

Thermostatic Radiator Valves (Caleffi)

Thermostatic Control Heads

- Thermostatic control head fits radiator valves
- Set point locking mechanism
- Range stop adjustment
- Built-in sensor with liquid-filled element
- Graduated scale from * to 5 corresponding to a temperature scale adjustment range of 45-82°F (7-28°C)

Description	Fits Valve Series	Brand	Part Number
Built-in Sensor	220, 221, 338 and 339	Caleffi	200000
With Remote Sensor, Capillary length: 78" (2m)	220, 221, 338 and 339	Caleffi	201000
With Contact Probe, Capillary length: 78" (2m)	220, 221, 338 and 339	Caleffi	203502
With Remote Adjusting knob, Capillary length: 78" (2m)	220, 221, 338, 339, and 676 (direct coupling)	Caleffi	472000



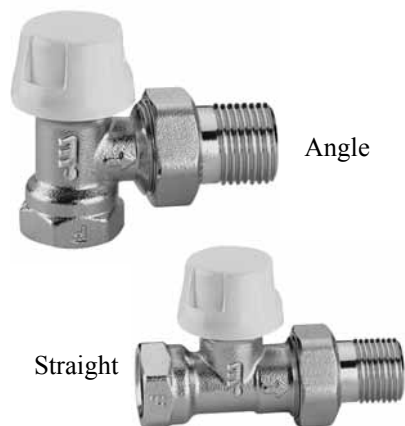
Thermo-Electric Actuator



- Thermo-electric actuator for electric control of radiator valves
- Low current draw
- Power supply: 24 V AC/DC
- Initial current draw: ≤ 250 mA
- Power consumption: 3 W, 6 VA
- 31.5" wire lead connection

Description	Fits Valve Series	Brand	Part Number
24V AC/DC	220, 221, 238, and 239 series	Caleffi	656404
24V AC/DC with micro-switch	220, 221, 238, and 239 series	Caleffi	656414

Thermostatic Radiator Valve Body



- Chrome plated
- Max working pressure: 150 psi (10 bar)
- Temp range: 40-212°F (5-100°C)
- Caleffi valves 220 and 221 series in combination with control heads 200 and 201 series are approved to standard EN 215

Description	Cv	Brand	Part Number
1/2" NPT Angled	2.7	Caleffi	220400A
3/4" NPT Angled	3.7	Caleffi	220500A
1/2" NPT Straight	1.7	Caleffi	221400A
3/4" NPT Straight	2.5	Caleffi	221500A

Thermostatic Radiator Valves (Honeywell)

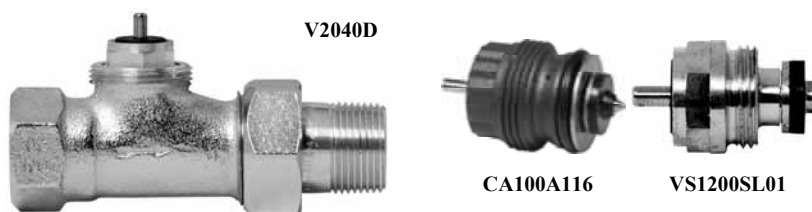
Standard Capacity (V2000 Series and Components)

- Automatic temperature control of one-pipe steam or hot water systems for free standing radiators, convectors, and other heating units with standard capacity requirements
- Allows constant monitoring and adjustment of room temperature
- Valve seat disc ensures tight shut off
- Nickel plated brass casted body with working parts in cartridge insert for ease of service
- Controls include sensor, set point dial and valve actuator



Temperature Controller For V2000 Valves		
Description	Temperature Control Range	Part Number
Universal Compact-size design radiator thermostat, with included snapping (DA) type connection suitable for TRV bodies and valve inserts with Danfoss (RA) type compatible snap connection. "A" Class energy efficiency certified according TELL labeling; M30 x 1.5 connection; Liquid Sensor; Easy to Clean; Easy to Equip with range stoppers.	6°C to 28°C (43°F to 82°F)	T2040NA
Controller with combined remote setpoint and sensor for wall mounting. Connected by 2m of capillary tube to actuator which mounts on valve body.	9°C to 26°C (48°F to 79°F)	T100B1035
Controller with remote setpoint and sensor mounted with setpoint dial mounted on outside of heating cabinet; sensor mounted beneath heating coils in cold air return. 1.4m dual capillary.	9°C to 26°C (48°F to 79°F)	T100C1026

V2000 Valve Bodies									
Application	Used With	Cross Reference	Body Style	Pipe Size		Outlet Connection	Capacity		Part Number
				Inch	DN		Cv	Btu/hr-steam	
Replaces most manual valves with minimal piping changes	T1002 & T100M controls to conform to horizontal mounting requirements	Replaces V100F1062	Horizontal Angle	3/4"	DN20	Threaded	2.7	63,800	V2040ASL20
		Replaces V100F1070		1"	DN25	Threaded	2.7	70,500	V2040ASL25
Especially suited for base boards and straight runs where manual valves were not originally installed	-	Replaces V100D1064	Straight	3/4"	DN20	Threaded	2.7	63,800	V2040DSL20
	-	Replaces V100D1072	Straight	1"	DN25	Threaded	2.7	70,500	V2040DSL25
	-	Replaces V100D5065	Straight	3/4"	DN20	Sweat	2.7	63,800	V2043DSL20
Use where installation space is limited	T100B, T100C, T100F	Replaces V100E1063	Angle	3/4"	DN20	Threaded	2.7	63,800	V2040ESL20
		Replaces V100E1071	Angle	1"	DN25	Threaded	2.7	70,500	V2040ESL25



Replacement Cartridges For Valves	
Description	Part Number
For old style 1/2" & 3/4" V100 valves with plastic cartridge body	CA100A116
For V2000 Valve - TRV valve body, adjustable	VS1200SL01



Thermostatic Radiator Valves (Honeywell)

High Capacity (V110 Series and Components)



T104A



T104B

T104C

- Precise automatic temperature control in two-pipe systems by modulating the flow of hot water or steam through free standing radiators, convectors, and other heating units with high capacity requirements
- Allows constant monitoring and adjustment of room temperature
- Valve seat disc ensures tight shut off
- Nickel plated brass casted body with working parts in cartridge insert for ease of service
- Controls include sensor, set point dial and valve actuator

Temperature Controller For V110 Valves		
Description	Temperature Control Range	Part Number
Self contained controller with integral sensor, integral setpoint dial with selectable limit stop and valve actuator in one unit. Adjustable limits. Horizontal Mount. Not for use inside enclosures or in locations with restricted airflow around sensor.	6C to 26C (43F to 79F)	T104A1040
Controller with combined remote setpoint and sensor for wall mounting. Setpoint/Sensor connect by 2m of capillary tube to actuator which mounts on valve body.	9C to 26C (48F to 79F)	T104B1038
Controller with remote setpoint and sensor normally mounted with setpoint dial mounted on outside cabinet or enclosure; sensor mounted beneath heating coils in cold air return. 1.4m dual capillary.	9C to 26C (48F to 79F)	T104C1036

V110 Valve Bodies									
Application	Used With	Cross Reference	Body Style	Pipe Size		Outlet Connection	Capacity		Part Number
				Inch	DN		Cv	Btu/hr-steam	
Precise and automatic control of room temperature in two-pipe systems by modulating the flow of hot water or steam through high capacity heating units	T104	Replaces V110D100	Straight	1/2"	DN15	Threaded	4.6	127,000	V110D1000
		Replaces V110D108	Straight	3/4"	DN20	Threaded	5.8	162,000	V110D1008
		Replaces V110D116	Straight	1"	DN25	Threaded	7.0	193,000	V110D1016
		Replaces V110D509	Straight	3/4"	DN20	Sweat	5.8	162,000	V110D5009
		Replaces V110E104	Angle	1/2"	DN15	Threaded	4.6	127,000	V110E1004
		Replaces V110E112	Angle	3/4"	DN20	Threaded	5.8	162,000	V110E1012
		Replaces V110E120	Angle	1"	DN25	Threaded	7.0	193,000	V110E1020
		Replaces V110F110	Horizontal Angle	3/4"	DN20	Threaded	5.8	162,000	V110F1010
Replaces V110F118	Horizontal Angle	1"	DN25	Threaded	7.0	193,000	V110F1018		



V110E



CA110C107



Electric Zone Valve Actuator For V110 Valves
NC without Auxiliary Switch
#MV110C1004

Replacement Cartridges For Valves	
Description	Part Number
Replacement cartridge for 1/2" & 3/4" V110D, E, F valves	CA110C107



Thermostatic Mixing/Diverting Valves (Caleffi)

MixCal™ Sweat - Thermostatic Mixing Valves



- Adjustable thermostatic and pressure balanced mixing valve for point of distribution in domestic water systems and radiant hydronic heating systems
- Low-lead brass body and fittings
- Locking set point knob
- Max working pressure: 200 psi
- Max inlet temperature: 200°F (93°C)
- Adjustable range: 85-150°F (29-65°C)
- Min. flow for optimum performance: 1.3 gpm
- Meets requirements of ANSI/NSF/ 372-2011
- Certified to ASSE 1017, CSA B125.3, UPC, IPC, Low Lead Laws and listed by ICC-ES for use in accordance with the U.S. and Canadian plumbing codes

Connection	Cv	Brand	Part Number
3/4" sweat	3	Caleffi	521509A
1" sweat	3	Caleffi	521609A
Temperature Gauge			
3/4" sweat	3	Caleffi	521519A
1" sweat	3	Caleffi	521619A

Mixed Temperature Gauge Adapter for 521 MixCal™



- Point of distribution mixed temperature gauge adaptor fits MixCal 521 series mixing valves
- Threaded union mounting replaces existing mixed outlet with 3/4" or 1" sweat pipe connection
- Removable gauge fits into temperature well
- Gauge dial is 2" diameter and scale from 30-210°F (-1-98°C)
- Certified Low Lead Brass

Connection	Brand	Part Number
3/4" sweat with gauge	Caleffi	NA10056
1" sweat with gauge	Caleffi	NA10058

Thermostatic Radiator Valves (Danfoss)

Standard Capacity (RA2000 Series and Components)



013G8250



013G8252



013G8562,
013G8565



013G8564



088H3110,
088H3111,
088H3114

- Automatically regulates the flow of hot water or steam through free-standing radiators, baseboards or convectors in hot water and two-pipe, low pressure steam systems
- Valve mounted operators provide fast acting modulating control of the space temperature through a patented vapor charge, ensuring the highest level of comfort control
- "Snap-Action" mechanism allows easy installation and removal
- Valves are fitted with a packaging gland assembly that is replaceable while the system is in operation, include a plastic cap, have a sturdy EPDM rubber valve disc and remain NO with no operator mounted
- **Always mount controller in a horizontal position**
- Actuators are used to electrically activate valves on hot water heating systems where slow opening and closing is desirable to eliminate water hammer associated with quick acting valve

Controllers For RA2000 Valve Bodies		
Description	Temperature Control Range	Part Number
Valve mounted dial & built-in sensor	7C to 30C (45F to 86F)	013G8250
Valve mounted dial & remote sensor* with 6' capillary	7C to 30C (45F to 86F)	013G8252
Combined remote mounted dial & built-in sensor* with 6' capillary	7C to 30C (45F to 86F)	013G8562
Separate remote mounted dial and sensor* with 6' capillary	7C to 30C (45F to 86F)	013G8564
Wall Mounted Dial and Remote sensor* with 16' capillary	5C to 30C (41F to 86F)	013G8565

*Includes socket for use on RAV, KOVM & VMT valve bodies

Electric Valve Actuators For RA2000 Valve Bodies		
Description	Volts / VA	Part Number
Normally Closed (NC)- Comes with valve position indicator, 47" leads, TWA-A	24VAC / 2.0VA	088H3110
Normally closed (NC) or normally open (NO) - Comes with valve position indicator, 47" leads, TWA-A	24VAC / 2.0VA	088H3111
Normally Closed, 4 Wire with End Switch (NC/S)- Comes with valve position indicator, 47" leads, TWA-A	24VAC / 2.0VA	088H3114







NOTE: The TWA-A actuator can be connected to the Danfoss Floor Heating manifold and to the Danfoss RA radiator valves.



Thermostatic Radiator Valves (Danfoss)

Standard Capacity (RA2000 Series and Components)

- Automatically regulates the flow of hot water or steam through free-standing radiators, baseboards or convectors in hot water and two-pipe, low pressure steam systems
- Valve mounted operators provide fast acting modulating control of the space temperature through a patented vapor charge, ensuring the highest level of comfort control
- "Snap-Action" mechanism allows easy installation and removal
- Valves are fitted with a packaging gland assembly that is replaceable while the system is in operation, include a plastic cap, have a sturdy EPDM rubber valve disc and remain NO with no operator mounted
- **Always mount controller in a horizontal position**
- Actuators are used to electrically activate valves on hot water heating systems where slow opening and closing is desirable to eliminate water hammer associated with quick acting valve

RA 2000	Part Number	Description				
		Connection		Cv	Design	Application
		Size	Type			
	013G8013	1/2"	FPT x MPT Union Tailpiece	1.6	Side Mount Angle	Water or 2 Pipe Low Pressure Steam
	013G8018	3/4"		2.1		
	013G8023	1"		2.8		
	013G8030	1-1/4"		2.8		
	013G8015	1/2"	FPT x Solder Union	1.6	Straight	
	013G8020	3/4"		2.7		
	013G802001	3/4"	2.7			
	013G8025	1"	2.8			
	013G8032	1-1/4"	2.8			
	013G8014	1/2"	FPT x MPT Union Tailpiece	1.6	Angle	
	013G8019	3/4"		2.7		
	013G8024	1"		2.8		
	013G8031	1-1/4"		2.8		
	013G8042	1/2"	Solder Union	1.6	Straight	2 Pipe Hot Water
	013G8044	3/4"		2.7		
	013G0140	1/8"	NPT	NA	1 Pipe Steam with Vacuum Breaker	1 Pipe Steam
	013L8011	1/8"	NPT	NA	Air Vent for 013G0140	1 Pipe Steam



013G8037



013G8038, 013G8039

Replacement Cartridges For RA2000 Valve Bodies	
Description	Part Number
Insert, valve top & gland replacement for 1/2"NPT angle & straight valve	013G8037
Insert, DUSA type, for all sizes RA-FN reversed angle valves	013G8038
Insert, valve top & gland replacement for 1/2" solder & all 3/4", 1", 1 1/4" valves	013G8039

