SAMSUNG

SUBMITTAL MCU-S6NEK3N

age 1 of 2
age 1 of 2

Samsung DVM S Series, Mode Control Unit (MCU)

Job Name	
Purchaser	
Submitted to	
Unit Designation	

Specifications					
Power	Voltage	(ø/V/Hz)	1 / 208-230 / 60		
	Max Current	A	1.6		
	Rated Controller Current	A	0.3		
	Minimum Circuit Ampacity	A	2		
	Max. Breaker	MOP (A)	15		
Capacity	Movimum Ptu/h	MCU total ¹	76,000		
		Each Port ¹	≤ 19,000 ¹		
	Number of Ports		6		
	Quantity of Connectable Indoor Units ²		1 - 18		
Piping Connections (inches)	Inlet Pipes From ODU / Outlet Pipes To Other MCU's	Liquid (braze)	3/8		
		Suction (braze)	3/4		
		HP Gas (braze)	5/8		
	To Indoor Unito	Liquid (braze)	1/4 X 6		
		Suction (braze)	1/2 X 6		
Sound Level	Standard Operation	High dB (A)	36		
	Mode Switching	High dB (A)	50		
Unit Dimensions	WXHXD	Inches	28 11/16 X 7 13/16 X 18 7/16		
	Weight	lbs.	53.58		
Safety Certifications			ETL (UL 1995)		

¹ If connecting an indoor unit > 19,000 Btu/h and ≤ 48,000 Btu/h, 2 consecutive ports must be twinned using Y-Joint part numbers DB96-23143A (liquid line) and DB96-23144A (suction line). Y-Joints are purchased separately. ² Maximum of 3 indoor units allowed on a single port. Twinned ports cannot connect to multiple indoor units. Please use DVM Pro design software for system design.

Accessory Y-Joint - Combining Two Ports



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

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Location Engineer Reference Approval Construction Schedule #

- · Compatible with Samsung DVM S Heat Recovery (AM****X***R/AA, AM****X***R2AA, AM0**NXMDCR/AA) systems only.
- · Allows for simultaneous heating and cooling on a single system.
- · Serial connection capability to supply refrigerant to other MCU's thus reducing Y-joint installation quantity (see example below).
- The MCU shall have pressure equalization valves (480 steps) to reduce refrigerant sounds during mode changing of connected indoor units.
- · Using solenoid valves, the MCU shall control the path of refrigerant to the indoor unit(s) based on the mode of operation required.
- · The unit shall contain internal subcoolers with an electronic expansion valve to maximize performance of connected units and reduce refrigerant sounds
- If connecting an indoor unit > 19,000 Btu/h and \leq 48,000 Btu/h, 2 consecutive ports must be twinned.
- . The MCU must be mounted indoors, level, with the pipes running horizontally in and out of unit.
- No drain connection required

Construction

- Galvanized steel cabinet
- · Most internal devices can be serviced via bottom panel. The PCB and wiring is accessible from the back.

Controls

- The unit shall be operated via a DDC type signal
- · Control wiring shall be 16 AWG X 2 shielded wire
- · Supports auto-addressing

Outdoor unit can only connect to one specific side of HR Change (TOP) (TOP) MCU-S6NEK3N Series connection



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Connection Example

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