

DUCTLESS ROOM SIZE REQUIREMENTS



UALS01A
Ductless Refrigerant
Detection Sensor
(RDS)

Building codes and industry standards have been updated to include safety requirements for A2L refrigerants. One of these requirements is the use of a **Refrigerant Detection Sensor (RDS)** in some applications.

The RDS detects leaking refrigerant before it reaches its lower flammability limit. If a leak is detected, the system will shut down the compressor and turn on the indoor fan to disperse the refrigerant. However, not every system requires a leak sensor.

HIGHWALLS



- Installed 6~8 ft from the ground
- If a leak occurs, the concentration of refrigerant is expected to disperse as it falls to the ground
- If the total system charge is over 3.9 lbs, check the minimum room size requirement to see if an RDS is needed (field installation required)
- 2026 Premium highwall models (GS06WP2BEA, GS09WP2BEB, GS12WP2BEB, GS18WP2BEB, GS24WP2BEB) include factory built-in RDS

CASSETTE (1-WAY and 4-WAY)



- Installed in the ceiling
- If a leak occurs, the concentration of refrigerant is expected to evenly disperse as it falls to the ground
- If the charge is over 3.9 lbs, check the minimum room size requirement to see if an RDS is needed (field installation required)
- If the total system charge is over 3.9 lbs, check the minimum room size requirement

CONSOLES



Built-in RDS

- Installed at ground level
- If a leak occurs, the built-in RDS helps ensure refrigerant doesn't stagnate in the floor area

DUCTED



Built-in RDS

- Connected to duct work
- If a leak occurs, the built-in RDS helps ensure refrigerant doesn't stagnate in the duct work



GE APPLIANCES
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AIR&WATER
SOLUTIONS

DUCTLESS ROOM SIZE REQUIREMENTS

UL60335-2-40 Edition 4

Single Zone	System Total Charge	Room Size Restriction and RDS Requirement
	≤ 3.9 lbs (62 oz)	No room size restriction, RDS not required.
	3.9 ~ 8 lbs (62 ~ 128 oz)	Room size restriction applies, but minimum room size requirement remains the same whether a RDS is installed. If you meet the room size requirement, RDS is not required.
	≥ 8 lbs (128 oz)	The installation of a RDS will help increase the minimum room size.

SINGLE ZONE HIGHWALLS



					Lineset Length ≤ 25 ft.	Lineset Length = 50 ft.	Total Charge with Maximum Lineset Length	
Series	Outdoor Model Number	Indoor Model Number	Maximum Line Length ft. / m	Factory Charge oz / lb	with or without RDS	with or without RDS	without RDS	with RDS
Caliber	1G09CB1BEA	GS09WB1BEA	66 / 20	30.3 / 1.9	No Room Size Restriction (RDS not recommended)			
	1G12CB1BEA	GS12WB1BEA	66 / 20	36.5 / 2.3				
	1G09CB2BEA	GS09WB2BEA	66 / 20	36.5 / 2.3				
	1G12CB2BEA	GS12WB2BEA	66 / 20	36.5 / 2.3				
	1G18CB2BEA	GS18WB2BEA	83 / 25	45.9 / 2.9				
	1G24CB2BEA	GS24WB2BEA	165 / 50	67 / 4.2	≥ 77 sq. ft.	≥ 83 sq. ft.	≥ 109 sq. ft.	
Altitude	1G09AD2BEA	GS09WB2BEA	66 / 20	36.5 / 2.3	No Room Size Restriction (RDS not recommended)			
	1G12AD2BEA	GS12WB2BEA	66 / 20	36.5 / 2.3				
	1G15AD2BEA	GS15WB2BEA	66 / 20	50.1 / 3.1				
	1G18AD2BEA	GS18WB2BEA	83 / 25	45.9 / 2.9				
	1G24AD2BEA	GS24WB2BEA	165 / 50	67 / 4.2	≥ 77 sq. ft.	≥ 83 sq. ft.	≥ 109 sq. ft.	
	1G3036AD2BEA	GS30WB2BEA GS36WB2BEA	165 / 50	88.2 / 5.5	≥ 102 sq. ft.	≥ 116 sq. ft.	≥ 225 sq. ft.	≥ 182 sq. ft.
Endure	1G09ED2BEA	GS09WP2BEA	66 / 20	46.6 / 2.9	No Room Size Restriction (RDS not recommended)			
	1G12ED2BEA	GS12WP2BEA	66 / 20	50.1 / 3.1				
	1G18ED2BEA	GS18WP2BEA	83 / 25	58.6 / 3.7	No Room Size Restriction (up to 45 ft. lineset length)	≥ 73 sq. ft.	≥ 81 sq. ft.	
	1G09ED2BEA	GS09WP2BEB	66 / 20	46.6 / 2.9	No Room Size Restriction (Factory built-in RDS)			
	1G12ED2BEA	GS12WP2BEB	66 / 20	50.1 / 3.1				
	1G18ED2BEA	GS18WP2BEB	83 / 25	58.6 / 3.7				
	1G24ED2BEA	GS24WP2BEA/ GS24WP2BEB	165/50	77.7/4.9	≥ 90 sq. ft.	≥ 96 sq. ft.	≥ 121 sq. ft.	
	1G3036ED2BEA	GS30WB2BEA/ GS36WB2BEA	165/50	109.4/6.8	≥ 126 sq. ft.	≥ 140 sq. ft.	≥ 289 sq. ft.	≥ 206 sq. ft.

SINGLE ZONE CASSETTES



Series	Outdoor Model Number	Indoor Model Number	Maximum Line Length ft. / m	Factory Charge oz / lb	Factory Charge (Lineset Length ≤ 25 ft.)	Lineset Length = 50 ft.		Total Charge with Maximum Lineset Length	
					Room Size Requirement	Charge oz / lb	Room Size Requirement	Max Charge oz / lb	Room Size Requirement
Altitude	1G09AD2BEA	US09CB2BEA	66 / 20	36.5 / 2.3	No Room Size Restriction (RDS not recommended)				
	1G12AD2BEA	US12CB2BEA	66 / 20	36.5 / 2.3					
	1G18AD2BEA	US18CB2BEA	83 / 25	45.9 / 2.9					
	1G24AD2BEA	US24LB2BEA	165 / 50	67 / 4.2	≥ 63 sq. ft.	79.5	≥ 75 sq. ft.	137 / 8.6	≥ 129 sq. ft.
	1G3036AD2BEA	US30LB2BEA US36LB2BEA	165 / 50	88.2 / 5.5	≥ 83 sq. ft.	100.7 / 6.3	≥ 95 sq. ft.	158.2 / 9.9	≥ 151 sq. ft.
	1G09AD2BEA	US09AB2BEA	66 / 20	36.5 / 2.3	No Room Size Restriction (RDS not recommended)				
Endure	1G12AD2BEA	US12AB2BEA	66 / 20	36.5 / 2.3					
	1G18AD2BEA	US18AB2BEA	83 / 25	45.9 / 2.9					
	1G09ED2BEA	US09CB2BEA	66 / 20	46.6 / 2.9	No Room Size Restriction (RDS not recommended)				
	1G12ED2BEA	US12CB2BEA	66 / 20	50.1 / 3.1					
	1G18ED2BEA	US18CB2BEA	83 / 25	58.6 / 3.7	No Room Size Restriction (up to 45 ft. lineset length)	63.6 / 4	≥ 60 sq. ft.	70.2 / 4.4	≥ 66 sq. ft.
	1G09ED2BEA	US09AB2BEA	66 / 20	46.6 / 2.9	No Room Size Restriction (RDS not recommended)				
	1G12ED2BEA	US12AB2BEA	66 / 20	50.1 / 3.1					
	1G18ED2BEA	US18AB2BEA	83 / 25	58.6 / 3.7	No Room Size Restriction (up to 45 ft. lineset length)	63.6 / 4	≥ 60 sq. ft.	70.2 / 4.4	≥ 66 sq. ft.
Endure	1G24ED2BEA	US24LB2BEA	165/50	77.7/4.9	≥ 73 sq. ft.	90.2 / 5.6	≥ 85 sq. ft.	147.7 / 9.2	≥ 139 sq. ft.
	1G3036ED2BEA	US30LB2BEA/ US36LB2BEA	165/50	109.4/6.8	≥ 103 sq. ft.	121.9 / 7.6	≥ 115 sq. ft.	179.4 / 11.2	≥ 194 sq. ft.

DUCTLESS ROOM SIZE REQUIREMENTS

UL60335-2-40 Edition 4

SINGLE ZONE CONSOLES



Built-in RDS

				Factory Charge (Lineset Length ≤ 25 ft.)		Total Charge with Maximum Lineset Length	
Series	Outdoor Model Number	Indoor Model Number	Maximum Line Length ft. / m	Factory Charge oz / lb	Room Size Requirement	Max Charge oz / lb	Room Size Requirement
Altitude	1G09AD2BEA	US09FB2BEA	66 / 20	36.5 / 2.3	No Room Size Restriction	44.7 / 2.8	No Room Size Restriction
	1G12AD2BEA	US12FB2BEA	66 / 20	36.5 / 2.3		44.7 / 2.8	
	1G18AD2BEA	US18FB2BEA	83 / 25	45.9 / 2.9		57.5 / 3.6	
Endure	1G09ED2BEA	US09FB2BEA	66 / 20	46.6 / 2.9		54.8 / 3.4	
	1G12ED2BEA	US12FB2BEA	66 / 20	50.1 / 3.1		58.3 / 3.6	
	1G18ED2BEA	US18FB2BEA	83 / 25	58.6 / 3.7		70.2 / 4.4	No Room Size Restriction when lineset length is ≤ 45 ft. Refrigerant lineset length > 45 ft. requires 242 sq. ft. minimum room size.

SINGLE ZONE DUCTED



Built-in RDS

				Factory Charge (Lineset Length ≤ 25 ft.)		Lineset Length = 50 ft.		Total Charge with Maximum Lineset Length	
Series	Outdoor Model Number	Indoor Model Number	Maximum Line Length ft. / m	Factory Charge oz / lb	Room Size Requirement	Charge oz / lb	Room Size Requirement	Max Charge oz / lb	Room Size Requirement
Altitude	1G09AD2BEA	US09MB2BEA	66 / 20	36.5 / 2.3	No Room Size Restriction				
	1G12AD2BEA	US12MB2BEA	66 / 20	36.5 / 2.3					
	1G18AD2BEA	US18MB2BEA	83 / 25	45.9 / 2.9					
	1G24AD2BEA	US24MB2BEA	165 / 50	67 / 4.2	≥ 63 sq. ft.	79.5	≥ 75 sq. ft.	137 / 8.6	≥ 129 sq. ft.
	1G3036AD2BEA	US30MB2BEA US36MB2BEA	165 / 50	88.2 / 5.5	≥ 83 sq. ft.	100.7 / 6.3	≥ 95 sq. ft.	158.2 / 9.9	≥ 151 sq. ft.
Endure	1G09ED2BEA	US09MB2BEA	66 / 20	46.6 / 2.9	No Room Size Restriction				
	1G12ED2BEA	US12MB2BEA	66 / 20	50.1 / 3.1					
	1G18ED2BEA	US18MB2BEA	83 / 25	58.6 / 3.7	No Room Size Restriction (up to 45 ft. lineset length)	63.6 / 4	≥ 60 sq. ft.	70.2 / 4.4	≥ 66 sq. ft.
	1G24ED2BEA	US24MB2BEA	165/50	77.7/4.9	≥ 73 sq. ft.	90.2 / 5.6	≥ 73 sq. ft.	147.7 / 9.2	≥ 139 sq. ft.
	1G3036ED2BEA	US30MB2BEA/ US36MB2BEA	165/50	109.4/6.8	≥ 103 sq. ft.	121.9 / 7.6	≥ 115 sq. ft.	179.4 / 11.2	≥ 169sq. ft.

DUCTLESS ROOM SIZE REQUIREMENTS

UL60335-2-40 Edition 4

In a multi-zone application, each zone's room size requirement should be calculated independently to assess the need for an RDS on each indoor unit. An RDS should only be installed for a zone that needs one.

Multi Zone

System Total Charge	Room Size Restriction and RDS Requirement
≤ 3.9 lbs (62 oz)	No room size restriction, RDS not required.
> 3.9 lbs (62 oz)	The installation of a RDS will help increase the minimum room size.

MULTI-ZONE HIGHWALLS



			Factory Charge			Total Charge with Maximum Lineset Length			
Series	Outdoor Model Number	Factory Charge oz / lb	Maximum Lineset Length w/o Additional Charge ft / m	Room Size Requirement (without RDS)	Room Size Requirement (with factory-built or field installed RDS)	Max Charge oz / lb	Maximum Lineset Length ft. / m	Room Size Requirement (without RDS)	Room Size Requirement (with field-installed RDS)
Altitude	2G18AD2BEA	53 / 3.3	66 / 20	No Room Size Restriction (RDS not recommended)		59.4 / 3.7	98 / 30	No Room Size Restriction (RDS not recommended)	
	3G24AD2BEA	60 / 3.8	100 / 30			79.4 / 5.0	197 / 60	≥ 91 sq. ft.	≥ 75 sq. ft.
	4G36AD2BEA	81 / 5.1	131 / 40	≥ 93 sq. ft.	≥ 76 sq. ft.	100.8 / 6.3	230 / 70	≥ 116 sq. ft.	≥ 95 sq. ft.
Endure	2G20ED2BEA	60 / 3.8	66 / 20	No Room Size Restriction (RDS not recommended)		79.6 / 5.0	164 / 50	≥ 92 sq. ft.	≥ 75 sq. ft.
	3G24ED2BEA	71 / 4.4	100 / 30	≥ 82 sq. ft.	≥ 67 sq. ft.	90.4 / 5.7	197 / 60	≥ 104 sq. ft.	≥ 85 sq. ft.
	4G36ED2BEA	113 / 7.1	131 / 40	≥ 130 sq. ft.	≥ 106 sq. ft.	132.8 / 8.3	230 / 70	≥ 159 sq. ft.	≥ 125 sq. ft.
	5G42ED2BEA	123 / 7.7	164 / 50	≥ 141 sq. ft.	≥ 116 sq. ft.	142.6 / 8.9	262 / 80	≥ 183 sq. ft.	≥ 134 sq. ft.

MULTI-ZONE CASSETTES



Series	Outdoor Model Number	Factory Charge oz / lb	Maximum Lineset Length w/o Additional Charge ft / m	Room Size Requirement	Total Charge with Maximum Lineset Length		
					Max Charge oz / lb	Maximum Line Length ft. / m	Room Size Requirement
Altitude	2G18AD2BEA	53 / 3.3	66 / 20	No Room Size Restriction (RDS not recommended)	59.4 / 3.7	59.4 / 3.7	No Room Size Restriction (RDS not recommended)
	3G24AD2BEA	60 / 3.8	100 / 30		79.4 / 5.0	79.4 / 5.0	≥ 75 sq. ft.
	4G36AD2BEA	81 / 5.1	131 / 40	≥ 76 sq. ft.	100.8 / 6.3	100.8 / 6.3	≥ 95 sq. ft.
Endure	2G20ED2BEA	60 / 3.8	66 / 20	No Room Size Restriction (RDS not recommended)	79.6 / 5.0	79.6 / 5.0	≥ 75 sq. ft.
	3G24ED2BEA	71 / 4.4	100 / 30	≥ 67 sq. ft.	90.4 / 5.7	90.4 / 5.7	≥ 85 sq. ft.
	4G36ED2BEA	113 / 7.1	131 / 40	≥ 106 sq. ft.	132.8 / 8.3	132.8 / 8.3	≥ 125 sq. ft.
	5G42ED2BEA	123 / 7.7	164 / 50	≥ 116 sq. ft.	142.6 / 8.9	142.6 / 8.9	≥ 134 sq. ft.

MULTI-ZONE CONSOLES AND DUCTED



Built-in RDS

Series	Outdoor Model Number	Factory Charge oz / lb	Maximum Lineset Length w/o Additional Charge ft / m	Room Size Requirement	Total Charge with Maximum Lineset Length		
					Max Charge oz / lb	Maximum Line Length ft. / m	Room Size Requirement
Altitude	2G18AD2BEA	53 / 3.3	66 / 20	No Room Size Restriction	59.4 / 3.7	98 / 30	No Room Size Restriction
	3G24AD2BEA	60 / 3.8	100 / 30		79.4 / 5.0	197 / 60	≥ 75 sq. ft.
	4G36AD2BEA	81 / 5.1	131 / 40	≥ 76 sq. ft.	100.8 / 6.3	230 / 70	≥ 95 sq. ft.
Endure	2G20ED2BEA	60 / 3.8	66 / 20	No Room Size Restriction	79.6 / 5.0	164 / 50	≥ 75 sq. ft.
	3G24ED2BEA	71 / 4.4	100 / 30	≥ 67 sq. ft.	90.4 / 5.7	197 / 60	≥ 85 sq. ft.
	4G36ED2BEA	113 / 7.1	131 / 40	≥ 106 sq. ft.	132.8 / 8.3	230 / 70	≥ 125 sq. ft.
	5G42ED2BEA	123 / 7.7	164 / 50	≥ 116 sq. ft.	142.6 / 8.9	262 / 80	≥ 134 sq. ft.