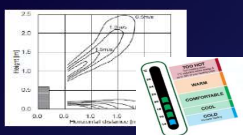




Dimensions of Smart Airconditioning

Comfort



Aesthetics



Efficiency



Reliability & Ease of Maintenance



Smart Home

Air Quality



Integration with other devices



Environment Friendliness & Safety



Ease of Operation & Control / Automation



Types of Airconditioners used in Homes

Type of Indoor unit



Window



Hi Wall



Cassette



Ducted

Split

Type of Compressor motor



Fixed Speed

Inverter /
Variable Speed

No of Indoor units



Single Split

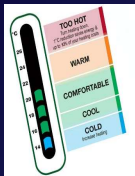


Multi Split Units

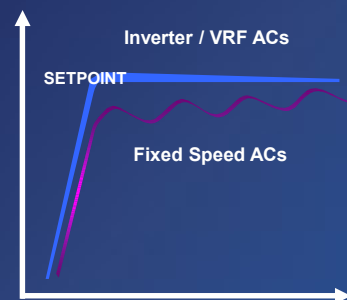


Comfort

- Room temperature
- Temperature Gradient
- Silent



- Inverter or VRF Airconditioners
- Indoor units with low decibel levels
- Night time operation mode



Aesthetics

Cluttered Building facades



Top Discharge VRF Units

Side Discharge VRF Units



Efficiency

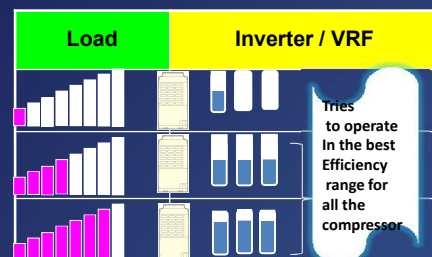
➤ Electricity Bills

Attributes of residential Appln

- Long operating hours
- Significant Part Loads



Selecting for Part loads v/s Sizing for full load



Diversity upto 200%

Combination	Single Unit										Doubled	Triple
System HP	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	~60HP		
	W990	W1210										
Diversity (%)										200		
Max	13	13	13	13	17	18	21	24	26
Max-Num. of FCUS (CV)												

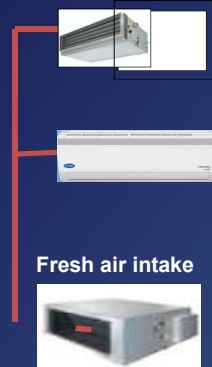
24 HP
2 HP 2 HP 2 HP 2 HP
➤ You can connect UP to 48HP

Air Quality

- Fatigue and discomfort due to CO2 levels
- High PM levels (PM2.5 & PM 10)
- Bacteria & Odour



Fresh Air Ducted



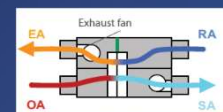
Fresh air intake



CO2 Meter



Air to Air Heat Exchanger



Ease of Operation & Control

Individual Remote Controls



Wireless



RBC-AS41E
Wired



RBC-AMT32E
Wired

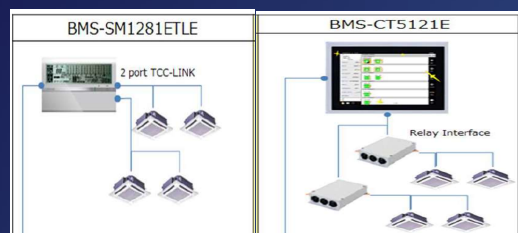


RBC-AMS41E
7-day Timer



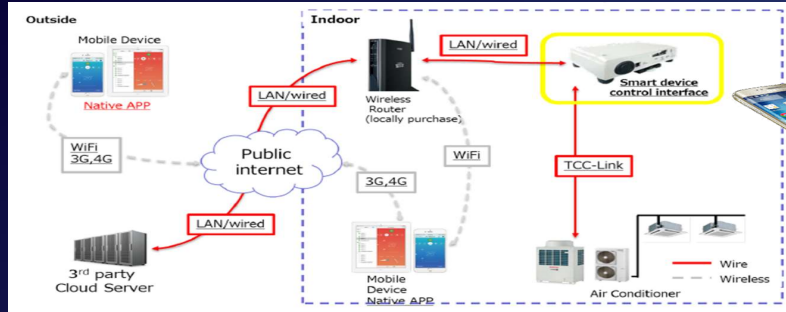
RBC-AMS54E-EN

Central Remote Controls



Automation

App based control via mobile / tab



3rd party device integration

System integration
(BACnet, LonWorks, Modbus)



Integration with other devices

- Occupancy Sensor for AC Operation
- Integration of multiple appliances
- Voice Control of ACs



Unit operation based on
Human presence



Integration with other
device on single UI



Voice controlled operation

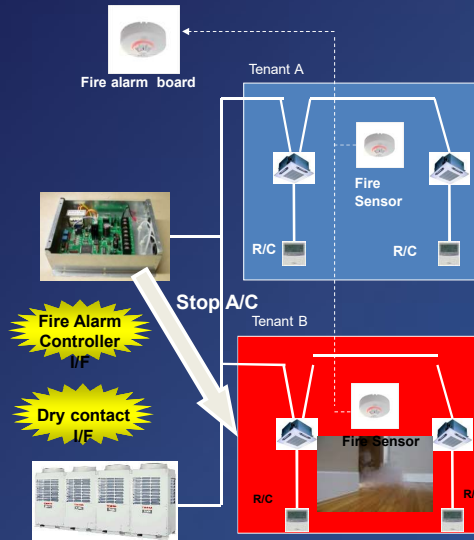
Environment Friendliness & Safety

Emergency shut down of system in case of refrigerant leakage in system



Remote control display for Refrigerant Leakage

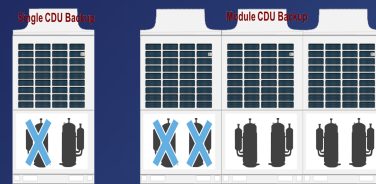
Emergency Shutdown of Airconditioning system in case of any fire



Reliability & Ease of Maintenance

- Breakdown
- Disturbance during Maintenance
- Failure History
- Equipment Records
- Complex troubleshooting

Back-up operation



Smart Tools – NFC Based



Product data
System data
Fault history
Test operation results

Wave Tool





Thank You