



Z-one™

ZONE VALVES AND CONTROLS
ZONE SERIES



PRODUCT FEATURES

- **Installer friendly relay boxes:**
Ample room for terminations, large screw terminals, automatic resettable fuse, snap-in transformers.
- **Extremely reliable zone valve design:**
Clutch-protected drive train, durable synchronous motor. Millions installed in North America.
- **Relay controls application versatility:**
3 selectable 120 VAC auxiliary switches for enabling pumps and boilers, dedicated pump outputs, unlimited zone expansion.
- **Easy to install and service:**
Compact zone valve design includes snap-on actuator with a convenient in-line push button. Removable bottom cap allows for easy in-pipe service.
- **Universal zone valve controller:**
Compatible with 2, 3 and 4 wire zone valves and thermostats whether zoning with pumps, valves or both. Versatile for one to unlimited number of zones.
- **Zone valve application versatility:**
Hot water, chilled water and low-pressure steam.

Dependable Z-one™ valves and controls

With over a decade of proven reliability in North America, the Z-one Motorized Zone Valves offer quick installation and easy service in a wide variety of commercial and residential applications including radiant, fan coils, chilled or hot water and low pressure steam applications. Whether zoning with pumps, valves or both, the Z-one Relay Controls are the installer's go-to choice. When the Z-one valves and controls are installed together, both qualify for our industry exclusive five-year warranty.

PRODUCT RANGE - Z-one™ Single-Zone and Multi-Zone Pump Controls - ZSR Series



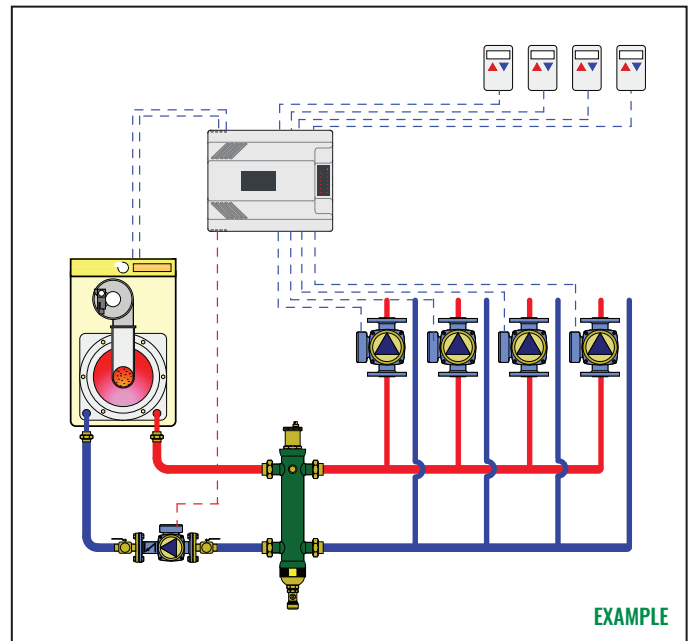

 Certified to CSA C22-2 No.24
 Intertek
 4009064
 Conforms to UL Standard 873

ZONES	CODE
1	ZSR101
2	ZSR103
4	ZSR104
6	ZSR106

PERFORMANCE

POWER SUPPLY	120 VAC, 50/50 Hz
TRANSFORMER VOLTAGE	24 VAC
MAX. TRANSFORMER LOAD	6 VA (ZSR101) 40 VA (ZSR103/104/106)
ELECTRICAL SWITCH RATING	20 A max Combined
ELECTRICAL SWITCH RATING PUMP OUTPUT	120 VAC, 5A each
DRY CONTRACT RATING, AUX, XX, ZONE1 E/S	120 VAC max, 2A each

APPLICATION DIAGRAM



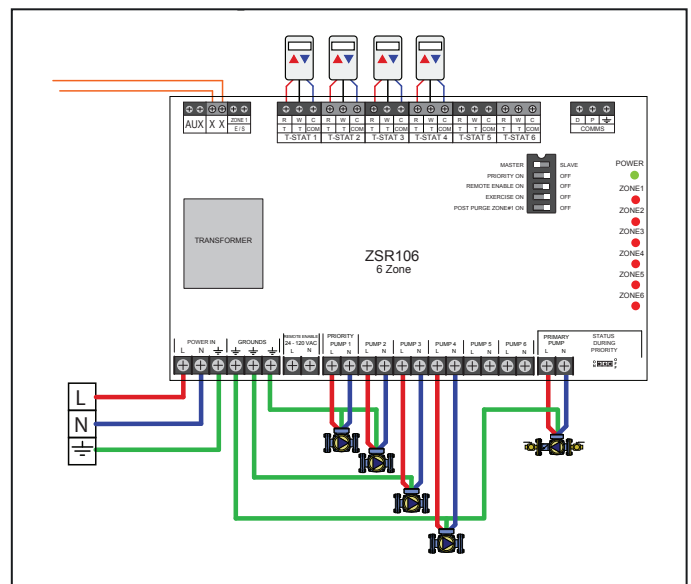
MULTI-ZONE PUMP CONTROL

- 3, 4 and 6 zone controls
- 1 primary pump output and 3 to 6 (model dependent) zone pump outputs (120 VAC/5A each)
- 3 dry contacts for enabling boilers and pumps
- Unlimited board expandability using Z-oneLink™ communications
- Each output individually fused. 2 extra fuses included
- Selectable with DIP switches:
 - Priority (1 hour tiemout)
 - Pump exercise
 - Post purge Zone #1 (after priority demand)
 - Remote Enable
 - Status of primary pump during priority
- Twelve 1/2" electrical knockouts
- Bright LED functional lights on front cover
- Multiple ground screws, eliminates wire nuts
- 3 year warranty

SINGLE-ZONE PUMP CONTROL

- 2 independent outputs
- Mounts to 4" x 4" junction box
- Rear wiring access

WIRING DIAGRAM



PRODUCT RANGE - Z-one™ Multi-Zone Pump Controls - ZVR Series



ETL Intertek
 Certified to CSA C22-2 No.24
 Conforms to UL Standard 873
 4009064

ZONES	CODE
3	ZSR103
4	ZSR104
6	ZSR106

Scan to view

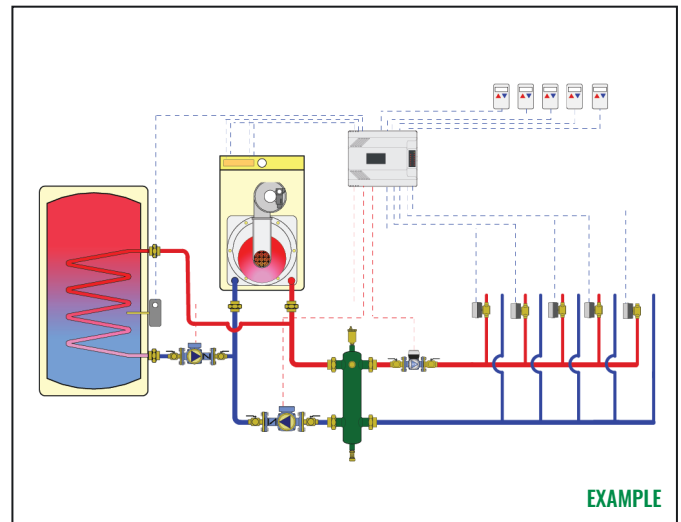


Wiring Guide

PERFORMANCE

POWER SUPPLY	120 VAC, 50/50 Hz
TRANSFORMER VOLTAGE	24 VAC
MAX. TRANSFORMER LOAD	40 VA (ZSR103/104) 80 VA (ZSR106)
ELECTRICAL SWITCH RATING	20 A max Combined
ELECTRICAL SWITCH RATING PUMP OUTPUT	120 VAC, 5A each
DRY CONTRACT RATING, AUX, XX, ZONE1 E/S	120 VAC max, 2A each

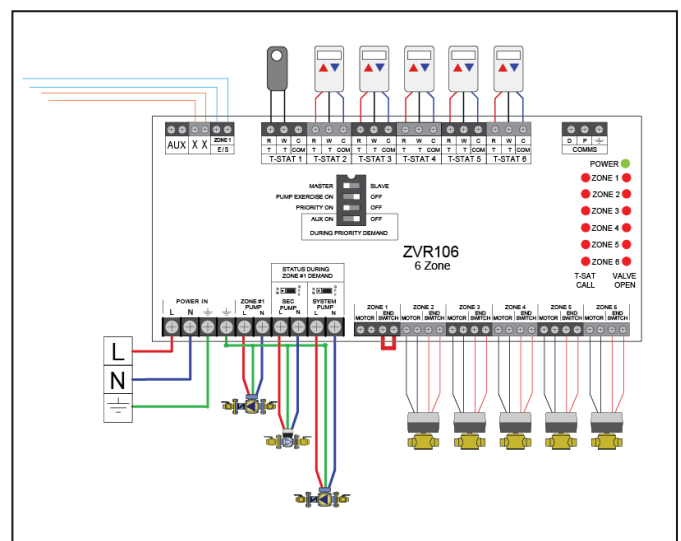
APPLICATION DIAGRAM



MULTI-ZONE PUMP CONTROL

- 3, 4 and 6 zone (thermostat and valve) controls
- 3 pump outputs (120 VAC/5A each)
- 3 to 6 zone valve outputs (24 V)
- 3 dry contacts for enabling boilers and pumps
- Unlimited board expandability using Z-oneLink™ communications
- Automatically resettable fuse on 24 V circuit
- Selectable with DIP switches:
 - Priority (1 hour timeout)
 - Pump exercise
 - Status of system pump during Zone #1 call
- Twelve 1/2" electrical knockouts
- Bright LED functional lights on front cover
- Multiple ground screws, eliminates wire nuts
- 3 year warranty
- 5 year warranty when installed with Caleffi Z-one™ motorized zone valves

WIRING DIAGRAM



PRODUCT RANGE - Z-one™ Zone Valves - Z Series

Z4 SERIES Z-ONE™ WIRE LEADS

ZONES	CODE	Cv	ΔP
Z40	Inverted flare	3.5	30 psi
Z40F*	¾" inv flare	3.5	30 psi
Z42	½" SAE flare	3.5	30 psi
Z44	½" sweat	2.5	50 psi
Z44P	½" press	3.5	30 psi
Z45	¾" sweat	7.5	20 psi
Z45P	¾" press	7.5	20 psi
Z425PL**	¾" press	7.5	20 psi
Z46	1" sweat	7.5	20 psi
Z46P	1" press	7.5	20 psi
Z47	1 ¼" press	7.5	30 psi



ZONES	CODE	Cv	ΔP
Z50	Inverted flare	3.5	30 psi
Z50F*	¾" inv flare	3.5	30 psi
Z54	½" sweat	2.5	50 psi
Z54P	½" press	3.5	30 psi
Z55	¾" sweat	7.5	20 psi
Z55P	¾" sweat	7.5	20 psi
Z55PL**	¾" press	7.5	20 psi
Z56	1" sweat	7.5	20 psi
Z56P	1" sweat	7.5	20 psi
Z57	1" sweat	7.5	20 psi

*Two ¾" sweat fittings (NA10006) included.
 **One extra long press fitting for retrofit.

*Two ¾" sweat fittings (NA10006) included.
 **One extra long press fitting for retrofit.

PERFORMANCE

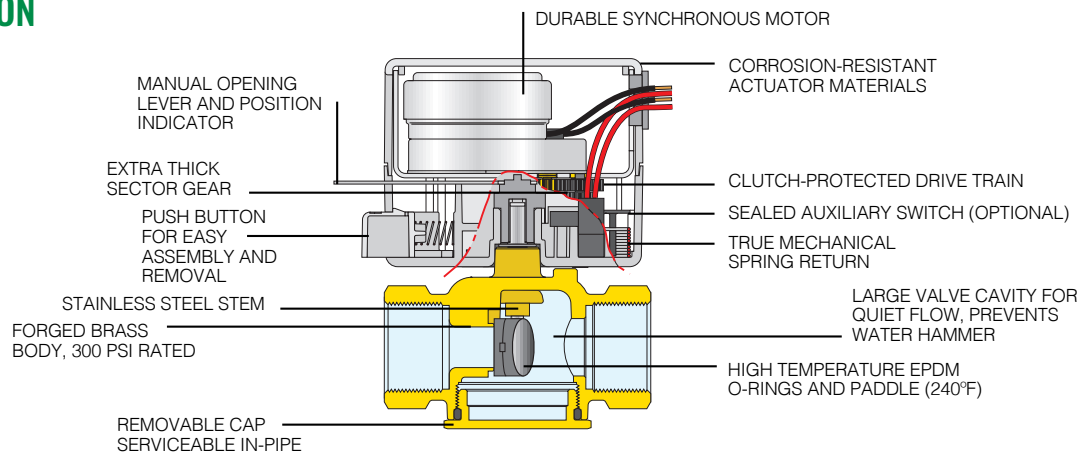
WORKING TEMPERATURE RANGE	32 - 240 °F (0 - 115 °C)
MAX. PERCENTAGE OF GLYCOL	50%
POWER SUPPLY	24 VAC
POWER CONSUMPTION	5 W, 7VA*
MAX. AMBIENT TEMPERATURE	125°F (52°C)

*Allows up to 5 valves per 40VA transformer.



US Patent 7,048,251

CONSTRUCTION



03619-24 NA | Caleffi17-063

Caleffi Partner:

WE RESERVE THE RIGHT TO CHANGE OUR PRODUCTS AND THEIR RELEVANT TECHNICAL DATA, CONTAINED IN THIS PUBLICATION, AT ANY TIME AND WITHOUT PRIOR NOTICE.



Caleffi North America, Inc.
 sales@caleffi.com · www.caleffi.com
 © Copyright 2024 Caleffi North America, Inc.