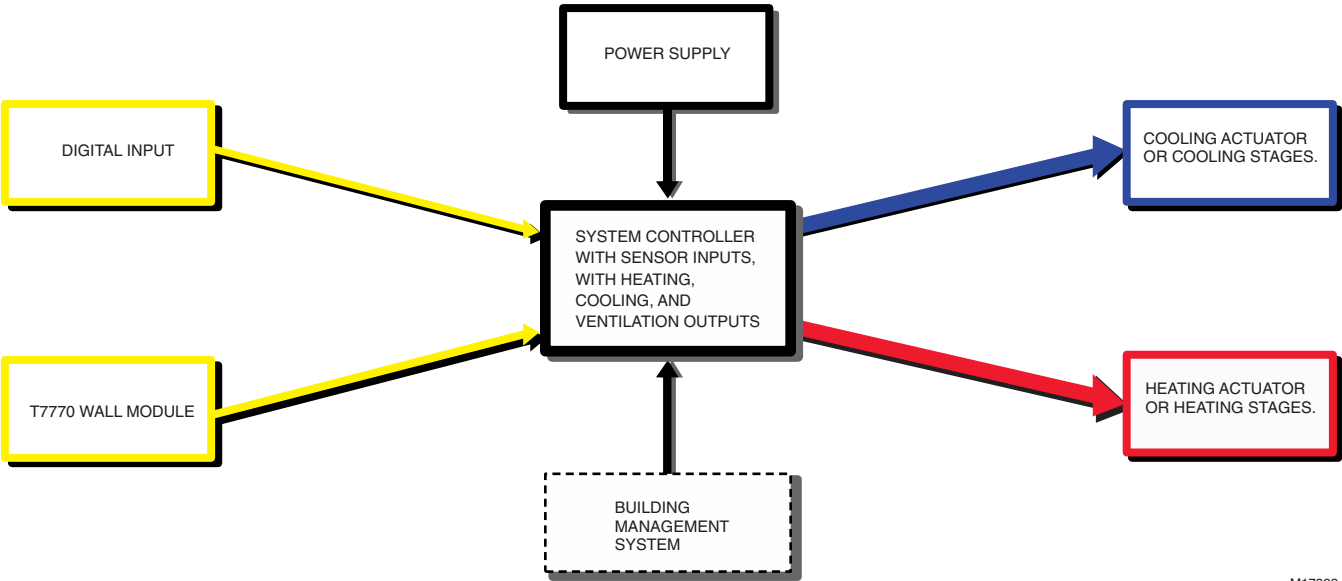




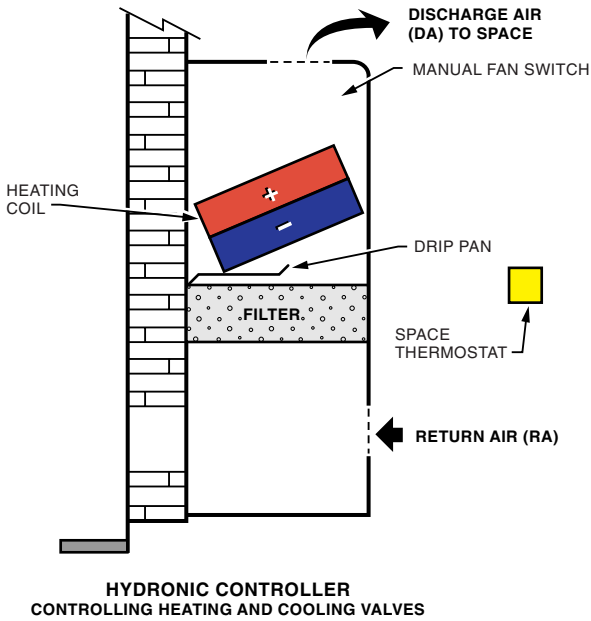
- Stand-alone or expandable. LonMark® compliant, Echelon® LonWorks® protocol-compatible (on LonWorks®Bus, Q7750 Zone Manager), free topology.
- High efficiency, low cost Heat/Cool valve application solution.
- Model with integrated or remote wall module
- Lonworks®Open protocol: flexibility now and for the future.
- Direct connection of thermal actuators
- Wide range of supported valves and actuators

Functional Block Diagram

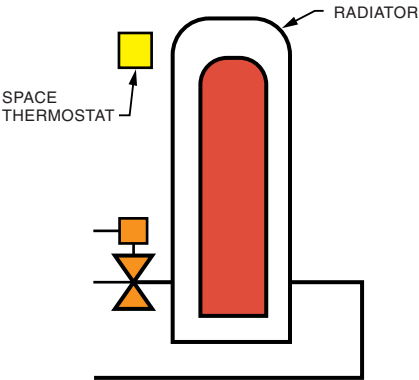


M17892

Duct Diagram



HYDRONIC CONTROLLER CONTROLLING HEATING AND COOLING VALVES



HYDRONIC CONTROLLER CONTROLLING RADIATOR VALVES

M17891

- KEY**
- INPUTS
 - ACTUATORS/VALVES
 - HEATING
 - COOLING

Excel 10
W7762/7763 Hydronic Controller

APPLICATION SELECTION GUIDE

- Hydronic Controller
 - Radiators
 - Induction Units
 - Fan Coil with manual Fan Switching
- Cooling
 - Chilled Water Coil (2 or 4 pipe)
 - Cooling Compressors
- Heating
 - Hot Water Coil (2 or 4 pipe)
 - Electric
- Energy Management
 - TOD, Occupied/Unoccupied
 - Communication

Excel 10 Hydronic Controller Application/Selection Decision

Honeywell Hydronic Valve Selection See Honeywell Valve Selection Guide 63-8038 for additional valves

DAMPER ACTUATOR SELECTION, Series 60 Floating, Non-Spring & Spring Return - Direct Coupled
24 Vac, -30 to 150°F Ambient Temperature, 90 degree, 90 seconds, w/De-clutch

Actuator	Torque (lb-in.)	Timing (SEC)	Notes	Accessories
ML6161B2024	35	90		ML6161B
ML6174B2019	70			#4074ENJ 45 & 60 Stop Pin & 3/8 Shaft Adapter
ML6174C2000	150		w/Feedback potentiometer	#7640QW Metal Enclosure for Conduit Connection & Plenum Rating
ML6184A1003 ^a			w/Two Auxillary Switches	#200976A 500 ohm Feedback Pot., #200976C 1000 ohm Feedback Pot.
ML6184C1001 ^a				#201052A 1-SPDT Auxiliary Switch, #201052B 2-SPDT Auxiliary Switch
ML6194A1002 ^a	300		ML6174, 84, 94	
ML6194F1007 ^a		w/Time out feature	#205753 3/8 in. Hub Sleeve, #205820A 3-Point Mounting Kit	
M6410A1029	40 (Stem Force)	125		M6410
			Includes conduit conductor	20102A Auxiliary Switch #7640QW Case and Cover #4 #200976A,C Feedback potentiometer, #205820A , 205840A Mounting Kit

^aStandard XL10 switches 24V com. Reverse 24V+ and 24V com to prevent motor damage.

BALL VALVE SELECTION, Series 60 Floating, Non-Spring Return
24 Vac, -30 to 150°F Ambient Temperature

Valve Assembly	Sweat Size (in.)	Cv	Ball Valve	Actuator	Notes
2-way Valves					
VB34A1072	1/2 FP	15	VB30A1039	ML6161B2024	System Pressure (Water and Glycol) 250 psig System Pressure (Steam) 15 psig Differential Pressure (Close Off) (Water and Glycol) 150 psi Differential Pressure (Close Off) (Steam) 15 psi
VB34A1536	1 FP	56	VB30A1070	ML6184A1003	
VB34A1544	1-1/4 RP	48	VB30A1088	ML6194A1002	
VB34A2088	1-1/4 FP	125	VB30A1096		
VB34A2104	1-1/2 FP	177	VB30A1112		
3-way Valves					
VB34B1014	1/2 RP	5.4	VB30B1004	ML6161B2024	NPT Pipe Thread System Pressure (Water and Glycol): 250# Close-Off Mixing: 150 psid System Pressure (Water and Glycol): 250# Close-Off Diverting: 60 psid Not suitable for Steam
VB34B1162	1 RP	14	VB30B1020	ML6184A1003 ^a	
VB34B1170	1-1/4 RP	21	VB30B1038	ML6194A1002 ^a	
VB34B1477	1 1/4 RP	21	VB30B1095		
VB34B1485	1-1/2 RP	34	VB30B1103		
VB34B1493	2 RP	47	VB30B1053		

^aStandard XL10 switches 24V com. Reverse 24V+ and 24V com to prevent motor damage.

VC Series Balanced Valve Selection, Series 60 Floating, Non-Spring Return
24 Vac, -32 to 140°F Ambient Temperature

Valve Assembly	Sweat Size (in.)	Cv	Close-off (psi)	Actuator	Notes
V5852A2007	1/2	0.19	65	M6410A1029	V5852: Two-way Valve body
V5852A2015	1/2	0.29	65		M6410A1029 is Plenum Rated
V5852A2023	1/2	0.47	65		M6410A1029 includes a conduit conductor
V5852A2031	1/2	0.74	65		
V5852A2049	1/2	1.2	65		
V5852A2056	1/2	1.9	45		
V5852A2064	3/4	2.9	45		
V5852A2072	3/4	4.9	45		
V5853A2006	1/2	0.29	55	M6410A1029	V5853A, Three-way Mixing Valve Body
V5853A2014	1/2	0.47	55		M6410A1029 is Plenum Rated
V5853A2022	1/2	0.74	55		M6410 includes a conduit connector
V5853A2030	1/2	1.2	22		
V5853A2048	1/2	1.9	22		
V5853A2055	3/4	2.9	7.25		
V5853A2063	3/4	4.9	7.25		

Accessories

AK3781 Wire, LonWorks® BUS, Single Twisted Pair Solid Conductor, Nonplenum, 22AWG	_____ Feet	_____
AK3782 Wire, LonWorks® BUS, Double Twisted Pair Solid Conductor, Nonplenum, 22AWG	_____ Feet	_____
AK3791 Wire, LonWorks® BUS, Single Twisted Pair Solid Conductor, Plenum, 22AWG	_____ Feet	_____
AK3781 Wire, LonWorks® BUS, Double Twisted Pair Solid Conductor, Plenum, 22AWG	_____ Feet	_____

Job Identification: _____