

All communication wiring is 18/2 Stranded. Shielding is not required.

Outdoor Units

Nominal Capacity	SEER2	EER2	HSPF2	Min/Max Connections	Model Number	Pipe Connections	Max Lift (ft.)	Min Line Length (ft.) (Actual)	Change to Max Line Length (ft.) (Actual)	Factory Charge (LBS.)	MCA ODU Only	MOP ODU Only	Rec. Breaker	Rated Cooling / Heating	Operating Range	AHRI Number	Outdoor Dimensions
Standard Heating Models (SYSTEM PERFORMANCE Non-Ducted/Ducted/Mixed Indoor Units)							Single Zone Piping Rules										
36,000	23.5 / 18 / 20.75	14.5 / 12.5 / 13.5	9.8 / 9.1 / 9.45	1/7	GMV-V36WL/NhC-T(U)	3/8x5/8	164/131	10	213	8.6	36	40	40	36,000 / 45,000	-22 - 129°F	217123443 217123424 217127984	3 / 4 / 5 Ton 35-3/8 x 53 x 13-3/8 (W/H/D) 
48,000	23.5 / 18 / 20.75	13.5 / 11.7 / 12.6	9 / 8.8 / 8.9	1/8	GMV-V48WL/NhC-T(U)	3/8x5/8	164/131	10	213	8.6	38	40	40	48,000 / 54,000	-22 - 129°F	217123444 217123425 217127985	
60,000	22.5 / 17.5 / 20	10.5 / 9.5 / 10	9.2 / 8.7 / 8.95	1/10	GMV-V60WL/NhC-T(U)	3/8x5/8	164/131	10	213	8.6	39	40	40	60,000 / 64,500	-22 - 129°F	216772249 216772305 217115272	
							ODU Above/ ODU Below				*The units carry dual ratings. The outdoor unit can be used to provide power to the IDU (s) using the factory supplied terminal block in the ODU. If utilized the MOP would be 60A						

Common Indoor Units

Wall Mount	Compact Cassette	Standard Cassette	One Way Cassette	Slim Ducted	Multi Position Air Handler		
					AHU Models		Electric Heater Kit Models
GMV-ND06G/NhA1C-T(U)	GMV-ND05T/NhE-T(U)	GMV-ND24T/NhD-T(U)	GMV-ND07TD/NhA-T(U)	GMV-ND07PHS/NhD-T(U)	GMV-ND09A/NhB-T(U)		Reference product submittal for Electric Heater Kit size requirements
GMV-ND07G/NhA1C-T(U)	GMV-ND07T/NhE-T(U)	GMV-ND30T/NhD-T(U)	GMV-ND09TD/NhA-T(U)	GMV-ND09PHS/NhD-T(U)	GMV-ND12A/NhB-T(U)		
GMV-ND09G/NhA1C-T(U)	GMV-ND09T/NhE-T(U)	GMV-ND36T/NhD-T(U)	GMV-ND12TD/NhA-T(U)	GMV-ND12PHS/NhD-T(U)	GMV-ND18A/NhB-T(U)		
GMV-ND18G/NhA1C-T(U)	GMV-ND12T/NhE-T(U)	GMV-ND42T/NhD-T(U)		GMV-ND18PHS/NhD-T(U)	GMV-ND24A/NhB-T(U)		
GMV-ND18G/NhA1C-T(U)	GMV-ND15T/NhE-T(U)	GMV-ND48T/NhD-T(U)		GMV-ND24PHS/NhD-T(U)	GMV-ND30A/NhB-T(U)		
GMV-ND24G/NhA1C-T(U)	GMV-ND18T/NhE-T(U)			GMV-ND36PHS/NhD-T(U)	GMV-ND36A/NhB-T(U)		LYQ-08-A/ECOHTR05KW LYQ-08-C/ECOHTR10KW LYQ-08-D/ECOHTR15KW LYQ-08-E/ECOHTR20KW
				GMV-ND48PHS/NhD-T(U)	GMV-ND42A/NhB-T(U)		
				GMV-ND54PHS/NhD-T(U)			
					GMV-ND60A/NhB-T(U)		
	Compact Grille	Standard Grille	One Way Grille				
	TF05	TF06	TD01				

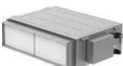
Combination Rules

Outdoor Unit Model	Max IDU Connected	Min IDU Connected Capacity (BTU) (50%)*	Max IDU Connected Capacity (BTU) (125%)*	
GMV-V36WL/NhC-T(U)	7	18000	45000	Use the MultiPRO Selector software available at GreeComfort.com for systems using multiple Y-Branches, multiple headers, or combinations of Y-Branches and Headers. See "Basic Piping Rules Defined" below. *For systems above 125%, the MultiPRO Selector software must be used.
GMV-V48WL/NhC-T(U)	8	24000	60000	
GMV-V60WL/NhC-T(U)	10	30000	75000	

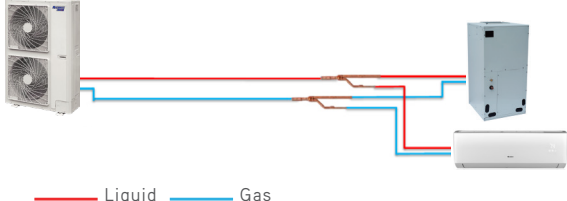
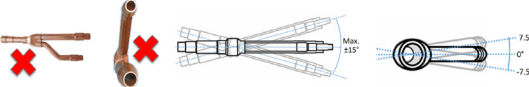
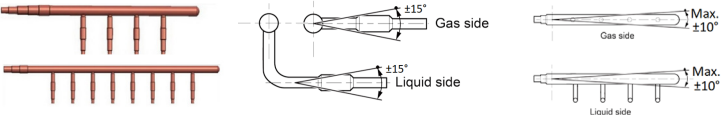
Control Options

	Wireless remote control (Included with Ductless Units).		Included with Multiposition Air Handler, ducted unit, and optional for Others. Controller with 7-day programmable function, Max.		Enables centralized local control. Can control and monitor up to 16 MultiPRO systems with up to 255 indoor units. Expanded option also available. Enables 7-Day programming, grouping, and function lockout.		ME32-33/H 24V And Dry Contact Adaptor Use with a 1-Heat, 1-Cool Third Party Conventional Thermostat ME32-23/H 24V And Dry Contact Adaptor Use with a 2-Heat, 1-Cool Third Party Heat Pump Thermostat	Enables the use of third-party 24V thermostat and other control systems that utilizes dry contacts.
YAP1F		XE7C-23/H	Able to connect up to 16 IDU's.	CE52-24/F Central Controller				

Accessories

	Enables remote monitoring and control of MultiPRO systems with up to six indoor units via a plug-and-play device and iocControl app for smartphones.		Enables remote monitoring and control of up to 16 MultiPRO systems with up to 32 indoor units via a plug-and-play device and iocControl app for smartphones. Provides local BMS integration via BACnet IP/MSTP and/or Modbus RTU/TCP and Home Automation via Modbus IP/RTY/ASCII/Rest API		Enables remote monitoring and control of up to 16 MultiPRO systems with up to 255 indoor units via a plug-and-play device and iocControl app for smartphones. Provides local BMS integration via BACnet IP/MSTP and/or Modbus RTU/TCP and Home Automation via Modbus IP/RTY/ASCII/Rest API		Enables remote monitoring and control of MultiPRO systems via a plug-and-play device and iocControl app for smartphones. Each controlled indoor unit requires one CoolPlug. Up to 16 IDU/CoolPlugs can connect to a CoolLinkHub.
	Multi-Position Air Handler and Downflow Applications Downflow capable, no kit required		Provides superior air filtration with low static pressure losses. For use with the following models and their corresponding, compatible filter boxes:				
			GFBHS-2	GMV-ND(07,09, 12, 15, 18, 24) PHS/NhD-T(U)			
			GFBHS-3	GMV-ND(30, 36, 42, 48, 54) PHS/NhD-T(U)			

Refrigerant Piping Installation Guidelines & Descriptions

Refrigerant Piping - Heat Pump has two pipes, liquid and gas - Both must be insulated - System mode is set by a user-determined main indoor unit - Twenty inches must be maintained between elbows, headers, and Y-Branched  — Liquid — Gas	Y-Branches - Specially designed for even distribution of refrigerant - Each kit includes one Y-Branch for gas and one Y-Branch for liquid - Simply use a tubing cutter for larger line sets - If installed horizontally, they must be level - If installed vertically, they must be plumb - FQ01A/A is used for downstream capacities of less than 68kBtu - FQ01B/A is used for downstream capacities of more than 68kBtu 	Headers - Specially designed for even distribution of refrigerant and oil - Each kit includes one Header for gas and one Header for liquid - Simply use a tubing cutter for larger line sets - Must be installed horizontally and they must be level - Liquid header is built with downward facing offset for installation next to gas header - FQ14/H1 is used for 4 units or less - FQ18/H1 is used for 8 units or less 
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Basic Piping Rules Defined

Note: The following is a basic set of rules for piping lengths. The MultiPRO systems are capable of far greater lengths and more complex configurations. Use our MultiPRO System Builder, MultiPRO Selector, or see the installation manual for more details.

SINGLE ZONE

Single Zone Piping Limits	3, 4, and 5T
	Ultra
Max Length ODU to IDU: (Actual)	213'
Max Height ODU Above IDU:	164'
Max Height ODU Below IDU:	131'

Single Zone MultiPRO		
The piping sizes are determined by ODU		
Model	Liquid	Gas
3 Ton Outdoor Unit	3/8"	5/8"
4 Ton Outdoor Unit	3/8"	5/8"
5 Ton Outdoor Unit	3/8"	5/8"

If necessary, reduce the piping size at the indoor unit

DUAL AND MULTIZONE

Dual/Multi Zone Piping Limits	3, 4, 5T
Max Length ODU to Y-Branch or Header:	98'
Max Length IDU to Y-Branch or Header:	50'
Max Height ODU Above IDU:	98'
Max Height ODU Below IDU:	98'

Note: these are basic limitations. Actual limitations are far greater. Use MultiPRO System Builder, MultiPRO Selector, or see installation manuals for more details.

Dual and Multi Zone MultiPRO		
Model	Liquid	Gas
5 to 12kBtu	1/4"	3/8"
14 to 24kBtu	1/4"	1/2"
30 to 60kBtu	3/8"	5/8"

This guide is to be used for reference only and is not intended to replace the Installation Instructions or the design software. Always read and follow the software outputs and the Installation Instructions.