

VAF

| MODULAR INTEGRATED MULTI-ZONE SOLUTION FOR CENTRALIZED CONTROL

Check your unit's
compatibility



For ducted & ductless inverter units

Airzone's integrated zone control solution that adapts to any HVAC installation because of its modular architecture. VAF can use individual, multi-sized, motorized dampers to zone **ducted units**, along with individual zone control modules for **single-zone ducted/ ductless units**, supplemental heating control modules, and zone thermostats, all managed from a single interface for precise, coordinated comfort.

ADAPTS TO ANY INSTALLATION: MODULAR COMPONENTS

Individual motorized dampers



Individual zone modules



Supplemental heating zone module



SYSTEM COMPONENTS

1 Control Board



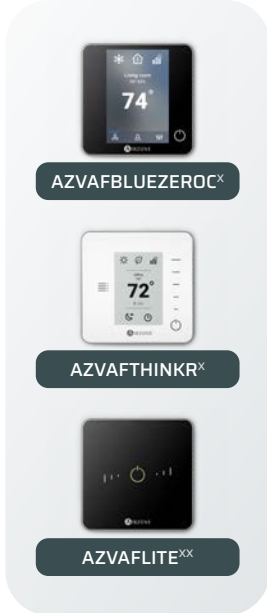
Responsible for the centralized, coordinated control of zone thermostats, damper modulation, individual zone modules and supplemental heating modules. (Powered by 110/230 VAC).

2 Communication gateway



Each inverter unit uses a proprietary “language” called communication protocol. Airzone gateways communicate with each indoor unit using its own manufacturer’s communication protocol, ensuring accurate bi-directional control and full system compatibility. The communication gateway is pre-installed in the central control board for zoning ducted units and integrated into each individual zone control module.

3 Advanced zone thermostats ¹



- **Blueface (wired):** Blueface serves as the main thermostat for VAF, so **one must be included in each system**. Powered by the main control board. Features a full-color touchscreen interface and measures room temperature and relative humidity. Blueface controls temperature, operating mode, and system speed, and it offers remote access to other zones in the installation. Configurable set point temperature limits.

- **Think (wireless):** Zone thermostat which features an E-Ink display with capacitive buttons. Powered by a CR2450 battery, proving up to a 2-year battery life. Measures room temperature and relative humidity and offers configurable set point temperature limits.

- **Lite (wired/ wireless):** Zone thermostat which offers basic control, allowing for temperature adjustments of $\pm 6^{\circ}\text{F}$, in increments of 2°F through touch buttons. These increments and base setpoint temperature are configurable. Lite reads room temperature and relative humidity. The wired version is powered by the control board (or daisy chain to it), and the wireless version is powered through a CR2450 battery.

4 Wired motorized round damper



Available in 6", 8", 10", 12", 14" diameters. Powered by the main control board. Each damper includes an actuator and dedicated zone module, which communicates with the zone thermostat via cable. Other features include inputs for open-window and occupancy detection, plus support for Airzone's or any 10 k Ω temperature probe/ sensor for greater flexibility in temperature reading.

¹ Premium finishes and backplates available.


 AZVAFDAMPER^{xxx}R

5 Wireless motorized round damper

Available in 6", 8", 10", 12", 14" diameters. Powered by the main control board. Each damper includes an actuator and dedicated zone module, which communicates wirelessly with the zone thermostat. Other features include inputs for open-window and occupancy detection, plus support for Airzone's or any 10 k Ω temperature probe/ sensor for greater flexibility in temperature reading.


 AZVAFZMO^{xxx}C/R

6 Wired/Wireless individual zone module

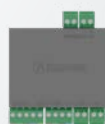
For non-zoned unit control. Each module is designed to work with a specific HVAC manufacturer communications' protocol. Communicates with the zone thermostat through cable and is powered through the Airzone connection bus in the central control board. It can be mounted on a DIN rail or wall. Other features include inputs for open-window and occupancy detection, plus support for Airzone's or any 10 k Ω temperature probe/ sensor for greater flexibility in temperature reading.



AZVAFZMF5RC

7 Fan coil zone module 5 relays wired

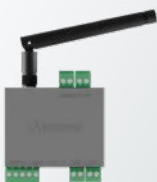
Local control module for chilled water fan coil units. Control of up to 3 speeds. Opening and closing of the electrovalves. Wired communications. Compatible with 2-pipe and 4-pipe installations. Externally powered at 230 Vac. Mounted on DIN rail or on wall.



AZVAFZMRADC

8 Wired supplemental heat only zone module

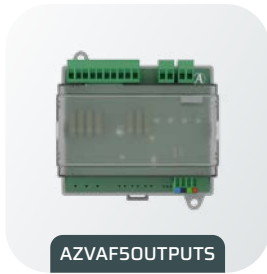
Supplemental heat only zone control. Communicates with the zone thermostat through cable and is powered through the Airzone connection bus in the central control board. Other features include inputs for open-window and occupancy detection, plus support for Airzone's or any 10 k Ω temperature probe/ sensor for greater flexibility in temperature reading.



AZVAFZMRADR

9 Wireless supplemental heat only zone module

Supplemental heat only zone control. Communicates with the zone thermostat wirelessly and is powered through the Airzone connection bus in the central control board. Other features include inputs for open-window and occupancy detection, plus support for Airzone's or any 10 k Ω temperature probe/ sensor for greater flexibility in temperature reading.



10 Relay supplemental heat control module

Wired zone module for controlling supplemental heating stages for up to 5 zones through voltage-free relays (or supplemental heat, baseboard heating, and hydronic heating). Powered through the Airzone connection bus in the main control board. Other features include demand relays for heat pumps and boilers, and identification via micro-switch.



11 Webserver HUB

Bidirectional integration gateway for the VAF system, allowing for home automation and Building Management System integration. It features dual Wi-Fi 2.4/ 5 GHz, a port for cabled Ethernet, and a port for Modbus or BACnet MS/ TP integration. The Webserver HUB provides access to the Airzone Cloud App after Bluetooth configuration and offers advanced system and parameter configuration. The Webserver HUB can control up to 32 Airzone zoning systems.

* Pg 36 for more information



12 Airzone Connection Extension Cable

Universal 6-pin extension cable (98 in). Ideal for installations where the Airzone gateway needs to be positioned farther away from the indoor unit. A maximum of three extensions can be used together, allowing for up to 32 feet from the indoor unit, in addition to the cable included with the unit.



13 Airzone metallic temperature probe in sheath

Airzone's 10 k Ω remote temperature sensor/ probe.



14 Airzone 12VDC power supply

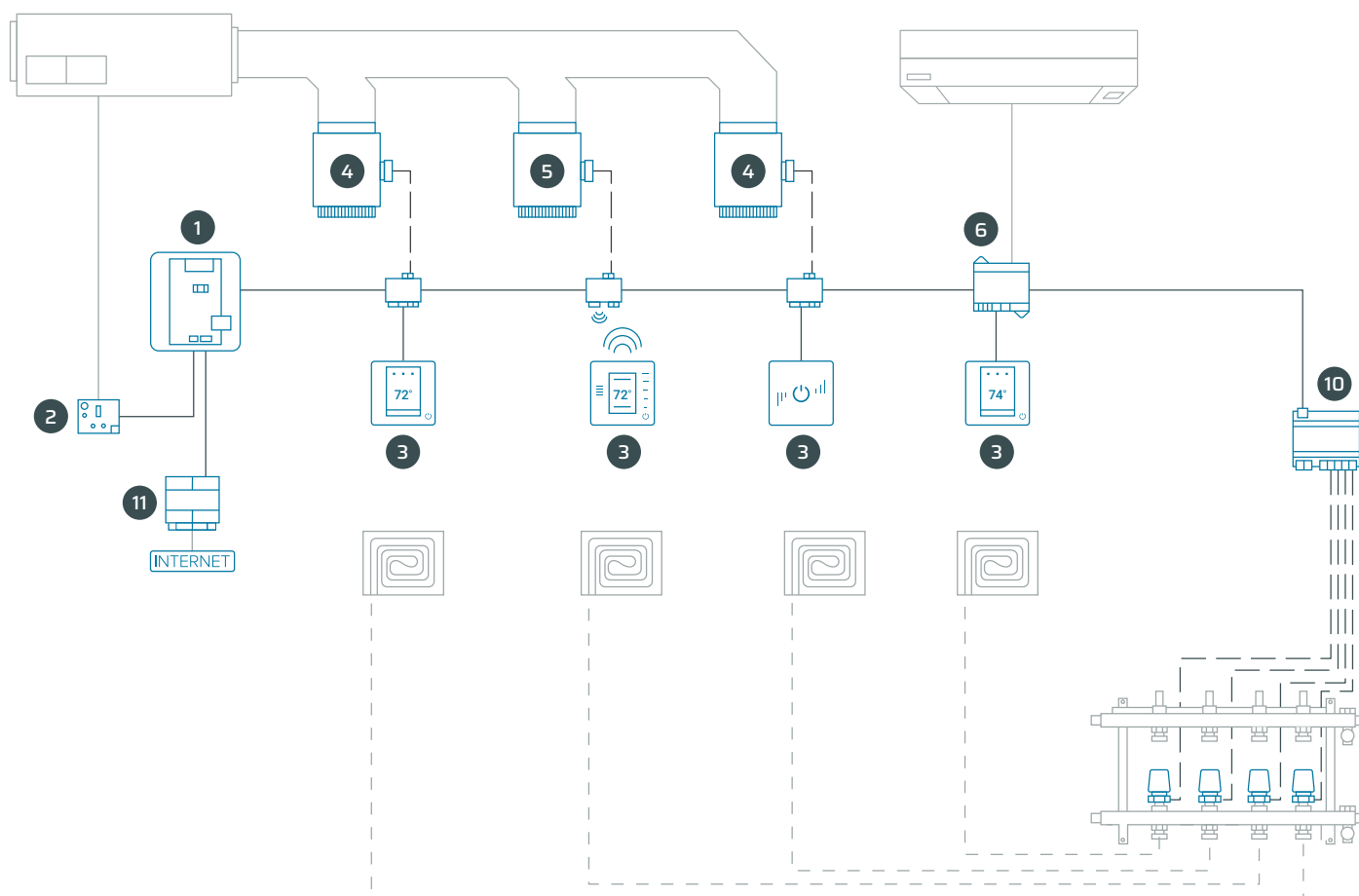
External, DIN rail-mounted power supply for Airzone systems (Multi-Voltage 110-230 VAC). Powers up to 6 zone modules with Blueface thermostats, or 10 control modules without Blueface.



15 Airzone Shielded Bus Cable UL444

Flexible shielded twisted cable. Transmits data (analog & digital signals) and supplies power to Airzone components, with protection against electromagnetic interference. Supplied in 300-ft and 50-ft rolls (AZX6CBLBUS50FT).

WIRING DIAGRAMS



VAF Support Page
to Download Product
Spec Sheets



Installation
Manual



Video
Resources



More Info &
Applications



PART NUMBERS

IMAGE	PART NUMBER	DESCRIPTION
1  2 	CONTROL BOARDS	
	AZVAFCB2 [brand]	Airzone VAF control board with [brand] gateway
	AZVAFR2F5R	Airzone VAF control board with 5-relay Fan coil gateway
	AZVAFR2F10	Airzone VAF control board with 0-10 V Fan coil gateway
	AZVAFCB2	Airzone VAF control board without gateway
3		
ADVANCED ZONE THERMOSTATS		
	AZVAFBLUEZEROCB	Airzone VAF Blueface Zero thermostat wired white
	AZVAFBLUEZEROCN	Airzone VAF Blueface Zero thermostat wired black
	AZVAFTHINKRB	Airzone VAF Think thermostat wireless white
	AZVAFTHINKRN	Airzone VAF Think thermostat wireless black
	AZVAFLITECB	Airzone VAF Lite thermostat wired white
	AZVAFLITECN	Airzone VAF Lite thermostat wired black
	AZVAFLITERB	Airzone VAF Lite thermostat wireless white
	AZVAFLITERN	Airzone VAF Lite thermostat wireless black
	AZX8EMB2HTTB	Mounting backplates designed to cover wall openings or electrical switch boxes

IMAGE	PART NUMBER	DESCRIPTION
ZONE MODULES		
	AZVAFDAMPER[06, 08, 10, 12, 14]C	Airzone VAF [06, 08, 10, 12, 14]” wired intelligent round damper
	AZVAFDAMPER[06, 08, 10, 12, 14]R	Airzone VAF [06, 08, 10, 12, 14]” wireless intelligent round damper
	AZVAFZMO [brand] C/R	Airzone VAF wired/wireless zone module with [brand] communication
	AZVAFZMF5RC	Airzone VAF wired zone module with Fan coil 5 relay control
	AZVAFZMRADC	Airzone VAF wired zone module only supplemental heat
	AZVAFZMRADR	Airzone VAF wireless zone module only supplemental heat
SUPPLEMENTAL HEAT		
	AZVAF5OUTPUTS	Airzone VAF supplemental heat relay control module
WEBSERVER AND INTEGRATION		
	AZX6WSPHUB	Webserver HUB Airzone Cloud Dual 2.4-5 GHz/Ethernet

IMAGE	PART NUMBER	DESCRIPTION
ACCESSORIES		

12		AZPV8WIREU	Airzone Connection Extension Cable - 2.5 m / 98 in for Gateway (6 pins)
13		AZX6SONDPROTECT	Airzone temperature metallic probe in sheath
14		AZX6POWER	Airzone 12VDC power supply
15		AZX6CBLBUS300FT	Airzone Shielded Bus Cable UL444 (AWG 24-2 wired + AWG 20-2 wired) 300ft
		AZX6CBLBUS50FT	Airzone Shielded Bus Cable UL444 (AWG 24-2 wired + AWG 20-2 wired) 50ft



AIRZONE SYSTEM	THERMOSTAT TYPE	SCREEN COLOR	PREMIUM FINISH OPTIONS ¹
[AZVAF] – VAF	[BLUESC] – Blueface [THINKS] – Think wireless [LITESC] – Lite wired [LITESR] – Lite wireless	[B] - White [N] - Black	[B] – White
			[N] – Black
			[CY] – Yellow gold
			[GP] – Rose gold
			[CW] – White gold

[brand]²

BA2	Baxi R32	HIT	Hitachi RPI
BAX	Baxi R410A	HS1	Hisense 1x1
DA0	Daikin Residential	HS2	Hisense VRF
DA1	Daikin Sky Air / VRV	LGE	LG
DA3	Daikin Fancoil HPC	MD1	Midea V5 protocol
FU2	Fujitsu UART	MD2	Midea V6 / V8 protocol
FUJ	Fujitsu 3 wires	MD4	Midea V5 (HAHB)
GR1	Gree U-Match R32	MD5	Midea V5 (HAHB) NA
GR2	Gree VRF	MEL	Mitsubishi Electric
GRE	Gree U-Match R410A	MHI	Mitsubishi Heavy
GW1	Giwee	PA0	Panasonic RAC Domestic
HAI	Haier	PAN	Panasonic PACi
HI2	Hitachi RAD	SA2	Samsung Nasa
HI3	Hitachi Primary	TOS	Toshiba

Check your unit's
compatibility



¹ See page 43 for more information about our thermostats' premium finishes.

² Can't find your unit's protocol? Check availability and compatibility at airzonecontrol.com