

# SINTESI DC

MOTORIZED BALL VALVE  
2 POSITION (0°-90°) – 3 POSITION (0°-45°-90°) CONTROL

## Body Valve

2 positions · 0°- 90°



2 WAY



3 WAY



BY PASS

## Actuator



**ISO 5211**

Connection kit



## Body Valve

3 positions · 0°- 45°- 90°



6 WAY

## Fast Push



### APPLICATIONS

- Heating and cooling systems (HVAC-R)
- Solar thermal systems
- Domestic water systems
- Alternative Energy systems
- General automation system

### SPECIFICATIONS

#### BODY VALVES \*

- **Valve type:** ball valve
- **Body pattern:** 2-way, 3-way, by-pass, 6-way
- **Connection type:** Male according to standard ISO228/1
- **Controlled fluid:** Hot or chilled water with up to 30% glycol, domestic hot or cold water
- **Nominal pressure:** PN16
- **Max. differential pressure:** 16 bar
- **Fluid temperature:** +5°C to 90°C/100°C
- **Materials**
  - Body, ball and stem: brass CW617N / CW602N (DZR) UNI EN 12165 (depending on the valve type)
  - Seats: P.T.F.E
  - O-ring: EPDM
- **Connection to actuator:** FAST (without screws) patented

\* For further information about ball valves please see Sintesi Technical Datasheet 48.2-17.

### MAIN FEATURES

- 2-way, 3-way, by-pass and 6-way body valves
- Size from 1/2" to 1" all PN16
- Fast connection between body valve and actuator (patented)
- 2 point or 3 point (on/off or modulating control)
- Feedback output phases
- Position arrow on the top of the actuator
- Manual override function

#### ACTUATOR

- **Functioning:** on/off
- **Control:**
  - 2 positions (2-point, 3-point)
  - 3 positions
- **Rotation:**
  - 2 positions: 0°-90°
  - 3 positions: 0°-45°-90°
- **Position indicator:** rotating arrow
- **Motor:** stepper
- **Power supply:** 12V DC, 24V DC
- **Power consumption:** max 2 VA
- **Electrical connection:** black cable 80 cm length, 5 x 0,35 mm<sup>2</sup>
- **Operating time (90°):**
  - 60 and 120 sec for 12V version
  - 30, 60 and 120 sec for 24V version
- **Feedback output phases:** feedback phase for open-mid-close position according to the control
- **Nominal torque:** 5 Nm (max 7÷10 Nm, according to the operating time)
- **Ambient temperature:** +5°C to +50°C
- **Environmental Protection Ratings:** IP54
- **Electrical insulation class:** II



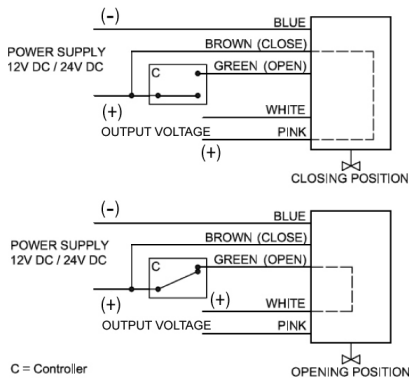
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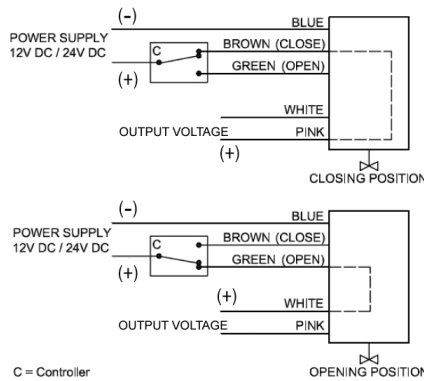
## WIRING DIAGRAMS

### 2 POSITIONS

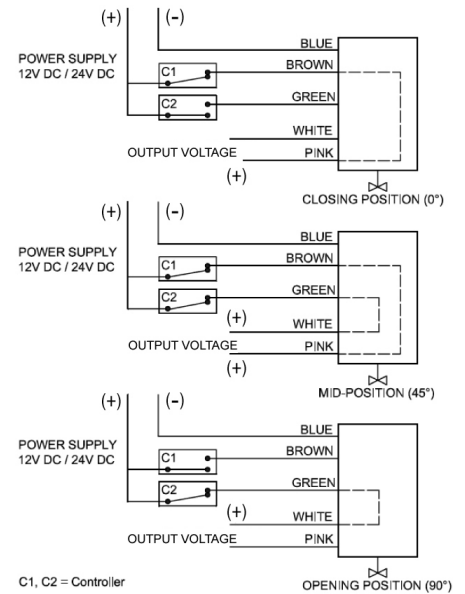
#### 2-POINT CONNECTION



#### 3-POINT CONNECTION

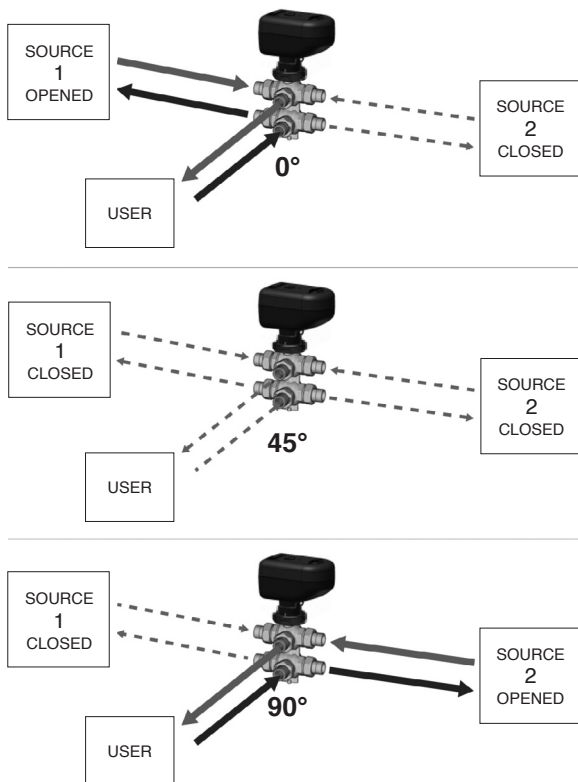


### 3 POSITIONS



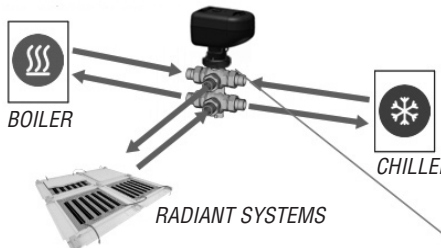
## 6-WAY BODY VALVE

### VALVE FUNCTIONING SCHEME

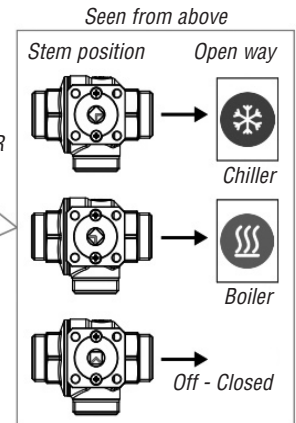
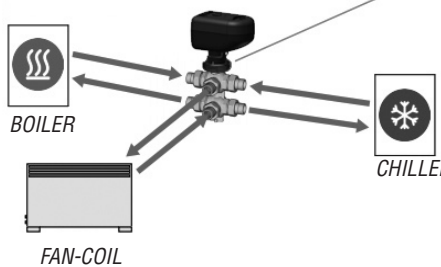


### OPERATING DIAGRAMS

#### Operating diagram with radiant systems



#### Operating diagram with fan-coil



UPDATED DATA SHEETS AVAILABLE ON THE WEBSITE [www.comparato.com](http://www.comparato.com)



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