with a two-phase refrigerant that is activated during heating mode in low ambient conditions.

*When using brine solutions. Please see technical data book or installation manual.
 **Optional settings to automatically adjust leaving water temperature based on outdoor ambient temperature or indoor ambient temperature.
 DVM-Pro software is required to properly design DVM S systems. DVM-Pro design software is available for download on SamsungHVAC.com.
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Controls and Accessories

(sold separately)

Optional Fan Coil Unit (FCU) Control Kits and Fan Coil Interface Modules are available to control and integrate third-party fan coil units to Samsung central and local controls.



MCM-A00UN

Module Controller

- Required to operate the DVM Chiller
- DVM Chiller ON/OFF control (module/group)
- Operation mode, water outlet temperature setting
- Optional operation setting, module/group setting
- Weekly operation schedule setting



MIM-F00N

FCU Control Kit

- Communication and control interfacing kit between 3rd party fan coil unit and Samsung control system
- Requires MIM-F10N Interface Module
- Compatible with MWR-SH11UN, MWR-WE13UN and MWR-WG00UN wired controllers
- Provides external contact input
- Output control signal for fan coil unit fan/water valve

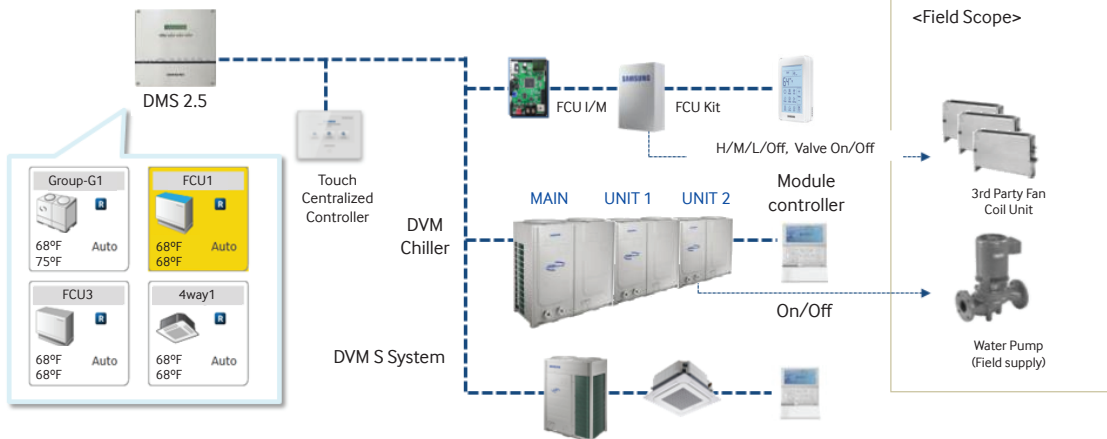


MIM-F10N

FCU Interface Module

- Communication interface module between FCU Control Kit and upper-level controller
- Used with MIM-F00N FCU Control Kits
- Supports FCU Kit only
- Maximum connection of 16 FCU Control Kits

DVM Chiller Integrated System



Central Controls

Samsung's Data Management Server (DMS) lets you monitor and control your on-site air conditioning needs remotely. It's the easiest and most convenient way to manage a large number of air conditioning units at once.

DMS 2.5:

- 24-hour standalone web-server
- No special software required
- All management functions integrated
- Heat pump auto changeover logic
- DMS 2.5 + BACnet and LonWorks available
- BACnet and LonWorks gateways will wire and setup the same as DMS 2.5

Additional control options available. Please refer to SamsungHVAC.com for all control options, features and specifications.



DMS 2.5
MIM-D01AUN



DVM Chiller

SPECIFICATIONS - 120,000 | 168,000 | 120,000

MODEL	OUTDOOR UNIT		AG010KSVAFH/AA	AG015KSVAFH/AA	AG010KSVAJH/AA	
TONS	NOMINAL		10	15	10	
PERFORMANCE	CAPACITY	COOLING	AMBIENT: 95.0°F (35.0°C) ENTERING TEMPERATURE: 54.0°F (12.2°C) LEAVING TEMPERATURE: 44.0°F (6.6°C)	120,000 Btu/h	168,000 Btu/h	120,000 Btu/h
		HEATING (DRY / WET BULB: 47.0/43.0°F, 8.3/6.1°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	128,000 Btu/h	182,000 Btu/h	128,000 Btu/h
			LEAVING TEMPERATURE: 120.0°F (48.9°C)	120,000 Btu/h	171,000 Btu/h	120,000 Btu/h
		HEATING (DRY / WET BULB: 17.0/15.0°F, -8.3/-9.4°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	84,000 Btu/h	90,000 Btu/h	84,000 Btu/h
	LEAVING TEMPERATURE: 120.0°F (48.9°C)		80,000 Btu/h	85,000 Btu/h	80,000 Btu/h	
	EER		11.20	10.10	11.20	
	COP	HEATING (DRY / WET BULB: 47.0/43.0°F, 8.3/6.1°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	3.84	3.52	3.84
			LEAVING TEMPERATURE: 120.0°F (48.9°C)	3.05	2.87	3.05
		HEATING (DRY / WET BULB: 17.0/15.0°F, -8.3/-9.4°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	2.20	2.20	2.20
			LEAVING TEMPERATURE: 120.0°F (48.9°C)	1.85	1.90	1.85
IPLV		20.50	18.80	20.50		
POWER	VOLTAGE	ø / V / Hz	3 / 208 - 230 / 60	3 / 208 - 230 / 60	3 / 460 / 60	
	MAX. BREAKER		70.0 A	90.0 A	30.0 A	
	MIN. CIRCUIT AMPACITY		52.0 A	70.0 A	24.0 A	
DIMENSIONS	W X H X D		70 11/16 X 66 3/4 X 30 1/8 in.	70 11/16 X 66 3/4 X 30 1/8 in.	70 11/16 X 66 3/4 X 30 1/8 in.	
	WEIGHT		959 lbs.	959 lbs.	959 lbs.	
SOUND PRESSURE LEVEL	OUTDOOR		60 dB(A)	62 dB(A)	60 dB(A)	
OPERATING WATER TEMPERATURE	COOLING	STANDARD	41.0 - 77.0°F (5.0 - 25.0°C)	41.0 - 77.0°F (5.0 - 25.0°C)	41.0 - 77.0°F (5.0 - 25.0°C)	
		WHEN USING BRINE	14.0 - 77.0°F (-10.0 - 25.0°C)	14.0 - 77.0°F (-10.0 - 25.0°C)	14.0 - 77.0°F (-10.0 - 25.0°C)	
	HEATING		77.0 - 131.0°F (25.0 - 55.0°C)	77.0 - 131.0°F (25.0 - 55.0°C)	77.0 - 131.0°F (25.0 - 55.0°C)	
OPERATING AMBIENT TEMPERATURE	COOLING		5.0 - 118.0°F (-15.0 - 47.8°C)	5.0 - 118.0°F (-15.0 - 47.8°C)	5.0 - 118.0°F (-15.0 - 47.8°C)	
	HEATING		-13.0 - 109.0°F (-25.0 - 42.8°C)	-13.0 - 109.0°F (-25.0 - 42.8°C)	-13.0 - 109.0°F (-25.0 - 42.8°C)	
WATER SIDE HEAT EXCHANGER	CONNECTION TYPE		50A Cut Groove	50A Cut Groove	50A Cut Groove	
	QUANTITY		2	2	2	
	WATER FLOW (GPM) (COOLING / HEATING)	MIN.		15.8 / 15.8	16.8 / 16.8	15.8 / 15.8
		NOMINAL		24.0 / 24.0	33.6 / 33.6	24.0 / 24.0
		MAX.		48.0 / 48.0	67.2 / 67.2	48.0 / 48.0
MIN. WATER SYSTEM VALUE		72 gal.	100.8 gal.	72 gal.		
REFRIGERANT	TYPE		R410A	R410A	R410A	
	FACTORY CHARGE		40 lbs.	40 lbs.	40 lbs.	
COMPRESSOR	TYPE		Inverter Driven Scroll (2)	Inverter Driven Scroll (2)	Inverter Driven Scroll (2)	
CONDENSER FAN	FAN	TYPE	Propeller (2)	Propeller (2)	Propeller (2)	
		CFM (MAX.)	12,855	12,855	12,855	
	MOTOR	TYPE	BLDC	BLDC	BLDC	
		OUTPUT	630 W X 2	630 W X 2	630 W X 2	
	MAX. EXTERNAL STATIC PRESSURE		0.32 in. WC	0.32 in. WC	0.32 in. WC	
ACCESSORIES	FAN COIL UNIT (FCU) CONTROL KIT		MIM-F00N	MIM-F00N	MIM-F00N	
	FAN COIL UNIT (FCU) INTERFACE MODULE		MIM-F10N	MIM-F10N	MIM-F10N	
	WIRED CONTROLLER		MCM-A00UN	MCM-A00UN	MCM-A00UN	



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Intertek

DVM Chiller design software is available at www.samsunghvac.com.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

DVM Chiller

SPECIFICATIONS - 168,000

MODEL	OUTDOOR UNIT		AG015K5VAJH/AA	
TONS	NOMINAL		15	
PERFORMANCE	CAPACITY	COOLING	AMBIENT: 95.0°F (35.0°C) ENTERING TEMPERATURE: 54.0°F (12.2°C) LEAVING TEMPERATURE: 44.0°F (6.6°C)	168,000 Btu/h
		HEATING (DRY / WET BULB: 47.0/43.0°F, 8.3/6.1°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	182,000 Btu/h
			LEAVING TEMPERATURE: 120.0°F (48.9°C)	171,000 Btu/h
		HEATING (DRY / WET BULB: 17.0/15.0°F, -8.3/-9.4°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	90,000 Btu/h
	LEAVING TEMPERATURE: 120.0°F (48.9°C)		85,000 Btu/h	
	EER			10.10
	COP	HEATING (DRY / WET BULB: 47.0/43.0°F, 8.3/6.1°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	3.52
			LEAVING TEMPERATURE: 120.0°F (48.9°C)	2.87
		HEATING (DRY / WET BULB: 17.0/15.0°F, -8.3/-9.4°C)	LEAVING TEMPERATURE: 105.0°F (40.5°C)	2.20
			LEAVING TEMPERATURE: 120.0°F (48.9°C)	1.90
IPLV			18.80	
POWER	VOLTAGE	ø / V / Hz	3 / 460 / 60	
	MAX. BREAKER		50.0 A	
	MIN. CIRCUIT AMPACITY		40.0 A	
DIMENSIONS	W X H X D	70 11/16 X 66 3/4 X 30 1/8 in.		
	WEIGHT	959 lbs.		
SOUND PRESSURE LEVEL	OUTDOOR	62 dB(A)		
OPERATING WATER TEMPERATURE	COOLING	STANDARD	41.0 - 77.0°F (5.0 - 25.0°C)	
	HEATING	WHEN USING BRINE	14.0 - 77.0°F (-10.0 - 25.0°C) 77.0 - 131.0°F (25.0 - 55.0°C)	
OPERATING AMBIENT TEMPERATURE	COOLING	5.0 - 118.0°F (-15.0 - 47.8°C)		
	HEATING	-13.0 - 109.0°F (-25.0 - 42.8°C)		
WATER SIDE HEAT EXCHANGER	CONNECTION TYPE		50A Cut Groove	
	QUANTITY		2	
	WATER FLOW (GPM) (COOLING / HEATING)	MIN.	16.8 / 16.8	
		NOMINAL	33.6 / 33.6	
		MAX.	67.2 / 67.2	
MIN. WATER SYSTEM VALUE		100.8 gal.		
REFRIGERANT	TYPE		R410A	
	FACTORY CHARGE		40 lbs.	
COMPRESSOR	TYPE		Inverter Driven Scroll (2)	
CONDENSER FAN	FAN	TYPE	Propeller (2)	
		CFM (MAX.)	12,855	
	MOTOR	TYPE	BLDC	
		OUTPUT	630 W X 2	
	MAX. EXTERNAL STATIC PRESSURE		0.32 in. WC	
ACCESSORIES	FAN COIL UNIT (FCU) CONTROL KIT		MIM-F00N	
	FAN COIL UNIT (FCU) INTERFACE MODULE		MIM-F10N	
	WIRED CONTROLLER		MCM-A00UN	



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A large, semi-transparent watermark of the Samsung logo is positioned on the left side of the page. It features the characteristic 'S' shape with a dark red upper curve and a dark blue lower curve.

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