

EG4



EG4[®] MULTI-ZONE MINI-SPLIT

Design and Sizing Document

EG4® MULTI-ZONE MINI-SPLIT

Compressor (Outdoor) Units

Engineered to deliver efficient heating and cooling from multiple power sources, the EG4 Multi-Zone Mini-Split product family is a DIY friendly whole-home climate control solution.

EG4 Multi-Zone Mini-Splits are offered in two capacities – 24,000 BTU and 36,000 BTU – based on the outdoor compressor unit. Depending on the capacity of the outdoor condenser unit multiple indoor air handlers, each cooling or heating a unique zone, of varying capacities can be supported.

Available Outdoor Compressor Units



Compressor Size	SKU	Minimum Zones Required	Maximum Zones Supported
24,000 BTU	EG4MSMZHYB24ODV1	2	3
36,000 BTU	EG4MSMZHYB36ODV1	2	4

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Air Handler (Indoor) Units

EG4 Multi-Zone Mini-Splits support three different sizes of indoor air handlers. Air handlers should be sized according to the size of the indoor space being heated or cooled. An improperly sized system can lead to inadequate temperature control or low unit efficiencies.

Available Air Handler Units



Air Handler Size	SKU	Recommended Room Size*	Room Examples
12,000 BTU	EG4MSMZHYB12IDV1	300 – 500 ft ²	Bedrooms
18,000 BTU	EG4MSMZHYB18IDV1	600-800 ft ²	Living Rooms Kitchens
24,000 BTU	EG4MSMZHYB24IDV1	1,000 – 1,250 ft ²	Garages Shops

*Heat load calculation recommender for most accurate sizing

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System Combinations

EG4 Multi-Zone Mini-Splits unlock full home climate control, with a single compressor unit heating and cooling up to 4 zones in the home and up to 2,000 ft², depending on the climate.

The following table shows the available combinations between compressor units and air handlers.

Compressor Size	Air Handler Qty	Air Handler Supported Combos
24,000 BTU	2	12K 12K 12K 18K* 18K 18K*
	3	12K 12K 12K*
36,000 BTU	2	12K 12K 12K 18K 12K 24K 18K 18K 18K 24K*
	3	12K 12K 12K 12K 12K 18K* 12K 12K 24K*
	4	12K 12K 12K 12K* 12K 12K 12K 18K*

* Where total air handler capacity is greater than compressor capacity, the total heating or cooling capacity across all zones will be the available capacity of the compressor unit.

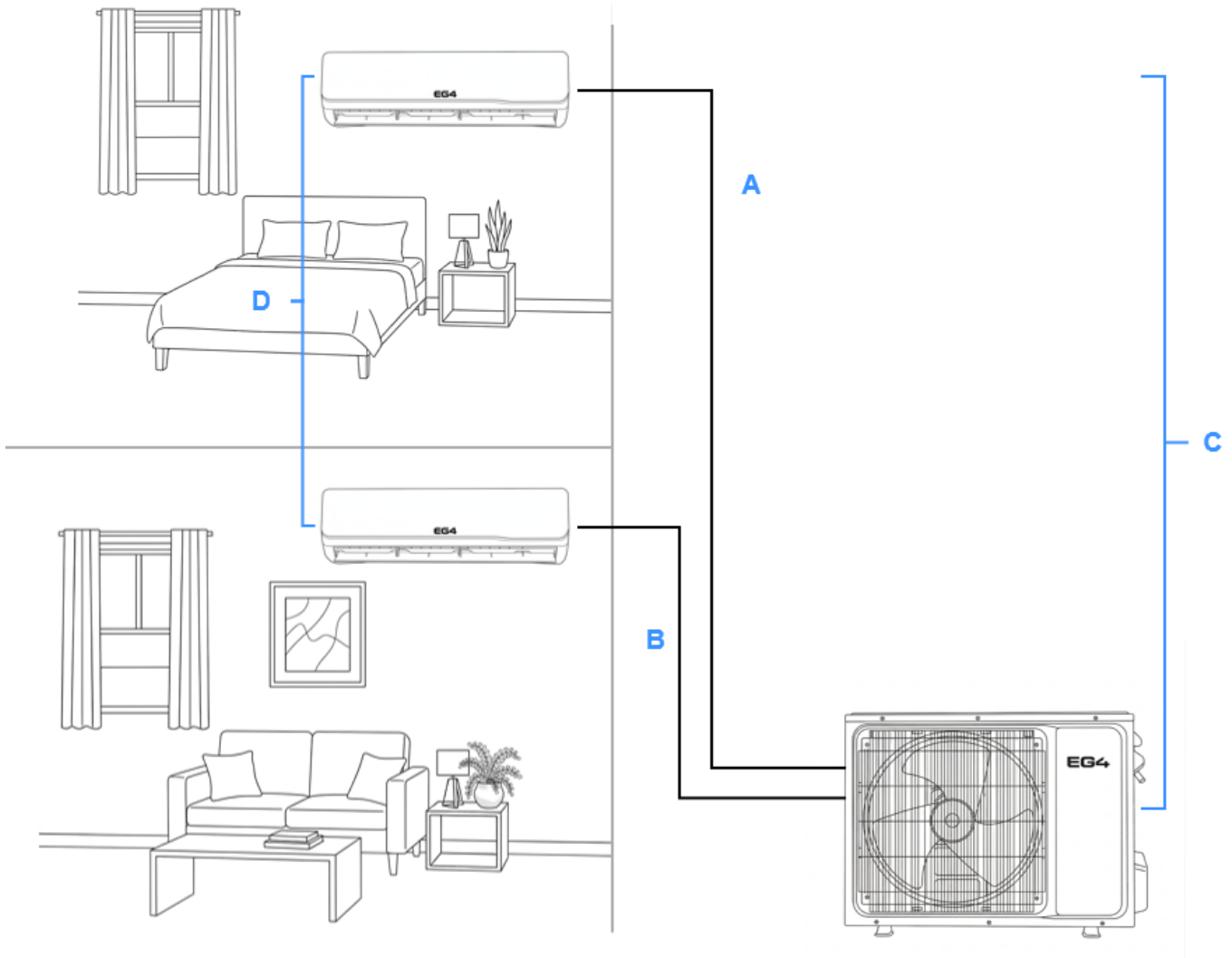
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Line Sets and Communication Cables

Due to the various combinations available with Multi-Zone Mini-Splits, pre-charged line sets are sold separately from other system components. Line sets come pre-charged and are sold in lengths of 16 and 26 ft. To ensure the correct amount of refrigerant, separate line sets are used with the 12K BTU air handler compared to the 18K BTU and 24K BTU air handlers. Where necessary, multiple line sets can be combined to achieve the required length of line required between the compressor and air handler.

Communications Cables between the compressor and air handlers are offered in 30 ft and 50 ft lengths. Similar to the line-sets, these cables can be combined to extend the total line length as necessary.

SKU	Description	Air Handler(s) Supported	Length	Diameter
EG4MSR32LS16FT38	Pre-Charged Line Set 16 ft. 3/8 in.	12K	16 ft	3/8"
EG4MSR32LS26FT38	Pre-Charged Line Set 26 ft. 3/8 in.	12K	26 ft	3/8"
EG4MSR32LS16FT12	Pre-Charged Line Set 16 ft. 1/2 in.	18K 24K	16 ft	1/2"
EG4MSR32LS26FT12	Pre-Charged Line Set 26 ft. 1/2 in.	18K 24K	26 ft	1/2"
EG4MSCOMM30FT	Communication Cable, 30ft	All	30 ft	-
EG4MSCOMM50FT	Communication Cable, 56ft	All	56 ft	-



Label	Description	Max Length (Compressor Size)	
		24,000 BTU	36,000 BTU
A	Length, Single Line	98 ft	114 ft
A + B + ...	Length, All Lines	196 ft	262 ft
C	Height Difference, Compressor and Air Handlers	49 ft	
D	Height Difference, Air Handlers	32 ft	

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