

R22 REPLACEMENT TECHNOLOGY PIPING SPECIFICATION

Existing piping connection with different diameter gas and liquid line is possible using the criteria detailed below

Liquid Pipe Size in" or mm		1/4 - 6.4 (STD)				3/8 - 9.5 (1-size larger)			
		3/8 - 9.5 (STD)		1/2 - 12.7 (1-size larger)		3/8 - 9.5 (STD)		1/2 - 12.7 (1-size larger)	
Gas Pipe Size in" or mm		Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged
		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
RAV-DI Series 4	SM30*	20	15	20	15	13	7.5	13	7.5

Liquid Pipe Size in" or mm		1/4 - 6.4 (STD)				3/8 - 9.5 (1-size larger)					
		3/8 - 9.5 (1-size smaller)		1/2 - 12.7 (STD)		5/8 - 15.9 (1-size larger)		1/2 - 12.7 (STD)		5/8 - 15.9 (1-size larger)	
Maximum Pipe Distance		Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged
		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
RAV-DI Series 4	SM40*	20	15	20	15	20	15	13	7.5	13	7.5
	SM56*			30	20	30	20	20	10	20	10
RAV-SDI Series 4	SP40*	30	20	30	20	30	20	20	10	20	10
	SP56*			50	20	50	20	20	10	20	10

Liquid Pipe Size in" or mm		1/4 - 6.4 (1-size smaller)				3/8 - 9.5 (STD)				1/2 - 12.7 (1-size larger)					
		1/2 - 12.7 (1-size smaller)		5/8 - 15.9 (STD)		1/2 - 12.7 (1-size smaller)		5/8 - 15.9 (STD)		3/4 - 19.1 (1-size larger)		5/8 - 15.9 (STD)		3/4 - 19.1 (1-size larger)	
Maximum Pipe Distance		Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged
		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
RAV-DI Series 4	SM80*	20	20	20	20	30	20	30	20	30	20				
	SM110*							50	30	50	30	25	15	25	15
	SM140*							50	30	50	30	25	15	25	15
RAV-DI Series 3	SM160*							50	30	50	30	25	15	25	15
RAV-SDI Series 4	SP80*	30	20	30	20	50	30	50	30	50	30				
	SP110*							75	30	75	30	25	15	25	15
	SP140*							75	30	75	30	25	15	25	15

Liquid Pipe Size in" or mm		1/2 - 12.7 (STD)				5/8 - 15.9 (1-size larger)			
		7/8 - 22.2 (1-size smaller)		1 1/8 - 28.6 (STD)		7/8 - 22.2 (1-size smaller)		1 1/8 - 28.6 (STD)	
Maximum Pipe Distance		Length	Pre-charged	Length	Pre-charged	Length	Pre-charged	Length	Pre-charged
		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
RAV-DI Series 4	SM224*	70	30	70	30	50	20	50	20
	SM280*	70	30	70	30	50	20	50	20

Common Refrigerants For Existing Plant
R12
R134A
R22
R404A
R407C
R417A

Smaller Pipe Sizes (Performance capacity is reduced due to the effect of gas pipe size being smaller than standard connection)

Normal Pipe Sizes

Larger Pipe Sizes

Not Compatible