



Patent application No. MI2006A 001935.



## Outside compensated temperature regulating units

### 174 series

#### Function - Features

- designed for radiant panel systems
- temperature regulation, with Optimiser digital controller and specific motorised three-way valve
- panel circuit fluid distribution with manifolds complete with flow meters and built-in valves
- primary circuit fluid distribution with specific manifolds complete with built-in valves
- head control with differential by-pass for primary circuit
- fluid control and distribution with circulation pump, safety thermostat, flow and return temperature gauges, pressure gauge, drain cock, shut-off valves
- accurate temperature regulation and high heat ratings control
- available with 3 to 13 outlets to panel circuit, with or without primary circuit manifolds

## Technical specifications

### 174 series

#### Performance

Medium:	water, glycol solutions
Max. percentage of glycol:	30%
Control temperature range:	30–90°C
Primary inlet temperature range:	5–100°C
Max. working pressure:	10 bar
Panel manifolds differential by-pass setting:	25 kPa (2,500 mm w.g.)
Primary circuit differential by-pass setting:	15 kPa (1,500 mm w.g.)
Primary circuit manifold internal diameter:	Ø 27 mm
Temperature gauge scale:	0–80°C
Pressure gauge scale:	0–10 bar
Connections: - primary circuit:	3/4" M
- to regulating unit:	1" F with nut
- panel circuit outlets:	3/4" M - Ø 18 mm
- outlets centre distance:	50 mm
- primary circuit manifold outlets:	3/4" M- Ø 18 mm
- outlets centre distance:	50 mm

#### Temperature controller (three-point type)

Electric supply:	230 V- 50 Hz
Power consumption:	5,5 VA
Protection class:	IP 40

#### Actuator (three-point type)

Electric supply:	230 V - 50 Hz
Power consumption:	8 VA
Protection class:	IP 44
Max. ambient temperature:	55°C

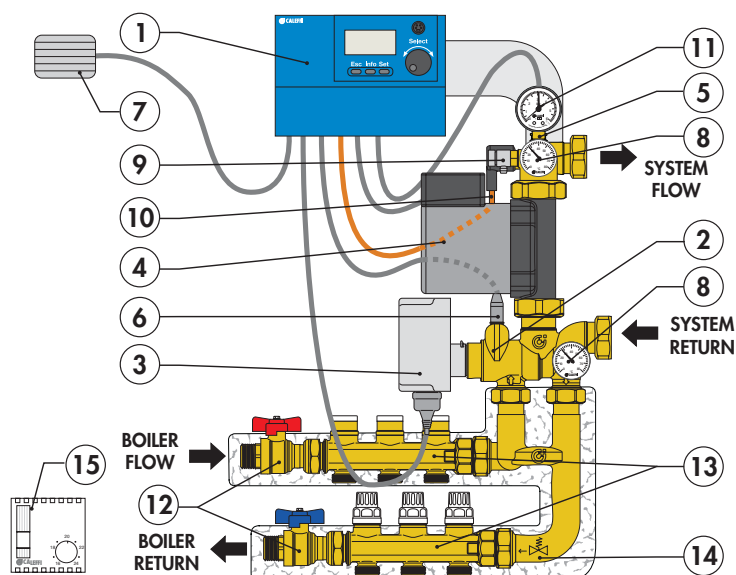
#### Pump

Three-speed pump:	UPS 25-60/UPS 25-80
Electric supply:	230 V - 50 Hz
Protection class:	IP 44
Pump centre distance:	130 mm
Pump connections:	1 1/2" with nut

#### Safety thermostat

Factory set:	55°C ±3°C
Protection class:	IP 55
Contacts rating:	10 A / 240 V

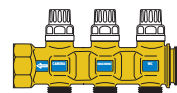
## Characteristic components



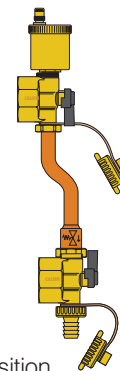
Flow manifold equipped with flow meters and regulating valves



Return manifold equipped with shut-off valves



End fittings with multi-position ball valves, automatic air vent valve, **differential pressure control by-pass kit** and filling/draining hose connection



Code is completed according to the number of outlets (5<sup>th</sup> digit)

E = 5 outlets  
F = 6 outlets  
G = 7 outlets

H = 8 outlets  
I = 9 outlets  
L = 10 outlets

M = 11 outlets  
N = 12 outlets  
O = 13 outlets



### 174 series

Code:

1745..

1745.. 003

1	Optimiser heating digital controller	✓	✓
2	Three-way mixing valve	✓	✓
3	Three-point actuator	✓	✓
4	Three-speed circulation pump UPS 25-60	1745..1	1745..1 003
	Three-speed circulation pump UPS 25-80	1745..3	1745..3 003
5	Flow temperature probe	✓	✓
6	Return temperature probe	✓	✓
7	Outside temperature probe	✓	✓
8	Flow and return temperature gauges with pocket	✓	✓
9	Adjustable drain valve	✓	✓
10	Safety thermostat	✓	✓
11	Pressure gauge	✓	✓
12	Primary circuit shut-off valves	✓	✓
13	Primary circuit distribution manifolds with built-in valves		✓
14	Primary circuit differential by-pass kit	✓	✓
15	Room thermostat and indoor sensor	opt.	opt.

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice.

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