

Viega Heating and Cooling Radiant Controlled Auto-Balancing System



Simple control for multiple zones

The Radiant Auto-Balancing System (RABS) gives users the ability to independently control each zone in a radiant heating system. Balancing valves are not required and installers can commission as many as eight thermostats and 12 circuits per control unit. With a web app-enabled user control, managing the system anywhere in the world is easy. RABS achieves the desired temperature in each zone by analyzing the supply water temperature, each circuit's return temperature and zone air temperatures where a thermostat is used. The system offers four different operation methods that complement each other. The user can control zones through power levels, thermostats and operation software. A local device can access the web app or it can be accessed remotely via the internet.



Connected in quality.



viega

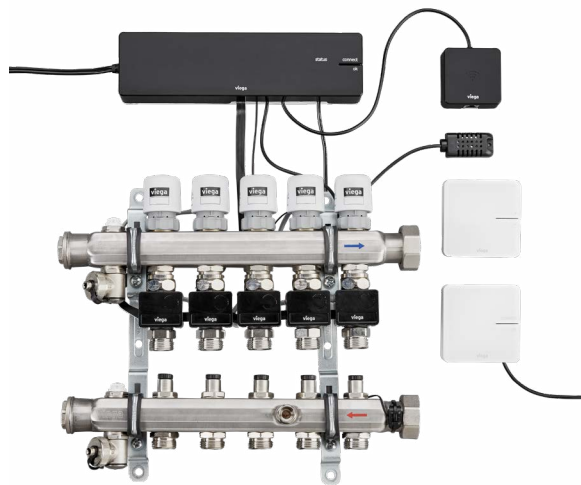
Radiant Controlled Auto-Balancing System

Features and benefits:







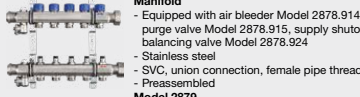




- Manual hydraulic calibration is not required
- Reduce contractor installation time
- Attractive wireless thermostats
- Zone management via ΔT feedback
- Pump/boiler relay connections
- Constant analysis enables automatic hydraulic balancing
- Compensates for inconsistencies and imperfections like:
 - Different circuit lengths or tube sizes
 - Varying installation clearances or tube depths/spacing
 - Change of floor coverings, rugs, furniture, etc.
 - Fluctuating supply temperatures, outdoor temperatures or external heat sources
- Prioritization of individual zones
- Custom temperature limits for each thermostat
- Unoccupied Mode increases energy efficiency by reducing demand during unoccupied periods
- Dynamic long-term temperature analysis helps optimize the system settings for increased system efficiency
- Prevents the floor from cooling down when the room is heated by an external source like a fireplace or solar gain
- Fault diagnosis system

Approvals:

- UL 60730
- FCC Part 15 Subpart B and Subpart C
- ICES 2003



Products:

 RABS - Control unit - Use only with Radiant Auto-Balancing System - Supports up to 8 thermostats and 12 powerheads Components Supply sensor, ribbon cable (large) UL 60730, FCC Part 15 Model 1250.0US	V	Wt [lb]	Quantity	Part No	DG			
	120 VAC		1	17040				
 RABS - Return sensor port - Brass - Use only with Radiant Auto-Balancing System - Up to 12 per control unit Note Required for proper function of RABS Model 1250.2US	SVC1	SVC2	Wt [lb]	Quantity	Part No	DG		
✓	✓		1	17050				
 RABS - Circuit hub - Use only with Radiant Auto-Balancing System - Up to 12 per control unit Note Required for proper function of RABS Model 1250.3US	V	Wt [lb]	Quantity	Part No	DG			
24 VDC		1	17055					
 RABS - Powerhead - Use only with Radiant Auto-Balancing System - Up to 12 per control unit Note Required for proper function of RABS UL 60730 Model 1250.1US	V	Wt [lb]	Quantity	Part No	DG			
24 VDC	0.194	1	17045					
 RABS - Thermostat - Use only with Radiant Auto-Balancing System - Up to 8 per control unit Model 1250.5US	V	Version	Wt [lb]	Quantity	Part No	DG		
3 VDC	black		1	17060				
3 VDC	white		1	17065				
 RABS - WLAN Module - Use only with Radiant Auto-Balancing System - One per control unit Note Enables WiFi communication for RABS Model 1250.4US			Wt [lb]	Quantity	Part No	DG		
				1	17070			
 Manifold - Equipped with air bleeder Model 2878.914, purge valve Model 2878.915, supply shutoff balancing valve Model 2878.924 - Stainless steel - SVC, union connection, female pipe thread - Preassembled Model 2879	Outlet(s)	SVC	Union	FPT	Wt [lb]	Quantity	Part No	DG
2	✓	1 1/4	1	2.454	1	16400	4	
3	✓	1 1/4	1	6.068	1	16401	4	
4	✓	1 1/4	1	6.948	1	16402	4	
5	✓	1 1/4	1	7.848	1	16403	4	
6	✓	1 1/4	1	7.318	1	16404	4	
7	✓	1 1/4	1	8.748	1	16405	4	
8	✓	1 1/4	1	9.697	1	16406	4	
9	✓	1 1/4	1	11.227	1	16407	4	
10	✓	1 1/4	1	12.142	1	16408	4	
11	✓	1 1/4	1	12.646	1	16409	4	
12	✓	1 1/4	1	13.881	1	16410	4	
 RABS - Range Extender - For use with RABS - Thermostat Model 1250.5 Note Extends range of RABS - Thermostat if required Model 1250.6US	V	Version	Wt [lb]	Quantity	Part No	DG		
3 VDC	black		1	17075				
3 VDC	white		1	17080				
 RABS - Power Adapter - Use only with Radiant Auto-Balancing System Note Required for Model 1250.6US, optional for Model 1250.5US UL 60950 Model 1250.7US	V	Wt [lb]	Quantity	Part No	DG			
120 VAC		1	17085					
 RABS - Supply Sensor - Spare part for RABS Control Unit Model 1250.0US Note NTC 10k Ω Model 1250.9US		Wt [lb]	Quantity	Part No	DG			
		1	17110					
 RABS - Ribbon Cable (Large) - Spare part for RABS Control Unit Model 1250.0US Model 1251.0US		Wt [lb]	Quantity	Part No	DG			
		1	17115					

Accessories and Spare Parts: