

# Motorized Zone Valves

## V4043 Line Voltage Zone Valves for Steam



**Dimensions Diagram:** See page 230  
**Application:** Steam (low pressure) Control  
**Type:** 2 position  
**Body Pattern:** Two-way, Straight-through  
**Valve Action:** Spring return to close  
**Frequency:** 60 Hz  
**Power Consumption:** 9.6 VA  
**Nominal Timing (sec, min):** 15 sec  
**De-energized Position:** Normally Closed  
**Electrical Connections:** 18 in. leads (457 mm leads)  
**Static Pressure:** 125 psi (862 kPa)  
**Fluid Temperature Range:** 40 F to 240 F (5 C to 116 C)  
**Maximum Ambient Temperature:** 125 F (52 C)

Two way on-off line voltage valves consist of an actuator motor and valve assembly for controlling the flow of low pressure steam.

- Manual opener (on all models, except straight-through, normally open valves) for valve operation on power failure; valve returns to automatic position when power is restored.
- All models may be installed without disassembling the valve.
- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Motor may be replaced without removing the valve body or draining the system.
- Suitable for heating applications.

### Materials

**(Body):** Brass  
**(Stem):** Stainless Steel  
**(Seat):** Brass  
**(Packing O-Ring):** EPDM rubber  
**(Ball Plug):** EPDM Rubber Ball  
**Comments:** For low pressure (15 psi) steam application

### Approvals:

**Underwriters Laboratories, Inc.** UL Component Listed: File MH11826 Vol. 1

### Replacement Parts:

**802360LA** 120V, 60 Hz Replacement motor for V4043, V4044 Zone Valves  
**802360MA** 208V, 60 Hz Replacement motor for V4043, V4044 Zone Valves  
**802360NA** 220V/50 Hz; 240V/60 Hz Replacement motor for V4043,

Hydronic Controls

Product Number	Pipe Size		Capacity		Connection Type	Maximum Close-off Pressure		Voltage	Manual Opener
	(inch)	(DN)	(Cv)	(Kv)		(psi)	(kPa)		
V4043E1003	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	20 psi	138 kPa	120 Vac	Yes
V4043E1011	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	20 psi	138 kPa	208 Vac	Yes
V4043E1029	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	20 psi	138 kPa	240 Vac	Yes

# Motorized Zone Valves

## V4044 Line Voltage Diverting Valves



**Dimensions Diagram:** See page 230  
**Application:** Hydronic Control  
**Type:** 2 position  
**Body Pattern:** 3-Way, Diverting  
**Valve Action:** Spring Return to port A  
**Frequency:** 60 Hz  
**Power Consumption:** 9.6 VA  
**Nominal Timing (sec, min):** 30 sec  
**De-energized Position:** Port A Normally Closed  
**Static Pressure:** 125 psi (862 kPa)  
**Fluid Temperature Range:** 40 F to 200 F (5 C to 93 C)  
**Maximum Ambient Temperature:** 125 F (52 C)

**On-off and diverting line voltage valves consist of an actuator motor and valve assembly for controlling the flow of hot or chilled water.**

- Manual opener (on all models, except straight-through, normally open valves) for valve operation on power failure; valve returns to automatic position when power is restored.
- All models may be installed without disassembling the valve.
- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Motor may be replaced without removing the valve body or draining the system.
- Suitable for heating and cooling applications.

### Materials

**(Body):** Brass  
**(Stem):** Stainless Steel  
**(Seat):** Brass  
**(Packing O-Ring):** EPDM rubber  
**(Ball Plug):** Buna-N (NBR) Rubber Ball

**Comments:** Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water.  
 Valve designed for cycling (not constantly powered on) applications.

### Approvals:

**Underwriters Laboratories, Inc.** UL Component Listed: File MH11826 Vol. 1

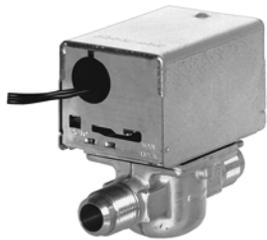
### Replacement Parts:

**802360LA** 120V, 60 Hz Replacement motor for V4043, V4044 Zone Valves  
**802360MA** 208V, 60 Hz Replacement motor for V4043, V4044 Zone Valves  
**802360NA** 220V/50 Hz; 240V/60 Hz Replacement motor for V4043, V4044 Zone Valves  
**802360QA** 277V, 50/60 Hz Replacement motor for V4043, V4044 Zone Valves

Product Number	Pipe Size		Capacity		Connection Type	Maximum Close-off Pressure		Voltage	Manual Opener	Electrical Connections	Additional Comments
	(inch)	(DN)	(Cv)	(Kv)		(psi)	(kPa)				
V4044A1001	1/2 in.	DN15	4 Cv	3.4 Kv	Flare	20 psi	138 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	—
V4044A1019	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	20 psi	138 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	—
V4044A1035	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	20 psi	138 kPa	208 Vac	Yes	18 in. leads (457 mm leads)	—
V4044A1043	1/2 in.	DN15	4 Cv	3.4 Kv	Flare	20 psi	138 kPa	240 Vac	Yes	18 in. leads (457 mm leads)	—
V4044A1050	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	20 psi	138 kPa	240 Vac	Yes	18 in. leads (457 mm leads)	—
V4044A1191	3/4 in.	DN20	7.0 Cv	6 Kv	Sweat	10 psi	69 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	—
V4044A1258	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	20 psi	138 kPa	277 Vac	Yes	24 in. leads (610 mm leads)	—
V4044A1290	1/2 in.	DN15	2.7Cv; 4 Cv	3.4 Kv	Sweat	20 psi	138 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	Restricted by-pass
V4044B1009	1/2 in.	DN15	4 Cv	3.4 Kv	Flare	20 psi	138 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	—
V4044B1017	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	20 psi	138 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	—
V4044B1314	3/4 in.	DN20	7.0 Cv	6 Kv	Sweat	10 psi	69 kPa	120 Vac	Yes	18 in. leads (457 mm leads)	—

# Motorized Zone Valves

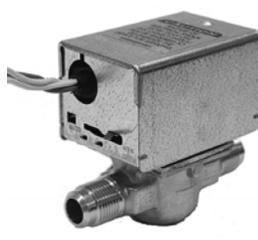
## V8043 Low Voltage Normally Closed Zone Valves



V8043 Flare



V8043A Sweat



V8043E Flare



V8043E Sweat



V8043A  
Inverted Flare



V8043A Sweat



V8043A Sweat



V8043F Sweat



V8043F Sweat



V8043F Sweat

**Two-way on-off low voltage valves consist of an actuator and valve assembly for controlling the flow of hot water.**

- Manual opener (on all models, except straight-through, normally open valves) for valve operation on power failure; valve returns to automatic position when power is restored.
- All models may be installed without disassembling the valve.

- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Actuator motor may be replaced without removing the valve body or draining the system.

**Dimensions Diagram:** See page 230

**Application:** Hydronic Control

**Type:** 2 position

**Body Pattern:** Two-way, Straight-through

**Valve Action:** Spring return to close

**Voltage:** 24 Vac

**Frequency:** 50 Hz; 60 Hz

**Power Consumption:** 7.7 VA

**Nominal Timing (sec, min):** 15 sec

**De-energized Position:** Normally Closed

**Electrical Connections:** 18 in. leads (457 mm leads)

**Static Pressure:** 125 psi (862 kPa)

**Fluid Temperature Range:** 50 F to 200 F (10 C to 93 C)

**Maximum Ambient Temperature:** 125 F (52 C)

**Comments:** Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water.

Valve designed for cycling (not constantly powered on) applications.

**Materials**

**(Body):** Brass

**(Stem):** Stainless Steel

**(Seat):** Brass

**(Packing O-Ring):** EPDM rubber

**(Ball Plug):** Buna-N (NBR) Rubber Ball

**Approvals:**

**Underwriters Laboratories, Inc.** UL Component Listed: File MH11826 Vol. 1

**Replacement Parts:**

**802360JA** 24V, 50/60 Hz Replacement motor for V8043, V8044 Zone Valves

**802360UA** 24V, 50/60 Hz Replacement motor for steam and heating Replacement Parts:

Hydronic Controls

Product Number	Pipe Size		Capacity		Connection Type	Auxiliary End Switch	Maximum Close-off Pressure		Manual Opener	Electrical Connections
	(inch)	DN	(Cv)	(Kv)			(psi)	(kPa)		
V8043A1003	1/2 in.	DN15	3.5 Cv	3 Kv	Flare	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043A1011	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043A1029	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043A1037	1 in.	DN25	3.5 Cv	3 Kv	Sweat	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
* V8043A1193	1/2 in.	DN15	3.5 Cv	3 Kv	Inverted Flare	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043A1227	1/2 in.	DN15	3.5 Cv	3 Kv	NPT	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
* V8043E1004	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
* V8043E1012	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
* V8043E1020	1 in.	DN25	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043E1061	3/4 in.	DN20	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	18 in. leads (457 mm leads)

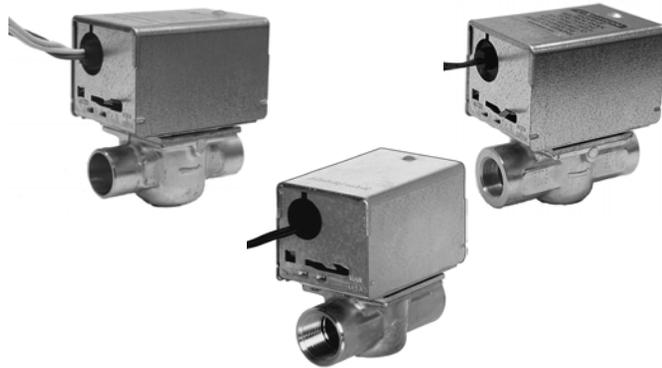
\* TRADELINE models • SUPER TRADELINE models

# Motorized Zone Valves

Product Number	Pipe Size		Capacity		Connection Type	Auxiliary End Switch	Maximum Close-off Pressure		Manual Opener	Electrical Connections
	(inch)	DN	(Cv)	(Kv)			(psi)	(kPa)		
V8043E1079	1 in.	DN25	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	18 in. leads (457 mm leads)
* V8043E1129	1/2 in.	DN15	3.5 Cv	3 Kv	Inverted Flare	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043E1137	1 in.	DN25	10 Cv	8.6 Kv	NPT	SPST	6.5 psi	45 kPa	Yes	18 in. leads (457 mm leads)
V8043E1145	3/4 in.	DN20	3.5 Cv	3 Kv	NPT	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
* V8043F1028	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	screw terminal block
* V8043F1036	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	screw terminal block
* V8043F1051	1 in.	DN25	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	screw terminal block
V8043F1093	3/4 in.	DN20	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	screw terminal block
V8043F1101	1 in.	DN25	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	screw terminal block

\* TRADELINE models • SUPER TRADELINE models

## V8043 Low Voltage Normally Open Valves For Steam



On-off and two way low voltage valves consist of an actuator and valve assembly for controlling the flow low pressure steam.

- All models may be installed without disassembling the valve.
- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Actuator motor may be replaced without removing the valve body or draining the system.
- Suitable for use 15 psi low pressure steam application.

**Dimensions Diagram:** See page 230  
**Application:** Steam (low pressure) Control  
**Type:** 2 position  
**Body Pattern:** Two-way, Straight-through  
**Valve Action:** Spring return to open  
**Voltage:** 24 Vac  
**Frequency:** 50 Hz; 60 Hz  
**Power Consumption:** 7.7 VA  
**Nominal Timing (sec, min):** 15 sec  
**De-energized Position:** Normally Open  
**Electrical Connections:** 18 in. leads (457 mm leads)  
**Static Pressure:** 125 psi (862 kPa)  
**Fluid Temperature Range:** 50 F to 240 F (10 C to 116 C)  
**Maximum Ambient Temperature:** 125 F (52 C)

**Materials**  
**(Body):** Brass  
**(Stem):** Stainless Steel  
**(Seat):** Brass  
**(Packing O-Ring):** EPDM rubber  
**(Ball Plug):** EPDM Rubber Ball  
**Comments:** For low pressure (15 psi) steam application

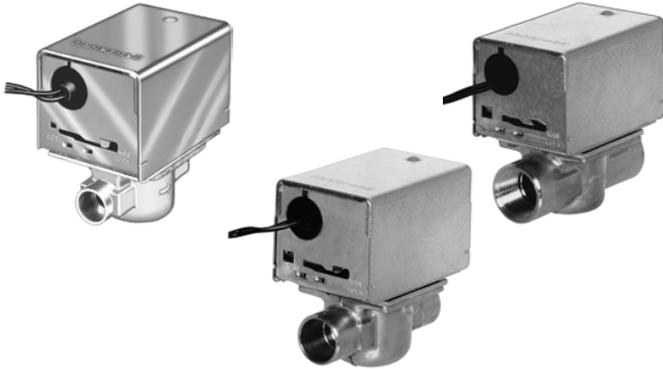
**Approvals:**  
**Underwriters Laboratories, Inc.** UL Component Listed: File MH11826  
 Vol. 1

**Replacement Parts:**  
**802360UA** 24V, 50/60 Hz Replacement motor for steam and heating Zone Valves

Product Number	Pipe Size		Capacity		Connection Type	Maximum Close-off Pressure		Voltage	Manual Opener
	(inch)	DN	(Cv)	(Kv)		(psi)	(kPa)		
V8043J1003	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	20 psi	138 kPa	24 Vac	No
V8043J1029	1/2 in.	DN15	3.5 Cv	3 Kv	NPT	20 psi	138 kPa	24 Vac	No
V8043J1037	3/4 in.	DN20	3.5 Cv	3 Kv	NPT	20 psi	138 kPa	24 Vac	No

# Motorized Zone Valves

## V8043 Low Voltage Normally Open Zone Valves



On-off and two-way low voltage valves consist of an actuator and valve assembly for controlling the flow of hot water.

- All models may be installed without disassembling the valve.
- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Actuator motor may be replaced without removing the valve body or draining the system.
- No Manual opener

**Dimensions Diagram:** See page 230

**Application:** Hydronic Control

**Type:** 2 position

**Body Pattern:** Two-way, Straight-through

**Valve Action:** Spring return to open

**Voltage:** 24 Vac

**Power Consumption:** 7.7 VA

**Nominal Timing (sec, min):** 15 sec

**De-energized Position:** Normally Open

**Electrical Connections:** 18 in. leads (457 mm leads)

**Static Pressure:** 125 psi (862 kPa)

**Fluid Temperature Range:** 40 F to 200 F (5 C to 93 C)

**Maximum Ambient Temperature:** 125 F (52 C)

**Comments:** Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water.

Valve designed for cycling (not constantly powered on) applications.

### Materials

**(Body):** Brass

**(Stem):** Stainless Steel

**(Seat):** Brass

**(Packing O-Ring):** EPDM rubber

**(Ball Plug):** Buna-N (NBR) Rubber Ball

### Approvals:

**Underwriters Laboratories, Inc.** UL Component Listed: File MH11826 Vol. 1

### Replacement Parts:

**802360JA** 24V, 50/60 Hz Replacement motor for V8043, V8044 Zone Valves

**802360UA** 24V, 50/60 Hz Replacement motor for steam and heating Zone Valves

Hydronic Controls

Product Number	Pipe Size		Capacity		Connection Type	Maximum Close-off Pressure		Frequency	Manual Opener
	(inch)	DN	(Cv)	(Kv)		(psi)	(kPa)		
V8043B1019	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	20 psi	138 kPa	60 Hz	No
V8043B1027	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	20 psi	138 kPa	60 Hz	No
V8043B1076	3/4 in.	DN20	3.5 Cv	3 Kv	NPT	20 psi	138 kPa	50 Hz; 60 Hz	No

# Motorized Zone Valves

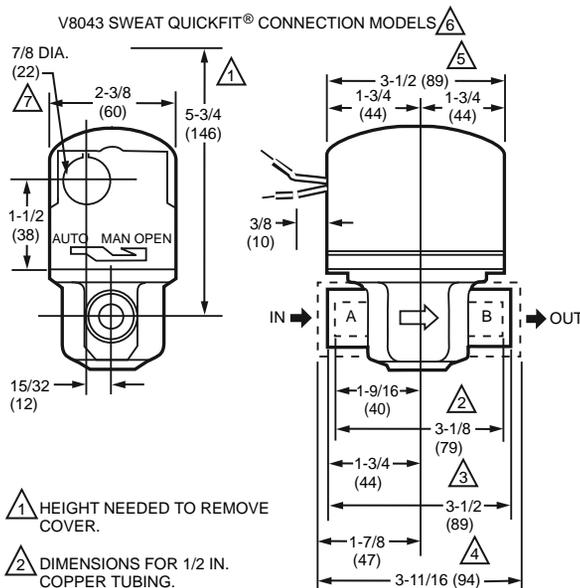
## V8043 Series 5000 QuickFit® Zone Valves



**Two-way on-off low voltage valves consist of an actuator and valve assembly for controlling the flow of hot water.**

- All models may be installed without disassembling the valve.
- Compact construction for easy installation.
- Manual opener (on all models, except straight-through, normally open valves) for valve operation on power failure; valve returns to automatic position when power is restored.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- "Quick Fit" pushbutton powerhead makes it easy to remove for service.
- Series 5000 replacement powerhead is backward compatible with series 1000 zone valves.
- Innovative motor technology offers silent operation, water hammer resist and longer life.

### Dimensions in inches (millimeters)



- 1 HEIGHT NEEDED TO REMOVE COVER.
- 2 DIMENSIONS FOR 1/2 IN. COPPER TUBING.
- 3 DIMENSIONS FOR 3/4 IN COPPER TUBING.
- 4 DIMENSIONS FOR 1 IN. COPPER TUBING.
- 5 4-7/8 IN. (124) MAX ON V8034F WITH TERMINAL BOARD ENCLOSURE.
- 6 V8043B VALVES THAT ARE NORMALLY OPEN IN THE DE-ENERGIZED POSITION HAVE NO MANUAL LEVER. THE VALVES ALSO HAVE A REVERSED POWERHEAD WHERE THE LEADWIRES EXIT THE POWERHEAD ABOVE THE B (OUTLET) PORT RATHER THAN ABOVE THE A (INLET) PORT.
- 7 OPENING FOR 1/2 IN. CONDUIT ON MANUAL LEVER SIDE FOR V8043

**Application:** Hydronic Control

**Type:** 2 position

**Body Pattern:** Two-way, Straight-through

**Valve Action:** Spring return to close

**Voltage:** 24 Vac

**Frequency:** 60 Hz

**Power Consumption:** 7.2 VA

**De-energized Position:** Normally Closed

**Static Pressure:** 300 psi (2068 kPa)

**Fluid Temperature Range:** 200 F Max. (93 C Max.)

**Maximum Ambient Temperature:** 125 F (52 C)

### Materials

**(Body):** Brass

**(Stem):** Stainless Steel

**(Seat):** Brass

**(Packing O-Ring):** EPDM rubber

**(Ball Plug):** Buna-N (NBR) Rubber Ball

**Comments:** Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water.

Valve designed for cycling (not constantly powered on) applications.

### Approvals:

**Canadian Standards Association:** CSA C/US

**Underwriters Laboratories, Inc.** CSA C/US

Product Number	Pipe Size		Capacity		Connection Type	Auxiliary End Switch	Maximum Close-off Pressure		Manual Opener	Electrical Connections
	(inch)	DN	(Cv)	(Kv)			(psi)	(kPa)		
V8043A5011	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043A5029	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	—	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043E5004	1/2 in.	DN15	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043E5012	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043E5020	1 in.	DN25	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	18 in. leads (457 mm leads)
V8043E5061	3/4 in.	DN20	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	18 in. leads (457 mm leads)
V8043E5079	1 in.	DN25	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	18 in. leads (457 mm leads)
V8043F5036	3/4 in.	DN20	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	screw terminal block
V8043F5051	1 in.	DN25	3.5 Cv	3 Kv	Sweat	SPST	20 psi	138 kPa	Yes	screw terminal block
V8043F5093	3/4 in.	DN20	8 Cv	6.9 Kv	Sweat	SPST	8 psi	55 kPa	Yes	screw terminal block

# Motorized Zone Valves

## V8044 Low Voltage Diverting Valves



Flare Connection

NPT Connection

Sweat Connection

Sweat Connection

Sweat Connection

**On-off and diverting low voltage valves consist of an actuator and valve assembly for controlling the flow of hot water.**

- Manual opener (on all models, except straight-through, normally open valves) for valve operation, except power failure; valve returns to automatic position when power is restored.
- All models may be installed without disassembling the valve.

**Dimensions Diagram:** See page 230

**Application:** Hydronic Control

**Type:** 2 position

**Body Pattern:** 3-Way, Diverting

**Valve Action:** Spring Return

**Voltage:** 24 Vac

**Frequency:** 60 Hz; 50 Hz

**Power Consumption:** 7.7 VA

**Nominal Timing (sec, min):** 30 sec

**De-energized Position:** Port A Normally Closed

**Electrical Connections:** 18 in. leads (457 mm leads)

**Static Pressure:** 125 psi (862 kPa)

**Fluid Temperature Range:** 40 F to 200 F (5 C to 93 C)

**Maximum Ambient Temperature:** 125 F (52 C)

**Comments:** Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water.

Valve designed for cycling (not constantly powered on) applications.

- Compact construction for easy installation.
- Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system.
- Actuator motor may be replaced without removing the valve body or draining the system.

**Materials**

**(Body):** Brass

**(Stem):** Stainless Steel

**(Seat):** Brass

**(Packing O-Ring):** EPDM rubber

**(Ball Plug):** Buna-N (NBR) Rubber Ball

**Approvals:**

**Underwriters Laboratories, Inc.** UL Component Listed: File MH11826 Vol. 1

**Replacement Parts:**

**802360JA** 24V, 50/60 Hz Replacement motor for V8043, V8044 Zone Valves

**802360UA** 24V, 50/60 Hz Replacement motor for steam and heating Zone Valves

Hydronic Controls

Product Number	Pipe Size		Capacity		Connection Type	Auxiliary End Switch	Maximum Close-off Pressure		Includes	Manual Opener
	(inch)	DN	(Cv)	(Kv)			(psi)	(kPa)		
V8044A1002	1/2 in.	DN15	4 Cv	3.4 Kv	Flare	—	20 psi	138 kPa	—	Yes
V8044A1010	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	—	20 psi	138 kPa	—	Yes
V8044A1044	3/4 in.	DN20	7.0 Cv	6 Kv	Sweat	—	10 psi	69 kPa	—	Yes
V8044A1051	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	—	20 psi	138 kPa	Restricted 2.5 Cv bypass port.	Yes
V8044A1135	1/2 in.	DN15	4 Cv	3.4 Kv	NPT	—	20 psi	138 kPa	—	Yes
V8044A1143	3/4 in.	DN20	4 Cv	3.4 Kv	NPT	—	20 psi	138 kPa	—	Yes
V8044B1018	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	—	20 psi	138 kPa	Integral SPDT changeover Aquastat controller	Yes
V8044E1003	1/2 in.	DN15	4 Cv	3.4 Kv	Sweat	SPST	20 psi	138 kPa	—	Yes
V8044E1011	3/4 in.	DN20	7.0 Cv	6 Kv	Sweat	SPST	10 psi	69 kPa	—	Yes

# Motorized Zone Valves

## Y496 Zone Control Builder Packs



Contain devices necessary for temperature control of a single zone in a hydronic heating system.

- Includes thermostat with special heat anticipator designed for best performance when used with the VC8715AM1000 Valve.
- Require 24 V power source.

**Valve Dimensions Diagram:** See page 230

**Pipe Connection:** Sweat

**Body Pattern:** Two-way

**Valve Action:** Spring return to close

**Thermostat Electrical Rating:** 24 V, 50/60 Hz

**Thermostat Color:** Premier White®

**Comments:** See valve and thermostat for more details.

**Includes:** (Y496B1024 and Y496B1040 only) 104456B Wallplate

**Approvals:**

**Underwriters Laboratories, Inc.** UL Listed: Models V8043A,B,E,J & V8044A,B,E; UL Component Recognized: V8043F

Product Number	Y-Pack Includes
Y496A1074	V8043E1012, T822K1018
Y496A1082	V8043E1004, T822K1018
Y496A1090	V8043E1061, T822K1018
Y496B1024	V8043E1012, T87K1007
Y496B1040	V8043F1036, T87K1007
Y496E1005	V8043A1029, TH5110D1006
Y496E1013	V8043E1004, TH5110D1006
Y496E1021	V8043E1012, TH5110D1006
Y896C1016	VC8715AM1000, T8400B1018

Product Number	Thermostat						Valve							
	Application	Anticipator Adj.		Temperature Range		Current	Capacity		Pipe Size (inch)	Maximum Close-off Pressure		Aux Switch Ratings	Electrical Connections	Electrical Rating
		Heating	Cooling	(F)	(C)		(Cv)	(Kv)		(psi)	(kPa)			
* Y496A1074	Single Stage Heating Only	0.18 to 1.0 A	—	55 to 95 F 13 to 35 C		—	3.5 Cv	3 Kv	3/4 in.	20 psi	138 kPa	50 VA pilot duty @ 24 V 4.4 A running @ 120 V	18 in. leads	24 Vac, 50/60 Hz
* Y496A1082		—	—			—	3.5 Cv	3 Kv	1/2 in.	20 psi	138 kPa		18 in. leads	
* Y496A1090		—	—			—	8 Cv	6.9 Kv	3/4 in.	8 psi	55 kPa		18 in. leads	
* Y496B1024	Single Stage Heating/ Cooling	0.1 to 1.2 A	0.0 to 1.5 A	40 to 90 F	4 to 32 C	—	3.5 Cv	3 Kv	3/4 in.	20 psi	138 kPa		18 in. leads	
* Y496B1040		—	—			—	3.5 Cv	3 Kv	3/4 in.	20 psi	138 kPa	Screw Terminal Block		
* Y496E1005		—	—	Heat: 40 F to 90 F; Cool: 50 F to 99 F	Heat: 4.5 C to 32 C; Cool: 10 C to 37 C	Cooling: 1.0 A running; Heating: 1.0 A running; Fan: 0.5 A running	3.5 Cv	3 Kv	3/4 in.	20 psi	138 kPa	—	18 in. leads	
* Y496E1013	—	—				3.5 Cv	3 Kv	1/2 in.	20 psi	138 kPa	50 VA pilot duty @ 24 V 4.4 A running @ 120 V	18 in. leads		
* Y496E1021	—	—				3.5 Cv	3 Kv	3/4 in.	20 psi	138 kPa		18 in. leads		
* Y896C1016	Single Stage Heating Only	—	—	40 to 99 F	4 to 39 C	—	5.8 Cv	5 Kv	3/4 in.	60 psi	97 kPa	—	Screw Terminal Block	24 Vac, 60 Hz

\* TRADELINE models • SUPER TRADELINE models

# Motorized Zone Valves

## Replacement Parts

Product Number	Description	Includes
40003918-006	Adaptor kit for V4043, V8043, 2-way hydronic valves	Adapter plate, ball and shaft assembly, large O-ring and four mounting screws.
40003918-007	Adaptor kit for V4044, V8044, 3-way diverting valves	Adapter plate, ball and shaft assembly, large O-ring and four mounting screws.
40003918-008	Adaptor kit for V4043E, J, V8043J, low pressure steam valves	Adapter plate, ball and shaft assembly, large O-ring and four mounting screws.

## Zone Valve Replacement Parts

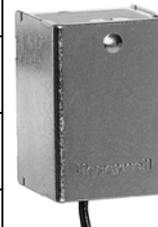
Product Number	Description	Voltage	Frequency	Used With Valve	Includes	
132184B	Replacement ball plug for V8043, V8044, V4043, V4044 valves (not for steam)	—	—	—	—	
272708A	1/2 in. inverted flare to 1/2 in. sweat adapter	—	—	—	—	
272708B	1/2 in. inverted flare to 3/4 in. sweat adapter	—	—	—	—	
802360JA	24V, 50/60Hz replacement motor for V8043 zone valves	24V	50 Hz; 60 Hz	V8043A,E,F	Motor mounting screw and lead connectors	
802360LA	120V, 60Hz replacement motor for V4043, V4044 zone valves	120V	60 Hz	V4043, V4044	Motor mounting screw and lead connectors	
802360MA	208, 60Hz replacement motor for V4043, V4044 zone valves.	208V	60 Hz	V4043, V4044	Motor mounting screw and lead connectors	
802360NA	220V/50Hz; 240V/60Hz replacement motor for V4043, V4044 zone valves.	220V/50 Hz 240V/60 Hz	50 Hz; 60 Hz	V4043, V4044	Motor mounting screw and lead connectors	
802360QA	277V, 60Hz replacement motor for V4043, V4044 zone valves	277V	60 Hz	V4043, V4044	Motor mounting screw and lead connectors	
802360UA	24V, 50/60 Hz Replacement motor for steam and heating Zone Valves	24V	50 Hz; 60 Hz	V8043J	Motor mounting screw and lead connectors	
803867A	Conduit case and cover for use with the V8043F when the end switch is used in line voltage application.	—	—	V8043F	Case and cover	

Hydronic Controls

# Motorized Zone Valves

## Zone Valves Replacement Heads

Product Number	Description	Electrical Connection Location	Voltage	Frequency	Maximum Ambient Temperature		Used With Valve Action	Used With Valve
					(F)	(C)		
40003916-021	24 Vac, 50/60 Hz Replacement head for V8043A	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close	Two-way
40003916-023	240 Vac, 50 Hz Replacement head for V4043A, 240V, 50Hz	Same side of manual lever	240 Vac	50 Hz	125 F	52 C	Spring return to close	Two-way
40003916-024	120 Vac, 60 Hz Replacement head for V4043A	Same side of manual lever	120 Vac	60 Hz	125 F	52 C	Spring return to close	Two-way
40003916-025	24 Vac, 50/60 Hz Replacement head with End Switch for V8044E	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-026	24 Vac, 50/60 Hz Replacement head with End Switch for V8044E	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close	Two-way
40003916-027	24 Vac, 50/60 Hz, N.O. Replacement head for V8043B	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to open	Two-way
40003916-030	240 Vac, 60 Hz, N.O. Replacement actuator for V4043B	Same side of manual lever	240 Vac	60 Hz	125 F	52 C	Spring return to open	Two-way
40003916-031	120 Vac, 60 Hz, N.O. Replacement head for V4043B	Same side of manual lever	120 Vac	60 Hz	125 F	52 C	Spring return to open	Two-way
40003916-032	24 Vac, 50/60 Hz Replacement head for V8044A	On opposite side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-035	220/240 Vac, 50/60 Hz	On opposite side of manual lever	220 Vac; 240 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-036	120 Vac, 60 Hz Replacement head for V4044	On opposite side of manual lever	120V	60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-037	24 Vac, 50/60 Hz Replacement head for V8044B, With Aquastat Switch	On opposite side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-040	120 Vac, 60 Hz Replacement head for V8044B, With Aquastat Switch	On opposite side of manual lever	120 Vac	60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-041	120 Vac, 60 Hz Replacement head for V4043E, Steam Valve	Same side of manual lever	120 Vac	60 Hz	125 F	52 C	Spring return to close	Two-way
40003916-043	24 Vac, 50/60 Hz Replacement head with End Switch for V8044E	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-044	24 Vac, 50/60 Hz Replacement head for V8044B, with Aquastat	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-045	120 Vac, 60 Hz Replacement head for V4044B, with Aquastat	Same side of manual lever	120 Vac	60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-046	24 Vac, 50/60 Hz Replacement head for V8044A	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-047	120 Vac, 60 Hz Replacement head for V4044A, 120V, 60Hz, with 96 in. leads	Same side of manual lever	120 Vac	60 Hz	125 F	52 C	Spring return to close "A" port	Diverting
40003916-048	24 Vac, 50/60 Hz Replacement head for V8043F, With End Switch	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close	Two-way
40003916-049	240V, 50 Hz Replacement head for V4044	—	240V	50 Hz	125 F	52 C	Spring return to close "A" port	Diverting



# Motorized Zone Valves

Product Number	Description	Electrical Connection Location	Voltage	Frequency	Maximum Ambient Temperature		Used With Valve Action	Used With Valve	
					(F)	(C)			
40003916-521	24 Vac, 50/60 Hz Replacement head for V8043A 5000 series	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close	Two-way	
40003916-526	24 Vac, 50/60 Hz Replacement head with End Switch, for V8043E 5000 series	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close	Two-way	
40003916-548	24 Vac, 50/60 Hz Replacement head for V8043F, With End Switch	Same side of manual lever	24 Vac	50 Hz; 60 Hz	125 F	52 C	Spring return to close	Two-way	

Hydronic Controls